

Sustainability and Quality of Life

A STUDY ON THE RELIGIOUS WORLDVIEWS, VALUES AND ENVIRONMENTAL IMPACT
OF AMISH, HUTTERITE, FRANCISCAN AND BENEDICTINE COMMUNITIES

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VRIJE UNIVERSITEIT

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Chapter 1 **Exploring the relation between religion and sustainability**

1.1 Introduction

Over the last 50 years our world has faced a growing level of production and consumption, resulting in an increasing pressure on the environment. The Millennium Ecosystem Assessment (MEA)¹ concludes: “Humans have made unprecedented changes to ecosystems in recent decades to meet growing demands for food, fresh water, fibre, and energy. These changes have helped to improve the lives of billions, but at the same time they have weakened nature’s ability to deliver other key services such as purification of air and water, protection from disasters, and the provision of medicines. The pressures on ecosystems will increase globally in coming decades unless human attitudes and actions change” (MEA, 2005, Key Messages, 3). The MEA makes clear that maintaining our present unsustainable level of production and consumption will have negative consequences for the quality of life in general, owing to the effects on ecosystems and nature’s functions. Poor countries will be the first victims of these developments. To avoid irreversible loss of quality of life worldwide, we need to realise a sustainable level of production and consumption, with low pressure on the environment.

These growing levels of production and consumption are no longer limited to mainly Western countries. Expanding economies in China and India lead to an increasing wealth per capita and rising levels of consumption among the growing middle class in these countries. Western patterns of consumption seem to be copied, which, because of their high use of raw materials, transportation of products and energy-use, are important causes of environmental degradation. These consumption patterns are not just accidental. They are rooted in specific worldviews, including ideas what constitutes quality of life and how mankind should relate to nature. The assumption of this dissertation is that environmental problems resulting from Western consumption and production have a fundamental character and therefore, a shift towards sustainable levels of production and consumption needs to take place at a fundamental level as well. Following this line, we can say that, to realise long-term sustainability, it must correspond with people’s ideas about how to achieve and maintain a high quality of life and therefore with people’s worldview.

In Western thinking, quality of life is often connected with economic growth. The idea that a higher income would lead to a higher quality of life is a point of view held by many. The World Values Survey and the World Bank, however, show that countries with a substantially low GNP per capita are not necessarily those with a low score on happiness and life satisfaction, which are indicators of the perception of quality of life.² A correlation between GNP and life satisfaction can only be found to a certain extent. Inglehart and Klingemann (2000) found that above an annual income of 13,000 dollars per person, additional income hardly yields

additional self-reported happiness. Likewise, studies on happiness in Western countries at micro-level show hardly any long-term effect of income change on happiness.³ Diener and Biswas-Diener (2002) conclude that a higher income may add to happiness when people are very poor, but that for middle- and upper-income people in economically developed nations, a higher income did not strongly enhance well-being. Rising income was also found to lead to higher divorce rates, greater stress, lower global well-being and less enjoyment of ordinary activities. Layard (2005) found that the United States, Europe and Japan faced more depression, more alcoholism and more crime than fifty years ago. Happiness and subjective well-being are not associated with people's material accumulation, but appear to relate to non-material factors and possibilities, like social relations, stable families, health, religion, material living standards, education, work, social recognition, governance, environment and safety.⁴ Therefore, as endorsed by the results of the MEA, the premise that growth in well-being and a higher quality of life will be accomplished by an ongoing growth in production and consumption must be seriously questioned.

In this dissertation, I define quality of life as the extent to which people can realise their ideas and beliefs about a 'good life', a life in accordance with their values. Values are motivational constructs and indicate a preference for something both desired and desirable; they can be seen as desirable goals that serve as guiding principles in people's lives (Schwarz and Reuling, 1995, 89). These values are determined by processes of reflection on the meaning of life, reality, experiences, and practices, and are grounded in a certain philosophy of life or worldview. Philosophy of life can be understood as the cognitive, ideological and normative foundation underlying our view on quality of life and giving direction to practical conduct (Boersema and Klop, 2001, 11). The concepts of values, philosophy of life, worldviews and religion will be further defined in chapter 2.

The importance of values and worldviews for realising sustainability is recognised more and more. In recent years, the State of the World has emphasised the importance of religion and ideas about the 'good life' based on well-being, for the establishment of sustainability worldwide.⁵ Gardner and Mastny (2004) describe five assets, possessed by religious institutions, which can help build a sustainable world: the capacity to shape worldviews, moral authority, a large base of adherents, significant material resources, and community building capacity. The Dutch Sustainability Outlook 2005 concludes that sustainability "depends on public opinions about the quality of life, the distribution of this quality across the globe, and the scientific understanding of the functioning of humans and natural systems" (Netherlands Environmental Assessment Agency, 2005, 5).⁶ It emphasises the importance of unravelling values and worldviews, which appear to affect environmental behaviour choices.

Structure of this chapter

This study focuses on Western society and worldviews. Although Western society, in the process of globalisation, is growing more and more towards a multi-cultural society with non-Western influences, it is to a large extent still guided by typical Western values that are rooted deeply in Greek and Christian thinking.⁷ Section 1.2 will briefly discuss the relation between the Western Christian worldview and the environment from a macro perspective and from a historical and theological point of view. For a long time this relation was labelled negative. An important catalyst of the debate on the relation between the Christian doctrine and the 'ecological crisis' was Lynn White Jr. with his famous and pioneering article 'The Historical Roots of Our Ecologic Crisis'.⁸ In section 1.2.1 first the content of the 'White thesis' will be

discussed, followed by an elaboration of some of the critics. The meaning and exegesis of the 'dominion texts' will be the subject of section 1.2.2. Section 1.2.3 describes the rise of science and technology in Europe and the role of Christian thinking in these developments. The section concludes with a discussion.

In the wake of the ideological 'White-discussion', a large number of empirical studies on the relation between 'Judeo-Christian'⁹ thinking and environmentalism has appeared since the late 1970s. These studies, which approach the debate from a social science perspective, investigate whether a relation between religious participation, denominations, religious beliefs and environmental attitudes and behaviour can be found at micro level. Section 1.3 gives an overview of the methodologies and conclusions of 21 surveys on religion and environment. Thereafter, it focuses on the role of denominations, religious beliefs and environmental attitudes and behaviour in the light of the discussion on White's thesis. The section concludes with a discussion and a new model for studying the relation between religion and environmental behaviour in a more coherent way. Section 1.4 summarises the main conclusions of the historical and theological debate on the relation between Christian faith and the ecological crisis as discussed in section 1.2 and the surveys on the relation between religion and environmental behaviour as analysed in section 1.3, and presents the focus and aim of this study.

Communities

In the discussion on the complicated relation between religion, value-considerations and their effects on environmental behaviour, much attention has been paid to ideological aspects and behaviour choices at macro level and micro level. A perspective that seems to be absent in the discussion on these issues is the meso-level of religious communities. Individual values and behaviour choices cannot be separated from their social context, which is relatively demarcated in the context of a community. Within religious communities usually a certain worldview and specific values are shared, endorsed and maintained. These ideas are embedded in and supported by what is called the 'social capital' of a community. Social capital refers to features of social resources, such as networks, norms, and social trust, available to group or community members, which facilitate and coordinate certain actions of individuals who are within this structure (Coleman, 1990, 302).¹⁰ Social capital can be seen as the cement of a community. Behaviour choices within a community are often related to general rules, agreements or tradition and maintained by mechanisms of mutual social control. Therefore, to study religious worldviews, sustainability and quality of life coherently, religious communities might be a missing link and will be the main focus of this study. The aim and research questions of this study are further formulated in section 1.4.2.

Section 1.4.3 will give an account and a short description of the four communities that have been studied for this dissertation. The four communities are all characterised by a specific and coherent worldview and are historically rooted in Western religious culture, namely the Amish, the Hutterites, the Franciscan Order and the Benedictine Order. They represent a radical interpretation of two religious movements in Western history: Anabaptism (as a specific form of Protestantism)¹¹ and Roman Catholicism. This ethnographic study focuses on their religious worldviews, their ideas about quality of life, their impact on the environment, and the value-considerations that underlie their patterns of behaviour. In most cases, their behaviour is not the result of a specific eco-philosophy or explicit environmental values, but of choices motivated by religious and social-cultural values. Surrounded by a modern and rapidly changing society, they manage to preserve their values and related behaviour choices, while keeping

a viable economic and social system. All communities apply certain reflectiveness in the way they deal with modernisation and (technological) innovations, to be able to maintain their social capital and desired quality of life. Although the outcomes of this process of reflective modernisation need not necessarily be sustainable, they definitely open up perspectives for sustainability.

A crucial question is what role values and religious worldviews play with regard to sustainability. Examples of ‘undercurrents’ in Western culture might offer inspiring examples of sustainable lifestyle choices, motivated by values and the wish to preserve a certain experienced quality of life. The structure of this dissertation, including the content of the chapters on the separate communities, will be further outlined in section 1.5. This chapter will now continue with the debate on the relation between Western Christian beliefs and the environment.

1.2 Debate on Christian thinking and the ‘ecological crisis’

1.2.1 White’s thesis

With his article ‘The Historical Roots of Our Ecologic Crisis’ Lynn White Jr. ignited a lasting debate on the relation between religion and the ‘ecological crisis’. White refers to the presuppositions that underlie modern technology and science to find the main cause of the ecologic crisis. Because both Western technology and science commenced in the Middle Ages, we need to examine fundamental medieval assumptions and developments to understand their nature and present impact. White describes how new technologies in the first half of the Middle Ages changed man’s attitude towards land. Distribution of land was no longer based on subsistence farming, but on the capacity of a machine to till the earth. White illustrates this ‘exploitive attitude’ with a change in calendars, which since the 9th century show men ploughing, harvesting and chopping trees: pictures of man as master of nature. White states that what “people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny – that is, by religion” (White, 1967, 1205).

White argues that the Western faith in perpetual progress cannot be seen apart from Judeo-Christian teleology. Christianity inherited the Jewish linear concept of time and a creation story that describes a gradual creation finishing with the creation of man. Naming the animals established humanity’s dominance over nature. White emphasises the medieval belief that God planned all of creation explicitly for man’s benefit and rule. Man himself was made in God’s image and shares, in great measure, God’s transcendence of nature. White calls Western Christianity “the most anthropocentric religion the world has seen” (White, 1967, 1205). He states that Christianity not only established a dualism between man and nature, but also insisted that it is God’s will for man to exploit nature for his own proper ends. By desacralising nature, Christianity made it possible to exploit nature for humanity’s desires in a mood of indifference to the feelings of natural objects.

White distinguishes the Western Latin form of Christianity from the Greek. The latter seems to have produced no marked technological innovation after the Greek fire. White suggests this is caused by a difference in piety and thought. The Greek viewed sin as intellectual blindness and salvation was to be found in clear thinking. The Latin understood sin as moral evil and salvation was to be found in right conduct. Therefore, White argues, implications of Christianity for exploitation of nature would emerge more easily in the Latin West. Because

the Greek conceived nature primarily as a symbolic system through which God spoke to humankind, science could hardly flourish. In the Latin West, the study of nature became an effort to understand God's mind, the 'natural theology'. From the 13th century onward, every major scientist explained his motivations in religious terms, and it "was not until the late 18th century that the hypothesis of God became unnecessary to many scientists" (White, 1967, 1206). White argues that modern science can be seen as "an extrapolation of natural theology" and that "modern technology is at least partly to be explained as an Occidental, voluntarist realization of the Christian dogma of man's transcendence of, and rightful mastery over, nature" (idem). White concludes that, if we recognise that science and technology joined to give mankind powers that now seem to be out of control, "Christianity bears a huge burden of guilt" (idem).

According to White, we will not solve the 'ecologic crisis' by applying more science and technology. Ideas of humanity's relation to nature are deep-rooted and therefore we must find a new religion or rethink our old one. White doubts whether Asian religions will have viability in the Western world and therefore puts forward Saint Francis of Assisi and his virtue of humility. Instead of demonstrating arrogance and dominance over nature, White argues, Saint Francis promoted a democracy of all creatures, designed for the glorification of their transcendent Creator. The Franciscan worldview and relation with nature will be further discussed in chapter 5 of this thesis. White concludes that "since the roots of our trouble are so largely religious, the remedy must also be essentially religious, whether we call it that or not" (White, 1967, 1207). In 'Continuing the Conversation' that White wrote as a reply to the reactions to his article, he points to Bible passages "... that can be read as sustaining the notion of a spiritual democracy of all creatures. The point is that historically they seem seldom or never to have been so interpreted. This should not inhibit anyone from taking a fresh look at them" (White, 1973, 61).¹² The idea that religion and values are probably not only the cause, but also play an essential role in finding a solution for the 'ecological crisis', is an important, but often-neglected or overlooked part of White's influential article.

White's article gave rise to numerous critical reactions. Regarding the statement that Christianity can be seen as the cause of environmental degradation, some argue that Western history cannot simply be explained by linear and monocausal reasons, as if only Christianity has modified its course.¹³ They emphasise the complicated processes that led to the rise of science and pollution of the environment and argue that the roots of these processes are not simply reducible to the biblical view of nature or the Christian belief in creation. According to them, the cause of the 'ecological crisis' is also connected with social relations, democratisation, technological innovation, short-term interests, population growth, the rise of capitalism and the process of industrialisation. Others emphasise a more environmentally sound interpretation of the Creation stories, with a focus on good stewardship. Toynbee (1972) advocates a return to a pantheistic worldview, which would give the opportunity to regain harmony between man and nature.¹⁴ White however suggests rethinking the old tradition of the West. He emphasises the importance of rejecting "the Christian axiom that nature has no reason for existence save to serve man" and formulating an alternative Christian view (White, 1967, 1207). An important element of the debate on Christian thinking and the environment is the interpretation of the Genesis-texts, which will be the subject of the next section. Section 1.2.3 discusses the role of Christianity in Western development and section 1.2.4 will discuss whether White is right.

1.2.2 Dominion texts

White attributes the impact of the Western Christian worldview to a desacralising of nature, the dualism between humankind and nature, and particularly man's dominion. White's line of reasoning is largely built on his reading of Genesis 1, 26-28.¹⁵ These verses are called the 'dominion texts', which would have given rise to *dominium terrae*, meaning dominion over the earth.¹⁶ In the debate on Christian thinking on environmentalism, much attention is paid to the meaning and interpretation of these dominion texts. In this section I will first mention briefly some aspects of the Genesis texts themselves which are important for a good understanding of the word 'dominion'. Then I will describe the reception of the dominion texts over the last decades.

An important concept in Genesis 1:26-28 is the *imago Dei*, referring to the text that man is made in the image of God. Dominion can be seen as a consequence of the *imago Dei*, in the meaning of 'lording over' and 'good leadership' (Jobling, 1972, 26).¹⁷ In Genesis 1 the things God created are termed 'good' and there is no reason to assume a detrimental meaning of the assignment to have dominion. Genesis 1 describes an explicit hierarchy in the order of creation. Within this creation order, man is to rule over animals and the earth. The interpretation of this creation order, however, is important for the way dominion is understood. In contrast to the linear hierarchy of the main Greek philosophy, we might better depart from the cosmology of the Old Israelites, which is depicted as an inequilateral triangle, with God, mankind and nature forming the three angles.¹⁸ This cosmology emphasises the value of nature and the existence of a direct relation between nature and Creator, putting man and his assignment of dominion in a more modest position. Furthermore, in the creation order man and animals were vegetarians, for they were given green herbs, seed-bearing plants and fruits for food.¹⁹ No animal was killed to serve as food. From this perspective the word 'dominion' might have a milder sound than it has in the present association with death, degradation and overexploitation of men and animals.

Where Genesis 1 describes the creation order, the second creation story of Genesis 2 focuses on humankind's relationships and activities and particularly underlines the tension and substantial differences between humans and animals. It describes the Garden of Eden, in which God placed humans "to till and keep it" (Genesis 2, 15). After man is made from the dust of the earth, he is appointed as a gardener and cultivator, within a paradisiacal setting, before the Fall. This creation story explicitly describes Adam's confrontation with fundamental differences between humankind and animals; they are not of the same 'flesh', as Adam puts it.²⁰ The fact that God appoints Adam as name-giver to the animals indicates a special status for humankind. Naming in the Hebrew Bible often marks insight into the nature and fate of the named and therefore may be interpreted as dominion and power, although this is not necessarily the case (Boersema, 2001, 95).²¹ The assignment to work the garden and the special status for humankind as name-giver cannot be interpreted as a licence to exploit the earth.

Reception of the dominion texts

In his article 'Continuing the Conversation', White points to Bible passages that can be understood as emphasising a spiritual democracy of all creatures, leading to a more sustainable interpretation of the assignment of dominion. However, White states, historically they seem seldom or never to have been so interpreted. This section will deal with the question how the texts of Genesis 1, 26-28 have been read and interpreted over the last decades.

Jobling (1972), Krolzik (1979), Cohen (1989), and Van Soest (1996) investigated the recep-

tion of Genesis 1 in Christian and Jewish sources in a specific period from 200 B.C. up to the 20th century. They found that the early exegetes did not say anything about human activities to subdue the earth and never used the texts as licence for a selfish exploitation of the environment. Some understood the texts as encouragement for self-mastery: animals were the wild passions within that needed to be subdued by the rational mind (Jobling, 1972, chapter 3).²² During the late Middle Ages the interpretation of dominium terrae gradually changed. Nature needed to be corrected and perfected by cultivation. Sir Francis Bacon, who saw nature as a key to understanding the Bible, argued that dominion over nature, partly lost at the Fall, should be regained and that nature might even be forced to reveal the secrets hidden in it.²³ By cultivating nature, paradise could be regained.

A hierarchical relationship between man and nature was generally assumed, as was the idea that the earth was created for humankind. This dualistic attitude is not only grounded in Judeo-Christian doctrine, but can also be traced back to Greek philosophy.²⁴ Where White labels Christianity the “most anthropocentric religion of the world” (1967, 1205), the historian and philosopher P. Harrison also refers to the older Greek tradition: “While the anthropocentrism which has characterised the Western approach to nature has commonly been thought to have originated in the Judaeo-Christian tradition, the view that nature has been designed to serve human ends may be found in Aristotle, and appears later as a basic tenet of Stoicism” (Harrison, 1998, 177).²⁵ Harrison demonstrates that this anthropocentric view of the Stoics was easily grafted onto the biblical idea of man having dominion over all living creatures.

Since the 19th century an increase can be observed in publications speaking of a merciful attitude towards animals, and protesting against mistreatment (Thomas, 1983, chapter 4).²⁶ Christians participated in this as well, for the first national animal protection society in the world, the Royal Society for the Prevention of Cruelty to Animals (R.S.P.C.A.), was founded largely by evangelical humanitarians in 1824 (B. Harrison, 1973, 788). Although reasonable treatment of farm animals gradually became a distinctive feature of civilisation, suppressing wild animals and ‘barbarians’ in colonies was still regarded as humane and justified. Sir Matthew Hale (1677) was supposedly the first to outline the idea of stewardship.²⁷ His idea of stewardship was built on the idea of the earth as a garden that needed to be developed, clearly inspired by the second creation story. Wild nature and unusable plants needed to be corrected. This idea of stewardship resulted in good care for landscapes, agricultural land and certain animals, but also in the loss of much wild nature.

Not until Darwin unfolded his theory of evolution and natural selection, did theologians start to focus on the content of dominium terrae in a more elaborate way. Van Soest (1996, 258) emphasises that the interest of theologians was only activated when an external factor made reflection on the concept necessary. The theory of evolution led to a profound change in the view of nature in the natural sciences. Harrison points out that Darwin’s theory “spelt the end of the physico-theological impulse which had driven the natural science of the seventeenth century” (Harrison, 1998, 272). Moreover, during the last 150 years nature itself has been transformed drastically as a consequence of industrialisation and urbanisation. At the end of the 1960s, awareness about environmental pollution arose, and since then a more ecologically sound interpretation of the concept of dominium terrae, the ideas of good stewardship, responsibility, and care for creation, have become popular.²⁸

We can conclude that Christian thinking has influenced attitudes towards nature, but not in an unambiguous way. Biblical teaching has been used both as a motivation to subdue wild nature as well as to protect nature. Besides, in many cases conduct towards nature has been

indirectly influenced by religious thinking and therefore, instead of being linked directly to specific biblical teachings, Western attitudes and behaviour choices might be better understood as part of a broader worldview, in which both Christian and Greek thinking can be recognised.

In his article, White states that modern science can be seen as an extrapolation of natural theology and that modern technology can be partly explained as a realisation of the Christian dogma of man's rightful mastery over nature, so for these reasons Christianity might be blamed for the ecological crisis. The next section will consider the influence of Christianity on the rise of science, technology, and capitalism, factors that played an important role in the development of Western society.

1.2.3 Christianity and Western development

In the first millennium after Christ it was common to interpret the Bible allegorically with an indifference to the physical world. As early as the 12th century, increased economic stability and a search for knowledge led to the study of the Book of Nature, which was seen as a means to learn more about God, a thought already put forward by Saint Augustine. Initially this led to the study of texts about nature, rather than a study of the empirical world itself. This changed during the period of the Renaissance, when allegorical text interpretation shifted to a literal study of the Bible (as well as Greek texts). People became aware of inconsistencies in the descriptions of nature in these texts, leading to both scientific and more biblical research. Thus, by stripping nature of its symbolic significance, the metaphor of nature as a book that could be read and understood, contributed substantially to the emergence of natural science. Harrison argues that the rise of textual criticism was also a driving force of Protestant Reformation (P. Harrison, 1998, chapter 3). Because of Luther's German Bible translation and the invention of the printing press, laymen gained access to the Bible. Individuals were stimulated to gather knowledge by themselves, without intervention or interpretation of a priest or bishop.²⁹ Both the Bible and the Book of Nature were seen as sources of true knowledge to learn more about God. The idea of the Book of Nature remained a central concept until the early 19th century.³⁰

As nature was mapped and described systematically, the research goals gradually changed. Discovery of the New World with new animals and plants contributed to further exploration of nature and the Bible. Soon the Book of Nature started to contradict a literal interpretation of the written text (Harrison, 1998, chapter 5). During the Enlightenment, a rational method of thought, rooted in Greek philosophy, stimulated further development of science. Gradually new worldviews and concepts of humankind appeared and humanism developed. Liberal thought arose, in which individual needs and desires got a more prominent position. In the 19th century, religion and science gradually grew apart. The influence of theology on science diminished and science became a significant development on its own.³¹

Capitalism originated in 17th century North-Western Europe. Roots of capitalism, as substantiated by Weber, can be found in the protestant ethic. Weber argues that the Calvinistic doctrine of predestination led to the work ethic that laid the foundation of the capitalistic market economy (Weber, 1971). Stoll depicts this Calvinistic view: "Labour was good and idleness sinful; commercial civilization was a blessing and wilderness unproductive. Therefore, every swing of the axe was a prayer to God" (Stoll, 1997, 2).³² Farming was a sign of civilisation and failure to make the best profit was seen as poor stewardship. Yet work was not an end in itself, but was done for the common good and the glory of God. With wealth came duty, not

repose or pleasure. Calvinism stimulated the work ethic considerably, although it was not a new invention. The ancient Greeks and Romans detested indolence, Saint Augustine taught 'Qui laborat orat'³³ and the Benedictines devised 'Ora et Labora'³⁴. Whilst Protestantism gradually became less influential, thrift and the work ethic remained important virtues in Western society, as well as the idea of an omniscient God and a hereafter where man can rest from his work. As with science, capitalism gradually became a development, or an ideology, in itself. The concept of progress moved increasingly towards the meaning of meeting needs in the present.

When science and technology gradually merged, development of the Western world accelerated. The process of industrialisation in particular, which advanced in Great Britain at the end of the 18th century and rapidly spread to the rest of Europe and North America, had an enormous impact. This process, however, cannot be isolated from other developments. After the French Revolution, democratisation gradually resulted in a more equal distribution of power and goods within Western society. Population growth³⁵, expansion, colonisation, urbanisation³⁶, growing prosperity, globalisation, and ideas about progress and control all influenced the process of industrialisation and the growing impact on the environment. These mutually-influencing factors enlarged the technological possibilities, resulting in certain blessings on the one hand, but disastrous effects for the environment on the other hand. According to Moncrief (1970), the effect of Christian tradition on the treatment of our environment has been indirect, by affecting the character of the processes of capitalism and democratisation. Several authors follow a comparable line of argumentation.³⁷

1.2.4 Discussion

The previous sections discussed the relation between the Western religious worldview and the environment. Section 1.2.2 shows that White's thesis cannot only be based on the meaning and interpretation of the dominion texts. The creation stories reflect the idea of a dualism between humankind and nature, but they do not convey the message that God made creation to be exploited by humans for their own ends. The position of humankind is one of 'lording over' in *imago Dei*, the image of God (Genesis 1) or as gardener (Genesis 2). The Genesis texts were rarely explained as an encouragement for overexploitation of nature. This might indicate that dominion was not seen as an important theological issue or that the idea was taken for granted. Although a direct relation between the dominion texts and environmental degradation cannot be found, this does not refute the idea that Christian thinking has affected attitudes towards nature. However, this influence often appears to be indirect, ambiguous, and part of a broader worldview. This can also be concluded about the four Christian communities I studied for this dissertation, and therefore I investigated the indirect relation between a shared religious worldview and behaviour choices, focusing on the role of values.

It is evident that Christian thinking influenced the development of science, technology and capitalism in the Western world, but it is obviously not the only driving force behind environmental degradation. As discussed in section 1.2.3, many developments contributed to the overexploitation of nature, indirectly influenced by Christian and Greek thinking.³⁸ As the influence of Christian doctrine diminished, science and technology continued to develop. Therefore the discussion about the causes of the ecological crisis should focus on the complex combination of factors as mentioned above, and the values that underlie these developments and ideas about progress, which are rooted in both Greek and Christian thinking. The role of religion itself must not be oversimplified nor overstated. The relation between Christian

thinking and the ecological crisis is present, but indirectly, as part of a broader worldview.

During the last centuries, science and technology have clearly contributed to a better quality of life. Better healthcare, hygiene, housing, education, transport and communication tools have changed the lives of many considerably. However, we are now at the point that, when the Western way and level of production and consumption is maintained, this will have negative effects on the quality of life in general, and the poor countries and biodiversity in specific (MEA, 2005). Therefore, quality of life should become a focus again in order to develop in a sustainable way. As assumed in the introduction of this chapter, to realise sustainability in the long term, it must correspond with people's ideas about achieving and maintaining a high quality of life. At the same time, sustainable ways of production and consumption will affect the quality of life worldwide in a positive way as well.

This section has described the debate on the relation between religion and environmental behaviour mainly from a historical point of view and a macro perspective, describing comprehensive developments that took place over a long period. The next section approaches the discussion on the relation between religion and environmental behaviour from a micro point of view. It will discuss surveys, carried out over the last thirty years, on the relation between individual religious choices and behaviour.

1.3 Surveys on religion and environmental behaviour

1.3.1 Surveys on White's thesis

White's thesis not only intrigued historians and theologians, but also gave rise to a large number of empirical studies by social scientists, who address the debate from a micro-perspective. This section will analyse surveys conducted since 1979, to put to the test the hypothesis of a possible direct relation between the Christian faith and environmental attitudes and behaviour in the present. Although the approaches might differ, almost all researchers conclude that adhering to Christian faith does not significantly or systematically lead to less or more environmentally sound behaviour. However, methodologically it is not so easy to test the White-thesis and to measure the relation between religion and environmental behaviour. In this section the methodologies and conclusions will be discussed. Appendix 1 gives an overview of twenty-one survey studies, including the items used on religion, religious beliefs, environmental attitudes, concern and behaviour, and the main conclusions.

Inspired by the White-thesis, the survey studies in the 1980s concentrated on the concepts of 'dominion' and 'mastery-over-nature', and often used items of the New Environmental Paradigm (NEP) scale to measure environmental attitudes and concern.³⁹ Main religious indicators were denomination and church attendance. Hand and Van Liere (1984) concluded from a mail survey of Washington State residents that people who did not describe themselves as Jewish or Christian ('non-Judeo-Christians') had slightly more concern for environmental issues than Jews or Christians ('Judeo-Christians'). The latter were generally more committed to the mastery-over-nature orientation than non-Judeo-Christians, but this varied considerably among denominations.

The 'conservative' denominations in particular emphasised the concept of dominion and were less likely to reflect environmental concern.⁴⁰ Church attendance in 'liberal' denominations was positively associated with environmental concern.⁴¹ Shaiko (1987), who used a very specific sample of environmentalist and social movement members, found 'Judeo-Christian

environmentalists' to be opposed to the 'mastery-over-nature' statement, though not as strongly as the 'non-Judeo-Christians' in his study. Shaiko concluded that his findings neither confirmed nor rejected White's thesis and suggested that a more comprehensive thesis might better explain the differences in values and attitudes of Judeo-Christians. Eckberg and Blocker (1989) criticised the studies of Hand & Van Liere and Shaiko for not using measures for religious beliefs and added items on the importance of religion and beliefs about the Bible. They found 'belief in the Bible as the actual word of God' to be negatively associated with environmental concern. They concluded that the results offered "firm support" for White's thesis, though this might be somewhat exaggerated. Regarding the three different measures of religious experience, only 'belief in the Bible' appeared to be relevant; denomination and importance of religion did not support White's thesis. The effect was never very strong.

Studies with a comparable design, carried out since the 1990s, draw the same conclusions. Woodrum and Hoban (1994) held telephone interviews in North Carolina and found that biblical literalism⁴² was not more supportive of the dominion belief⁴³ than other factors. They concluded that churches could not be singled out as culpable for environmental problems. Greeley (1993), who used the 1988 General Social Survey, described the relationship between religion and environmental concern as spurious. He suggested looking at larger worldviews. A weak point in this research is that Greeley based his conclusion on just one item on environmentalism: a variable to measure support for environment-related spending. Schulz (2000) found in his research of university students in 14 countries that respondents with a high score on biblical literalism scored significantly lower on the NEP, lower on ecocentric environmental concerns and higher on anthropocentric environmental concerns. No significant relation was found between biblical literalism and self-reported pro-environmental behaviour. Schulz concluded that people with a literal belief in the Bible act from other motives. Their concerns are rooted in the effects that environmental degradation will have for humans. Kalbheim (2000) concluded the same from a Dutch survey. He found that church attendance does not make any difference in environmental behaviour. Church members just have different motives for their actions.

1.3.2 Denominations and religious beliefs

Since evidence for White's thesis seemed to be ambivalent, researchers started to look for more specific indicators to measure the impact of religion on environmental behaviour. Some hypothesised a variation among denominations. In a cross-national analysis of 14 European countries, Ester and Seuren (1992) found slightly higher environmental awareness and 'willingness to offer' for the environment among Protestants compared to Catholics. However, this conclusion did not hold for the individual countries. Another European survey done by Dekker, Ester and Nas (1999), part of the International Social Survey Project, yielded the same results. Protestants did not differ consistently from Catholics. They stated that, in modern advanced society, being a Christian or non-Christian is quite irrelevant as far as environmental attitudes are concerned. In the British Social Attitudes Survey, Catholics seemed to be the most sceptical toward nature among the British Christian denominations.⁴⁴ Others, however, indicated Catholics as more concerned about the environment⁴⁵ and more willing to support environmental spending⁴⁶. Kanagy and Nelsen (1995) concluded from a Gallup survey that Judeo-Christians, even religiously conservative individuals, were no less likely than nonreligious individuals to identify themselves as environmentalists and were as concerned about environmental issues as others. Wolkomir et al. (1997a) concluded from a national telephone

survey on biotechnology that denomination and church attendance had no significant effect on environmentalism.

The studies mentioned before focussed their research on religion in relation to environmental behaviour largely on indicators such as church attendance, denomination, biblical literalism, and the score on the NEP-statements. Another way to study the influence of religion is to investigate more specific religious beliefs and practices. Guth and Kellstedt (1993) analysed the impact of theological orientations on environmental attitudes in a survey of American religious activists. They found environmentalism to be part and parcel of a liberal religious and political worldview. Conservative Protestants were less concerned with the environment as a political issue. From an extensive study of four data sets on religious and political participation, Guth et al. (1995) concluded that conservative eschatology⁴⁷ and religious tradition have significant influence on the way Americans view the environment. Conservative eschatology was negatively associated with environmentalism and proved by far the strongest religious predictor of environmental attitudes. Evangelicals appeared to be the least environmental, while mainline Protestants and Catholics were more concerned about the environment. Because of the variations among Judeo-Christian traditions, Guth et al. concluded that White's thesis is far too simplistic. Eckberg and Blocker (1996) and Boyd (1999) both used data from the 1993 General Social Survey and concluded that the negative effect of Christian theology seems to be largely an effect of fundamentalism or of sectarianism. Religious participation⁴⁸ and more frequent prayer⁴⁹, however, were associated with stronger support for the environment. In Europe Ester and Seuren (1992) found no evidence for the hypothesis that more orthodox and traditional religious beliefs lead to a lower concern for environmental issues. They strongly question direct relationships between religious beliefs and environmental attitudes. Boyd (1999) underlined that religious variables appeared to be weak predictors of environmentalism.

1.3.3 Environmental attitudes and behaviour

The first analyses generally focused on environmental attitudes or concern rather than on behaviour, which is more difficult to measure with a survey study. Attitudes and behaviour often appear to be at variance.⁵⁰ Ester (1979) indicated moderate negative correlations between orthodox religious beliefs and environmental concern, but hardly or not with environmentally friendly behaviour. Kanagy and Willits (1993) measured environmental behaviour with items on consumption behaviours and social and political action, in their survey of Pennsylvania residents. Their religious indicators were affiliation and church attendance. Attendance was found to be negatively associated with NEP-attitudes, but positively related to behaviour. Judeo-Christian affiliation was not significantly related to behaviour. They concluded that the positive effect of religious participation on environmental behaviour is not conditioned by the acceptance of the ideas contained in the NEP, but rather by other ideas that apparently support environmental activity, such as stewardship.

With Kanagy and Nelsen (1995), I am critical of the use of the NEP as a measure of environmentalism in relation to religion, because of the association with 'new ecological' ideas and values as described in the NEP. Individuals committed to the Judeo-Christian tradition might not identify with these indicators. This criticism can be confirmed by studies in which respondents with a high score on biblical literalism or church attendance score low on the NEP, but not significantly low on environmental behaviour.⁵¹ The finding that churchgoers are generally more committed to the mastery-over-nature orientation, measured by the NEP-

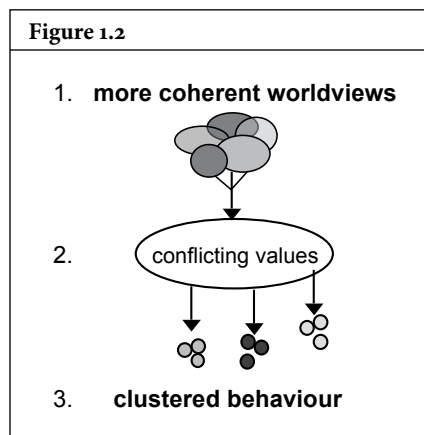
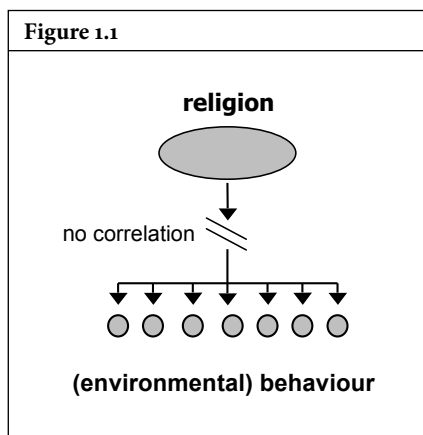
statement: 'Mankind was created to rule over nature', does not mean that the content and the realisation of this mastery have a negative effect on the environment. Shaiko (1987), who used the NEP as well, noticed differences in values and attitudes among Judeo-Christians of all denominations and suggested a more comprehensive thesis, incorporating a middle ground position like stewardship, in order to explain these differences better.

Using data from an American survey conducted in 1992, Wolkomir et al. (1997b) showed that religious salience, meaning relative importance of particular religious beliefs, and biblical literalism strongly correlated with dominion belief, but, like Kanagy and Willits, they concluded that these variables did not significantly affect environmental concern. They found some evidence for more environmental behaviour among religious individuals and suggested that this may indicate the effect of a religiously based environmental ethic.

Since direct relationships between specific religious beliefs and environmental concern and behaviour could not be confirmed, environmentalism should be explained by other variables. Some researchers found demographic characteristics, such as the region of residence, education, income, gender and age to be positively and significantly related to environmental concern or behaviour.⁵² Environmental concern happened to be most common among women, young people, the more highly educated, and political liberals. However, young people were not more likely to show environmentally friendly behaviour. Persons in higher-class positions expressed a higher willingness to pay taxes for environmental objectives.⁵³ Remarkably, in the United Kingdom, Hayes and Marangudakis (2001) concluded that the better educated and the scientifically more knowledgeable were significantly more likely to express a pro-dominion stance. Becker et al. (1996) showed that political orientations, especially post materialism and a politically left point of view, affected both environmental concern and environmental behaviour. Environmental concern and behaviour appeared to be part of a more comprehensive religious and political worldview.⁵⁴

1.3.4 Discussion

The results of the preceding surveys show that a direct causal relation between religion, measured by denomination, church attendance, and biblical beliefs on the one hand, and environmental behaviour, measured by attitudes, concern and/or diverse actions on the other hand, cannot be found. This is outlined in figure 1.1.⁵⁵ When religion is used as a concept to cover the larger denominations such as Roman Catholics, Protestants, Evangelicals, and others,



no correlation can be found with environmental behaviour. In this figure, 'environmental' is written between brackets, because it is practically nothing more than just behaviour. Environmental behaviour includes all behaviour choices with a significant effect on the environment and in fact nearly all human behaviour has an impact on the environment. As mentioned before, many surveys conclude that the relation between religion and environmental behaviour appears to be indirect and complicated. I will give some suggestions for studying this relation in a more coherent way, which are outlined in figure 1.2.

An important point of discussion is the way religion is measured. The more specifically religious beliefs were questioned, the less clear a difference between denominations could be determined. It is suggested that environmental behaviour, instead of being connected to a certain denomination, is part of a more comprehensive and coherent worldview. Therefore, in order to study the relation between religion and environmental behaviour, the first suggestion is to focus not on isolated items as church membership, denomination, and specific religious beliefs, but on religion as broader concept and content of a comprehensive worldview. This might result in more coherent correlations between religion and behaviour.

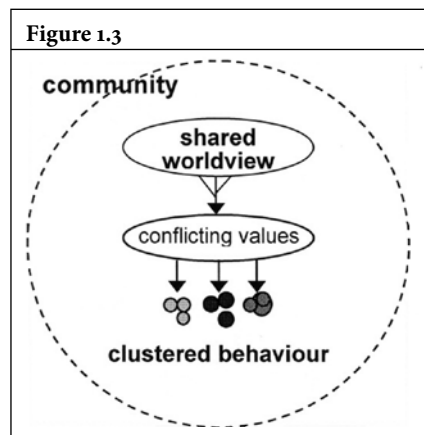
A second, related, suggestion is that the influence of worldviews on behaviour might be better perceived by studying intermediate values. These values are usually not related to a specific denomination, but rooted in a more comprehensive worldview. Studying values grounded in people's worldview can better identify the indirect influence of worldviews on behaviour. Behaviour choices involve a trade-off between competing values, leading to certain value-hierarchies in different situations. When a vegetarian, for example, decides to eat meat at an unexpected dinner at the new neighbour's, good relations are valued higher than vegetarianism at that specific moment. It might be expected that certain values that may have a positive effect on environmental behaviour in the long term are part of a person's value-hierarchy, but just at a lower position than values with a more short-term focus. It is therefore interesting to study the wide range of a person's values and particularly the position of these values in the hierarchy at different situations.

A third remark relates to the way environmental behaviour was measured. In the studies mentioned above, dissimilar indicators were used. Some studies used a large number of items, while others based their conclusions on one or two indicators. More abstract descriptions of environmental behaviour yielded different results from those of concrete and daily realities and acts. Not all studies distinguished between types of environmental behaviour, or between attitudes and behaviour, which makes the studies hard to compare. Other associations can also play a role, especially in the case of political statements. Besides, as suggested above, it is important to realise that practically any behaviour affects the environment, and therefore 'environmental behaviour' is quite a loose construct. In fact, there is no such thing as 'environmental behaviour'. In most cases behaviour is not performed to influence the environment as primary goal. Behaviour is rarely unambiguous and is determined by a complex number of factors. People can make environmentally sound choices at one point, while polluting the environment at another point. Therefore, the third suggestion is to focus on specific clusters of behaviour, like nutrition, transport and energy-use, and the motives that underlie behaviour choices in these separate clusters. Instead of drawing conclusions about environmental behaviour in general, one needs to be more specific about behaviour in relation to values and worldviews.

The meso level of communities

A last, but very crucial, remark has to do with the level on which the relation between religion and environmental behaviour is studied. The historical discussion, as described in section 1.2, approaches the relation between religion and environmental behaviour primarily from a macro point of view. The surveys as described in section 1.3 are developed for the micro level, where religion and environmental behaviour are determined as the sum of individual scores on survey questions. A level that seems to be rather absent in mainstream research on the relation between religious worldviews, values and behaviour choices, is the meso-level of communities.

Individual values and behaviour choices are embedded in a specific social context. When within the context of a community people adhere to a shared worldview and communally decided and monitored behaviour choices, this is likely to lead to a more coherent worldview. Religious communities may provide a context in which values and ideas about quality of life are shared and maintained, and therefore conflicting values are more likely to come to light. Furthermore, the social capital, including communal norms, trust and social structure, can facilitate and reinforce the embedding of values and behaviour of community members. These individual behaviour choices are to a certain extent framed by communal agreements, rules and traditions, and maintained by mechanisms of mutual social control and a certain sanction system. Therefore, the meso-level of communities might be an interesting approach or even a missing link in the research on the relation between worldviews, values and behaviour. This approach is outlined in figure 1.3, and has been used as framework of this study. The research design of this study, as well as the aim, research questions and research groups are elaborated in the next section.



1.4 Research design

1.4.1 Religious worldview, values and sustainability

From the two debates as discussed in the previous sections the following conclusions can be drawn. The historical and theological debate about Judeo-Christian doctrine as cause of the ecological crisis (section 1.2) shows that Judeo-Christian thinking did influence attitudes towards nature, but not in an unambiguous way. The study of the Book of Nature, that lead to systematic descriptions and mapping of nature and further exploration of the Bible, was an

important, although unintentional, catalyst of the rise of science. Christian thinking, influenced by rationalistic Greek philosophy, formed the common worldview of the Renaissance and was still generally accepted in the 17th and 18th centuries. As the influence of theology on science diminished, science became a significant development on its own. A complex combination of factors and values influenced the processes of industrialisation, capitalism, technology, and science, resulting in a growing impact on the environment. Christian concepts have been used ambiguously. For long, wild and tame nature were clearly distinguished. Wild nature needed to be subjugated, while, since the 19th century nature, and particularly domesticated animals and cultivated areas, started to be protected and preserved. The historical overview demonstrates that Christian thinking indirectly influenced the rise and development of science and technology, leading to exploitation of nature in the Western world, but also produced counterforces to preserve nature.

Recent surveys on the influence of religion on behaviour choices (section 1.3) conclude that a direct causal relation between religion, measured by the sum of individual scores on items such as denomination, church attendance, and literal biblical beliefs on the one hand, and personal environmental behaviour on the other hand cannot be found. It is suggested that environmental concern and behaviour are related to a more comprehensive worldview. The study of religion as part of a broader concept of philosophy of life or worldview is considered to result in more coherent perspectives. The influence of worldviews on behaviour might be better perceived by studying values grounded in these worldviews. Environmental behaviour consists of a very heterogeneous set of often unrelated behaviours. Instead of drawing conclusions about environmental behaviour in general, specific clusters, like nutrition or transport, are suggested in order to be more specific. Generally speaking, one cannot distinguish environmental behaviour, because in fact any behaviour affects the environment, and thus all behaviour choices must be taken into account. Behaviour is determined by a complex number of factors and often involves a trade-off between competing values. Therefore, values play an important role in this study on religious worldviews, sustainability and quality of life.

It is evident that the growing impact on the environment has negative consequences. It is also evident, that the developments and processes leading to this environmental damage are in some way rooted in values and worldviews. I therefore agree with White that religion and values will be essential in order to find a sustainable solution for the 'ecological crisis'. In their study 'Modernization, cultural change and the persistence of traditional values', Inglehart and Baker (2000) find that religion and ideologies leave an enduring imprint on values, despite modernisation. Christian and Greek thinking largely formed the Western cultural and religious past, and values closely connected with Christian and humanistic worldviews are still deeply rooted in the Western world. The fact that being a Christian or non-Christian is quite irrelevant as far as environmental behaviour choices are concerned, might also suggest that specific Christian and humanistic values are rather familiar to all Western people. Therefore, in the Western world, Christian and humanistic worldviews should be the starting point for defining values leading to behaviour with a low impact on the environment. In order to establish sustainability, as hypothesised in this study, it needs to be anchored in our worldview. An important aspect in this is what people mean by a 'good life' and how they define quality of life. Sustainability will not take shape until it is in harmony with ideas that can achieve and maintain a high quality of life.

A significant question is how we deal with concepts of modernisation and growth, which for long have been associated with progress, development, individuality and economic pros-

perity, eventually leading to unsustainable levels of production and consumption. An attempt to formulate an alternative for this concept of growth is the concept of sustainable development, defined by the Brundlandt Commission as a development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987).⁵⁶ The broad concept of sustainable development combines a diversity of interests, aiming at environmental protection, social equity and economic prosperity. This concept will be further discussed in chapter 2. The linear progress of modernity has led to a growing uncertainty, a ‘risk society’ as argued by Beck.⁵⁷ He introduces the concept of ‘reflexive modernisation’ as a replacement of the ‘first modernity’. The meaning of reflexivity is not unambiguous. First, reflexivity means a self-confrontation with the effects and threats provoked by the process of modernisation. A second meaning, reflexivity as reflectivity, is a reflection on the foundations of society. Some authors, like Beck, describe it as a cognitive reconstruction of modernity itself. Others, like Giddens (Beck, Giddens and Lash, 1994), emphasise the role of values in formulating goals for decision-making, from international politics to a very personal level. Reflexivity in the meaning of reflectivity may offer perspectives for introducing ideas about sustainability and quality of life in the discussion on modernisation and growth.

1.4.2 Aim and research questions

The aim of this study is to investigate possible ways of realising a high quality of life combined with a sustainable way of living. Crucial aspects are the role of values in and the influence of worldviews on both the interpretation of quality of life and practical behaviour choices. These aspects are studied in the social context and cultural setting of communities, in order to investigate the practical consequences of a shared religious worldview and values rooted in this worldview, as well as the way communities deal with communal values and behaviour choices.

In this study on the relation between religious worldviews, values and sustainability within four religious communities, the main research questions are:

1. Which values that are rooted in a shared religious worldview, lead to a relatively low impact on the environment and a more sustainable pattern of consumption and production?
2. How are behaviour choices with a relatively low impact on the environment maintained in the long term?

Underlying sub questions, which are dealt with in the separate chapters on the communities, are the following:

- a. What are the most relevant elements of the religious worldviews of the separate communities in relation to sustainability?
- b. Which values are most relevant in relation to sustainability?
- c. In what way do values of the communities lead to a lower impact on the environment?
- d. What kind of value-hierarchy can be distinguished?
- e. To what extent can we characterise the lifestyle of these communities as sustainable?
- f. Which aspects of the social organisation are important for maintaining sustainability?
- g. Which inspiring examples of sustainable choices, motivated by values and the wish to preserve a certain experienced quality of life, are offered by these communities?

The methodology to answer these questions is further outlined in chapter 2. A more precise checklist that is used as basis for observation, interviews and literature study can be found in appendix 2.

1.4.3 Research groups

The study is limited to four religious communities, each characterised by a specific and coherent worldview and rooted in Western religious culture: the Amish, the Hutterites, the Franciscan Order and the Benedictine Order. These communities are rooted in Western tradition and culture and are characterised by a long existence. Research on Western religious communities as such may bring to light values that are hidden in our present society. Another condition was that their lifestyles were believed to have a relatively low impact on the environment. Accessibility and necessary conditions for participant observation were practical considerations.⁵⁸

An important reason for the choice of these four, somewhat peculiar, religious groups is that they represent a radical interpretation of two religious movements in Western history: Protestantism (although Anabaptism does not represent all forms of Protestantism) and Roman Catholicism, offering the possibility of a mutual comparison of two communities within the same confession of faith. These longstanding religious communities have developed common beliefs and manners, often rooted deeply in a shared worldview. These worldviews are relatively clear-cut and the maintenance of specific values and quality of life seems to be important. The underlying thought is that these communities have given their worldview a clear and even determining role in many daily activities. In all four communities, behaviour choices are usually not made for environmental reasons, but for religious and traditional reasons. Interestingly, the research groups have practised a reflective way of dealing with modernity for a long time and have succeeded to a considerable extent in preserving their preferred quality of life, while implementing necessary innovation for economic survival. This contribution of values and ideas about quality of life to a reflective process of necessary change might be very interesting for Western society in general.

The communities provide a social context in which religion, shared values, and behaviour can be studied in daily life. By using the methods of participant observation, interviews, and literature study, I studied their worldview, their ideas about quality of life, their impact on the environment and the value-considerations that underlie important choices in their way of living. The four communities have proved to be sustainable in a broad sense. Their traditions and religious worldviews might offer interesting reflections, values and practices to the way in which the Western world negotiates with sustainability and quality of life. To study the relation between the religious worldviews and environmental behaviour at the level of communities, I chose the qualitative method of participant observation. By using the method of participant observation, the content, meaning and limitations of the shared worldview, as well as value considerations, conflicting values, and behaviour choices, can be studied within the dynamics of daily life and within the social context and cultural setting of the community. The method of participant observation is further explained in section 2.6.

The following sections will give a short description of and motivation for the choice of the separate research groups.

Amish

The Amish have their roots in the Anabaptist movement, which was founded after the Radical Reformation in the sixteenth century. Since the 18th century many Amish have moved from Europe to the United States. The Amish have expanded enormously; an estimated 250,000 Amish (adults and children) live in the USA and Canada nowadays (Young Center, 2011).⁵⁹ This growth is caused largely by the high birth rate, together with the fact that more than 80% of Amish children decide to commit themselves to the Amish community by baptism when

they are adults.⁶⁰ Important Amish values, like respect for tradition, community, moderation, modesty and obedience, are translated into a simple lifestyle, small-scale agriculture, separation from the world, pacifism and a high work ethic, and together they form the framework for the Amish quality of life. Amish keep these collective values and norms in high esteem. Characteristic is their attitude of '*Gelassenheit*', best translated by resignation. The Amish identity is perceptible in their Swiss-German language, their clothes and their way of transport. Working the land is deeply rooted in this traditional agricultural community. It is very likely that the Amish have a relatively low impact on the environment, for they are not connected to the electricity grid and travel by horse and buggy. I studied their choices on energy use, nutrition, transport, and agriculture, and the motivations and values that underlie these choices. Being part of a rapidly developing Western society, their need for change led the Amish to a reflective process of modernisation. An interesting question is how this process of modernisation is practised and how their values and quality of life are preserved in this process.

Hutterites

Hutterite history began in 1528 when a Moravian group of Anabaptists started to share their possessions. The Hutterites are named after Jacob Hutter, an important leader in the 16th century. Like the Amish, the Hutterites faced a lot of persecution. In the 1870s the Hutterites moved from Russia to the USA and later also to Canada. In 2006, 460 Hutterite colonies existed in the US and Canada each with an average of about 95 members.⁶¹ They have been remarkably successful in maintaining their identity and expanding their population. Communal life and shared property are important characteristics of Hutterite life and a basic aspect of their theological conviction. All income is shared within the colony, and no wages are paid for labour. The meals are cooked and consumed in the central kitchen. Most of the ingredients are home grown and most of the meat is home butchered. Laundry is done in a central laundry area. Important values are sharing of possessions, order, submission, separation from the world, surrender to God and moderation or frugality. In contrast to the Amish, the Hutterites have embraced advanced technology on their large-scale farms. The Hutterite household, on the other hand, is very modest. Hutterite thinking shows a fundamental dualism, in which the spiritual and the material are separated. Spirituality is particularly expressed in daily life and hardly at all in economic activity, which only serves to maintain communal living. The Hutterites are amongst the longest existing communal groups. A specific question for the Hutterites is whether their communal way of living has a positive effect on sustainability and in what way it adds to the quality of life.

Franciscan Order

White put Saint Francis of Assisi forward because of his virtue of humility and his idea that both nature and man are designed for the glorification of their transcendent Creator. During the last 40 years Saint Francis and his ideas seem to have been rediscovered and the emphasis has gradually moved from Friar Minor towards 'Green Saint', owing to stories about him preaching to animals and his 'Canticle of the Sun', also known as *Laudes Creaturarum*, in which he calls the sun, the moon, the elements, and even death his brothers and sisters. On 29th November 1979 Pope John Paul II officially declared Saint Francis patron saint of ecologists. However, above all, Saint Francis chose to live a life of poverty. This chapter will consider the relevance of Saint Francis' ideas and the stories about his life for the present Friars Minors and Poor Clares. I studied the relation between Franciscan values, like poverty, humility and

moderation, on the one hand and sustainability on the other hand, and what can 'lay people' in the Western world learn from it.

Benedictine Order

The Benedictine Order is characterised by '*ora et labora*', a combination of prayer and work. Saint Benedict founded the first great monastery in the Western world in the sixth century and decided that the monks would remain self-sufficient. In his reaction to White's article, Dubos argued that man is never just a worshipper of nature (referring to Saint Francis, MV), but always influences nature by his existence. He proposed to study the life of Saint Benedict and his rule, for the latter "implies ecological concepts which are in tune with the needs of the modern world" (Dubos, 1973, 47). In the Middle Ages, the activities of the Benedictines, and the Cistercians in particular, played a crucial role in developing Europe. The monasteries translated the '*labora*' into a sustainable agriculture that supplied them with their needs and maintained its productivity, for which they became known as wise and good managers. Besides the agricultural '*labora*', the Benedictine rule might offer relevant concepts for both sustainability and quality of life in Western society. The Benedictine Rule and the monastic vows are important elements in the Benedictine way of life and I studied how these vows and values affect sustainability and ideas about quality of life.

1.5 Structure of the dissertation

This chapter has explored the debate on the relation between religion and sustainability in the Western world from a historical and theological perspective as well as from a social science perspective, followed by the reasons for studying the relation between worldviews, values, and sustainability in the social context of religious communities, with the aim of investigating possible ways of realising a high quality of life combined with a sustainable way of living. The results of this study are analysed in the following chapters.

Chapter 2 offers more precise definitions and descriptions of the central concepts and methodology used in this study. After a short recapitulation of the model for studying the relation between religion, conflicting values, and clustered behaviour, as outlined in section 1.3.4, section 2.2 focuses on the concept of community. The chapter continues with a theoretical perspective on religion and worldviews, particularising basic attitudes towards the natural environment. Further, the chapter defines the concept of values and quality of life, which are both essential in relation to sustainability. After clarifying the concept of sustainability, specifically in relation to the concept of development, the chapter describes how environmental impact and behaviour is dealt with in regard to the research groups, describing the ipat-formula and specific clusters of behaviour. Next, the methodologies used will be explained, focusing on the method of participant observation, which appeared to be the most obvious way to study religious worldviews, values, and behaviour in the daily context of communal life. The chapter ends with a short description of the fieldwork among each of the four communities.

Chapters 3, 4, 5 and 6 have got a comparable structure. Each chapter gives a description and analysis of a particular research group: chapter 3 is on Amish, chapter 4 is on Hutterites, chapter 5 is on Franciscans, and chapter 6 is on the Benedictine Order, including the Cistercian Order. The chapter starts with an introduction to the community and is followed by a short history, important characteristics and significant developments. The third section deals with religion and social-cultural aspects and describes respectively (1) the worldview, religious

rituals, beliefs and consequences, and cultural symbols; (2) important values, perceived value-hierarchies and important changes; (3) social capital, organisation, the role of gender, age or relevant rules. The fourth section describes the economic situation of the community in relation to values and sustainability. Questions dealt with are: what are the main sources of income? What is the role of technology and modernisation? What is the agricultural practice (if applicable)? How are the finances governed? What does the economic future look like? The fifth section is concerned with the environmental impact of the communities, with a focus on energy use, transport, and nutrition. The chapters end with an analysis of the relation between the specific religious worldview, quality of life, and sustainability, elaborating clashing values and values and choices that are most relevant and 'promising' for general Western society in regard to sustainability and quality of life. The four chapters are designed in this way to incorporate the research questions as much as possible and to prepare the input for the last chapter of this dissertation.

In chapter 7 the relation between religious worldview, values and sustainability of the research groups will be analysed, following the two research questions as posed in section 1.4.2. Section 7.2 deals with the question how behaviour choices and quality of life are maintained in the long term. I will analyse the role of the religious worldview, social capital and reflective change within the research groups and compare the four communities. Section 7.3 analyses specific 'promising' values of the communities that lead to behaviour choices with a relatively low impact on the environment, discussing community and communal life, stability, moderation in material goods, humility, rhythm of life, and reflection. Section 7.4 discusses in what way these promising values might connect to Western society and reflects on the theoretical framework of this study. The dissertation concludes with a general discussion on how sustainability and a high quality of life could be stimulated in Western society.

Chapter 2 **Theoretical perspective and methodology**

2.1 Introduction

Environmental problems have a fundamental nature - both the causes and the solutions are rooted in specific worldviews and the way mankind relates to nature. The assumption of this dissertation is that, to realise long-term sustainability, it must correspond with people's ideas about how to achieve and maintain a high quality of life. Sustainable behaviour choices will only be maintained in the long-term when they are motivated by people's worldview and values. Therefore, this study aims to investigate 'promising values' and ideas about quality of life, rooted in the Western religious culture, that intentionally or unintentionally lead to a sustainable way of living. This may bring to light values that are hidden, but still present in our society, and may be activated, in order to stimulate to find quality of life in values that lead to a sustainable way of living.

In social science research on religion, values, and environmental behaviour often concentrates either on the micro level of individual values and behaviour choices, or on the macro level of differences between nations. This study focuses on the meso-level of communities, in order to be able to study the relation between religion, values, and environmental behaviour in a more coherent way. Communities that have proved to be able to adapt to circumstances for hundreds of years while preserving important values, may be a missing link in the study of sustainable behaviour. Long-standing communities usually have strong social capital, by which their religion, values, traditions, and desired behaviour can be better maintained. The social networks, (unwritten) rules, and mechanisms of social trust and control regulate and facilitate activities within a community. The amount and quality of social capital, and the embeddedness of religion, values, and behaviour in the community, might have an important influence on the causality of the relation between religion and environmental behaviour.

The theoretical model of studying the relation between religion and behavioural choices in a communal setting has been introduced in chapter 1 and is outlined in figure 1.3. Religion is studied as a broad concept and content of a shared religious worldview, within Amish, Hutterite, Franciscan and Benedictine communities. I studied values grounded in their religious worldviews, the trade-off between competing or conflicting values, and value-hierarchies relating to their behaviour choices. Furthermore, I investigated behaviour choices within certain clusters, like nutrition, transport, and energy use, in order to be more precise about the sustainability of the communities and build up a picture of the impact of religion and values on these specific behavioural choices. In particular the way the communities deal with modernisation and change in relation to their religion, culture, and values, is an interesting process in the light of the discussion on sustainability.

This chapter continues by defining the central concepts and methodology of this study. Section 2.2 briefly describes the concepts of community and social capital. Section 2.3 gives a theoretical perspective on religion and worldviews. Values and the meaning of quality of life are the subject of section 2.4. Section 2.5 focuses on sustainability and describes the way behaviour and environmental impact are dealt with in this study and the clusters that are used for (environmental) behaviour. The last section explains the methodologies used and focuses particularly on the method of participant observation. This method appeared to be the most obvious way to investigate the relation between worldview and sustainability in the dynamics of communal daily life and to study values and behaviour in their social and cultural context.

2.2 Community

According to Robert Nisbet community is something that “encompasses all forms of relationship which are characterised by a high degree of personal intimacy, emotional depth, moral commitment, social cohesion, and continuity in time. (...) Community is a fusion of feeling and thought, of tradition and commitment, of membership and volition. It may be found in, or given symbolic expression by, locality, religion, nation, race, occupation, or crusade” (Nisbet, 1966, 47-48). Although modern society appears to develop community around common characteristics and interests more than around locality, I chose to study communities for whom living together and sharing property are felt to be highly important for maintaining community.

This study focuses on communities of Amish, Hutterites, Franciscans and the Benedictine family, which exist at diverse levels. ‘Community’ can refer to the local Amish church district, but also to the Amish of Lancaster County or even the Old Order Amish in America. The same holds for the Hutterites: one can talk about the local colony, but also about the total branch of *Schmiedeleut* Hutterites. Likewise, the level of community may vary from the Benedictine Order or Franciscan Brotherhood worldwide to the local monasteries. The concept of community thus appears at various levels and consequently the four research groups have been studied at various levels as well. However, in most cases ‘community’ is used for the smallest level of the Amish church district, the Hutterite colony, or the monastery, for this is the level at which most daily choices are made.

At the local level people most directly perceive what McMillan and Chavis (1986) call ‘sense of community’. They distinguished four important elements of community, namely (1) membership, which includes boundaries, emotional safety, a sense of belonging and identification, personal investment, and a common symbol system; (2) influence, which includes both the influence of the individual in the group and that of the group on individual members, needed for group cohesion; (3) integration and fulfilment of needs, (4) shared emotional connection, which the authors call the “definite element for true community” (McMillan and Chavis, 1986, p. 14). This includes a shared history, or at least identification with this history, and shared participation. These four elements can be clearly identified in the communities studied.

Social capital

The research communities are expected to be characterised by strong social capital, a clear structure, and shared traditions, which are essential for building a strong community. Capital, in economic terms, refers to a stock of wealth, goods, and services, which can be used to produce other goods and services. Social capital, as introduced by Pierre Bourdieu, refers to a

‘stock’ of skills, norms and social networks, which can be used to increase cooperation among individuals for mutual benefit. Two basic elements of social capital are trust and reciprocity (Smidt, 2003). Coleman (1988) distinguishes three types of capital: (1) obligations, expectations, and trustworthiness of structures, which help to strengthen social trust in interpersonal relationships, (2) information channels, which refer to the use of social relations to acquire information, and (3) norms and effective sanctions. When a norm exists and is shared, it is a powerful contribution to the social capital. In addition to facilitating action, norms and sanctions also constrain undesirable actions.

An interesting question is whether it makes any difference when social capital is rooted in a religious context. From a comprehensive study on religion and social capital in America, Smidt (2003) concludes that religious social capital shows some particular distinctions. In the US, the social capital generated through religious means far exceeds social capital generated by other means. Religious social capital appears to be more durable, as a result of specific commitments, and it is distinguished in terms of its range. Religion appears to have a distinctive capacity to nourish social capital and sustain reciprocity and group cooperation. Lastly, religious social capital yields benefits within particular segments of society.

Since the religious communities of the Amish, Hutterites, Franciscans, and Benedictines are all characterised by specific obligations, expectations, social relations, norms, sanctions, and commitments, their social capital is expected to be considerable. Chapters 3 to 6 will describe how this social capital is applied and sustained within the specific communities and how it relates to the aim of this dissertation, which is to investigate possible ways of realising a high quality of life combined with a sustainable way of living.

2.3 Religion and worldviews

2.3.1 Defining religion

The term ‘religion’ is usually reserved for specific worldviews that assume in a substantial way the existence of another, sacred or supernatural, reality. This can be recognised in the definition given by sociologist Berger (1967, 51), who describes religion as “the establishment, through human activity, of an all-embracing sacred order, that is, of a sacred cosmos that will be capable of maintaining itself in the ever-present face of chaos”.⁶² By this faith in a deity, a transcendental power or an invisible and elusive reality, people modify their thoughts, feelings and actions, both personally and as members of a community. Another still often used definition is the one given by the anthropologist Geertz. He describes religion as “(1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic” (Geertz, 1973, 90). For Geertz, religion is essentially a cultural system that gives meaning to human existence, which comes close to the definition of worldview as given in the next section. Remarkably, in Geertz’s definition of religion no deity, supernatural power or sacred order has been included, as is the core of the definition as given by Berger. Geertz approaches religion exclusively from a cultural point of view, in which religious symbols help to bring congruence between someone’s lifestyle and the inexplicable, and religious beliefs function to provide meaning, comprehension and comfort, offer explanations for anomalous experiences, and provide ethical criteria to explain inadequacies within reality.

The scholar Burkert (1996) disagrees with the exclusively cultural approach as advocated by Geertz, which poses religion in contrast to nature, denying the idea that religion can also be a general phenomenon deriving from human nature. Regarding Geertz's definition of religion, Burkert argues that the practical aspects of religion may still be underestimated: "It is not the symbols alone that create this seeming reality; it is the ongoing activity of living people interacting with each other through symbols, exchanging signs and reacting to them while working on their own 'reality', which constitutes religion" (Burkert, 1996, 5). To "grasp the distinctive features of religion", Burkert defines three principal characteristics. In the first place religion deals with the invisible, that which cannot be verified empirically. It is manifest in actions and attitudes; what is intended and dealt with cannot be seen or touched in the usual way. Secondly, religion manifests itself through interaction and communication, focusing toward the unseen and toward the social situation. Thirdly, religion claims priority and seriousness; it is the 'ultimate concern'. Burkert's sociobiological premise aims to unite cultural and biological, or genetic, ideas to explain and define religion.

Although Geertz precisely describes the steps of the cultural framework that coheres with religion, I agree with Burkert that religion deals with the invisible or a supernatural reality and therefore cannot be seen as just a cultural system. This is the core of Berger's definition as well, who defines the invisible as a sacred cosmos. Furthermore, I underscore the importance of the aspect of interaction and communication toward the unseen. I understand religion as a set of beliefs, feelings, and ritual actions and interactions that define the relation between human beings and divinity or a supernatural reality. In this study, religion will be described by specific elements of a community of believers, including certain dogmas, sacred books, rituals, worship, rules, and organisation.

I based my field study on religion and religious practices on Glock's multidimensional approach to religious involvement and commitment (1973), encompassing five dimensions. These dimensions consist of (1) *experience*, which includes experiences, feelings and perceptions that cohere with communication with a divine essence; (2) *ritual* activities, including religious practices like worship and prayer, and participation in special sacraments; (3) *ideology*, content, scope and adherence to the principal beliefs of the religion; (4) the *intellectual* side of religion, which concerns the knowledge of individuals about basic tenets of their religion and its sacred scriptures; and (5) the *consequential* dimension, which looks at the secular effects of religious belief, practice, experience and knowledge on the individual and his or her behaviour (Glock, 1973, 10-11).⁶³ Based on this approach, I have studied the experiences, rituals, beliefs, symbols, use of language, holy books, songs, religious practices, and the effects of religion in people's personal and communal life, using literature, interviews, and participant observation during the field research, in order to describe the most relevant elements of the religious worldviews of the separate communities in relation to sustainability.

2.3.2 Worldview

Although we can observe a decline in membership and church attendance in many churches in Western society, a fundamental need for answers to existential questions has far from disappeared.⁶⁴ Giving meaning to life seems to be an essential aspect of human existence. Human beings have always searched for answers to questions about the nature, aim, origins, and significance of life and the place of humanity and the individual in this world, which in effect influence individual, social and cultural processes. Shared ideas about giving meaning to life can be covered by a certain worldview. The term worldview has much ground in common

with concepts such as religion, culture, and philosophy of life.⁶⁵ In the literature these terms seem to be intermingled.

The concept of worldview has a long history and has been used in a variety of ways.⁶⁶ From the German word *Weltanschauung*, as introduced by Kant, the term worldview refers to an overall perspective from which an individual or group sees, understands and interprets the world. A worldview includes presuppositions, values and beliefs concerning fundamental aspects of reality, such as the existence of God, who we are as human beings, our purpose in life, our duties and roles in society, and life after death. People reflect on ontological questions, on ethical dilemmas, and on existential questions, which affect the other two aspects. A worldview can be based on an existing meaning system, like forms of Christianity, Islam, Confucianism, Marxism or humanism, but can also consist of an individual, personal meaning system, made up of philosophical, religious or ideological ideas. A worldview can therefore be a religious worldview or a secular worldview. A vast majority of world population adhere to a religious worldview.

In her dissertation on meaning systems, Hijmans (1994) distinguishes two aspects of the process of giving meaning to life: a cognitive aspect, containing personal visions, aims and ultimate values; and an instrumental aspect, covering the applied and practical possibilities deriving from this meaning system, things in life to hold on to. Both aspects are taken into account in this study, in which the cognitive aspect focuses on the content of religion, values and ideas about quality of life in the religious communities, and the instrumental aspect deals with the practical implications and motivation for behaviour choices.

Formerly, the term 'worldview' was used to oppose the term 'religion' (Goudsblom, 1985). The idea was that, besides official theology, like Christianity or Islam, other ideas about mankind and the world do exist, like deism or several forms of humanism, which deserve the same respect.⁶⁷ Later, the term 'worldview' became a more neutral umbrella term, covering both religious and nonreligious meanings of life. The concepts of worldview and philosophy of life are now used for any rather coherent, articulated, socially identifiable set of ideas about human life and its meaning, in short, ideas about being and well-being. Many definitions use a rather Western cognitive approach (describing worldview as a systematic and stable set of meanings), which might not be applicable to all cultures, especially those whose worldview is barely verbalised or written down. However, since this dissertation is focused on Western society, I choose to refer to both the cognitive or reflective process and the outcomes of this reflective process, and thus define worldview as a perspective on the meaning of life, reality, and experiences, culminating in a complex of values, answers to existential questions, and ideas about desirable behaviour.

The religious worldview plays an important role in the communities studied for this research. In each community, ideological and normative ideas about the meaning of life and reality, as well as values and ideas about desirable behaviour, are shared. Both cognitive aspects, like written and narrated stories, visions and aims, and instrumental aspects, reflected in rituals and practical rules, can be recognised. Especially in the Anabaptist communities, the socialisation of the younger generations in the religious value systems is an essential aspect of transmitting the religious worldview. The social structure of the Anabaptist communities is established in such a way, that from the cradle on children are educated in communal religion. Within the monasteries, new members first have a period of noviciate, in which they study theology, philosophy, and the basics of the order they wish to become part of. All four communities are characterised by an explicit choice for the communal religion and way of life and

an adult ritual of commitment: the Anabaptists practise adult baptism after a public vow and the monastics take monastic vows. Furthermore, the daily rule provides for the practice of religious life. The shared worldview is embedded in the social capital of the community, and vice versa: strong social capital helps to maintain, explain and cultivate the religious worldview.

To recapitulate, giving meaning to life is inextricably bound up with human existence. Although not everybody is involved in this process in the same way, most people, at a certain moment, question the meaning of life, the nature of existence, experiences, interaction with the unseen, and how to live. The concept of 'worldview' is defined as a perspective on the meaning of life, reality, and experiences, culminating in a complex of values, answers to existential questions and ideas about desirable behaviour. The concept of 'religion' will be used in cases of shared ideas about a transcendent reality and shared religious symbols and rituals. We will now continue with two specific elements of worldviews, namely values and ideas about quality of life.

2.4 Values and quality of life

2.4.1 Defining values

An important assumption of this study is that intermediate values play an essential role in the interplay of a religious worldview and environmental behaviour. In this section I will define the concept of values and describe significant conceptualisations in social sciences. This is followed by a brief discussion on the relation between worldviews, values and behaviour, as well as an explanation of the way values are studied in the context of communities.

Values have been defined and described in various ways. Kluckhohn described values as conceptions of or beliefs about the desirable that influence the selection from available modes, means and ends to action (Kluckhohn, 1951, 395). This evaluative aspect can also be found in the definition of Rokeach, who defined values as "... enduring belief[s] that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence" (Rokeach, 1973, 5). Values can be seen as motivational constructs that indicate a preference for something both desired and desirable. Schwartz, who built his extensive studies on the work of Rokeach, described human values as "desirable goals, varying in importance, which serve as guiding principles in people's lives" (Schwartz and Reuling, 1995, 89).⁶⁸ Thus, values can be defined as deeply rooted motivations or principles that guide the attitudes, norms, and opinions that control human action. Shaped by the culture in which we live and by our experiences, values have become relatively stable.

The social psychologist Rokeach (1973) developed the 'Rokeach Value Survey', in order to measure the influence of values on actions and attitudes.⁶⁹ Many value lists are based on his ideas about values, seen as "social products that have been transmitted and preserved in successive generations through one or more of society's institutions" (Rokeach, 1973, 24). This idea is particularly interesting in regard to the influence of communities and social capital on passing on values to the next generations and to new community members. Rokeach elaborated the idea of a value system: a hierarchy based on a ranking of an individual's values in terms of intensity. Differences between cultures, religions, or political orientations are, according to Rokeach, translatable into questions concerning differences in underlying values and value systems.

Schwartz (1995, 2001) expanded the Rokeach values and asked respondents to rate the

importance of 56 values as guiding principles in their lives. He focused his value research on the development of a theoretical framework for a comparison of cultures.⁷⁰ The interplay between conflicting or opposing values and the way in which conflicts are resolved will give a good view of an individual's or culture's value preferences. Although I did not use the 'Rokeach Value Survey' and the 'Schwartz Values Inventory' directly, I applied the ideas that people evaluate the importance of specific values in different ways, resulting in various value hierarchies and that some values may be compatible when pursued simultaneously, while others may give rise to psychological or social conflict.⁷¹ Among the communities, it is particularly interesting to study the way the communal value-hierarchy is dealt with and the way individual members relate to the communal value hierarchy.

Values and culture

Two authors in particular stimulated the elaboration of the relation between values and culture. The first is Hofstede (1980, 2001), who described values as core elements of culture, held by individuals as well as by collectivities, determining our 'subjective definition of rationality'. Hofstede developed five value dimensions and compared national cultures along these dimensions.⁷² Although these value dimensions are very useful to understand different cultures, the method of Hofstede did not fit in my field research and I only used the dimensions for my basic understanding of the communities I studied. The second influential researcher in the field of values and culture is Inglehart (1990, 2000), who focuses on cultural change and the role of values in these processes. He concludes that, while industrialisation is linked with economic growth at almost any price, people within affluent societies increasingly emphasise issues like quality of life, environmental protection and self-expression.

Using the World Values Surveys as main data source, Inglehart and Baker developed two dimensions to locate cultures: firstly the 'traditional' versus 'secular-rational' dimension, associated with the transition from agrarian society to (post) industrial society, and secondly the 'survival' versus 'self-expression' dimension, involving materialist values versus post-materialist values and subjective well-being. Interestingly, they find that "the rise of industrial society is linked with coherent cultural shifts away from traditional value systems, and the rise of post industrial society is linked with a shift away from absolute norms and values toward a syndrome of increasingly rational, tolerant, trusting, post industrial values." (Inglehart and Baker, 2000, 46). However, they also find that values seem to be path dependent: "A history of Protestant or Orthodox or Islamic or Confucian traditions gives rise to cultural zones with distinctive value systems that persist after controlling for the effects of economic development" (Idem). The authors conclude that the broad cultural heritage of a society leaves an imprint on values, which endures despite modernisation.

An interesting question is whether and how values that cohere with these cultural heritages can contribute to a reflective process of modernisation, in order to gain quality of life. In the four religious communities that have been studied traditional values systems and shared norms and ideas about quality of life have been maintained in a communal setting. Furthermore, although attendance at many religious services has declined throughout advanced industrial society, Inglehart observes a persistence of religious beliefs, religious values, and spiritual concerns. This confirms the idea that worldviews and values remain important for people, and are therefore essential elements in the quest for sustainability.

In the last part of this section on values, I will briefly discuss the relation between worldviews, values and behaviour, as well as the way values are studied in the context of communities.

Relation between worldviews, values and behaviour

When we focus on worldviews as a perspective on the meaning of life, reality and experiences, culminating in a complex of values, answers to existential questions and ideas about desirable behaviour, values are perceived as deriving from a worldview. The relation between values and behaviour, on the other hand, is more complicated. Values are defined as deeply-rooted motivations or principles that guide attitudes, norms and opinions that direct human action. People evaluate the importance of specific values in different ways, resulting in various value-hierarchies. Some values may be compatible, while others may give rise to psychological or social conflict. Values, therefore, provide guidelines for behaviour, which means that people consider implications of behaviour choices for the things they value. However, environmental behaviour depends not only on motivational factors, such as values and beliefs; it is also determined by contextual factors, such as individual opportunities, abilities and externalities (Poortinga, Steg and Vlek, 2004). The impact of values on environmentally relevant behaviour appears to be both direct and indirect, depending on factors such as beliefs, socio-demographic variables and situational variables.⁷³

In a community setting, where beliefs and situational variables are largely shared, I would expect that the relation between values and behaviour might be stronger linked and better embedded. In research on worldviews, values, and behaviour, this level of communities has been rather neglected as salient so far. Within a community, people generally explicitly or implicitly agree on how to translate certain values into actual behaviour. This consensus is part of the social dynamic that shapes a viable community, often based on a long community history. The community offers a framework, by which individual values and behaviour choices are maintained.⁷⁴ Therefore, in this study, the relation between values and behaviour is assumed to be better perceived in communities, where behaviour is expected to be embedded in a shared value hierarchy and shared ideas about quality of life.

2.4.2 Quality of life

The concept of quality of life is essential in relation to sustainability (Boersema, 2001). As discussed in chapter 1, a growth in GNP not necessarily leads to growth in subjective well-being. In his study on happiness in the United States, Europe and Japan, economist Layard (2005) found that despite growth in income, production and consumption, on average people have not become happier in the last fifty years. Because the growing production and consumption clearly result in a higher impact on the environment, it is important to look for quality of life in less materialistic factors in order to gain sustainability. This section looks at the meaning of the concept of 'quality of life' and theories that have been used to measure it.

Since ancient times, philosophies and religions have given notions about the 'good life', ranging from engaging in a certain positive attitude to life, a search into the depths of your being, to attaining the good life by practical codes of conduct.⁷⁵ Notions about quality or a good life are closely linked to the culture people are part of. Quality of life is associated with well-being, happiness, life satisfaction, and the perception of meaning in life. Philosophers have never agreed on a single definition of quality of life.

The same is true of the practice of empirical quality of life measurement.⁷⁶ The first empirical studies investigated quality of life particularly in relation to health issues and life expectation. The Quality of Life Research Unit of Toronto, for example, found that life expectations are adjusted in such a way, that they lie within the realm of what an individual perceives as possible.⁷⁷ This enables even people with difficult life circumstances to maintain a reasonable

perceived quality of life. In quality of life research, often a distinction between 'subjective' and 'objective' quality of life is made. Subjective quality of life concerns self-appraisals based on implicit criteria. It refers to how a person evaluates his or her own life, feelings, notions, and satisfaction with things in general. Objective quality of life is about fulfilling societal and cultural demands.⁷⁸ According to Veenhoven (2000), who studied the social conditions for human happiness, objective quality of life refers to the degree a life meets explicit standards of the good life, as assessed by an impartial outsider. Because of the complexity of the concept, Veenhoven concludes that one cannot meaningfully speak about quality of life at large.⁷⁹ The objective quality of life is often influenced by the culture in which people live.

Much research on quality of life is based on theories that generate lists of objective factors that can be seen as part of a good life. Vlek et al. (1998), Gatersleben (2000), and Poortinga et al., (2004) used various quality of life indicators in a number of studies to evaluate the impacts of changes related to the environment and consumption. The latter elaborated 22 'Quality of Life Aspects', which later were summarised into seven value dimensions: (1) *health, family and safety*; (2) *self direction*, including freedom, privacy, and leisure time; (3) *achievement*, including education and work; (4) *environmental quality*, including also biodiversity and aesthetic beauty; (5) *maturity*, including identity or self-respect, security, and spirituality or religion; (6) *openness to change*, including social relations, change or variation, and excitement; (7) *self enhancement*, including money or income, comfort, status, and material beauty. Since in these studies values are conceptualised as important life goals or normative standards serving as guiding principles in life, judgements given to the various aspects of quality of life may also be taken to reflect basic human values (Poortinga et al., 2004).⁸⁰

The Commission on the Measurement of Economic Performance and Social Progress, led by Stiglitz, Sen and Fitoussi, has been created in 2008 to reconsider the current measures of economic performance and to look for better measures of societal well-being and measures of economic, environmental, and social sustainability. In their report, Stiglitz, Sen and Fitoussi (2009, 16) recommend that measuring all features of quality of life requires both objective and subjective data. Objective data, such as given by the Human Development Index, should be complemented with data on subjective well-being, which encompasses different aspects, like cognitive evaluations of one's life, happiness, satisfaction, positive emotions such as joy and pride, and negative emotions such as pain and worry. This will not only add to a better measure of quality of life, but will also lead to a better understanding of its determinants, that reach beyond people's income and material conditions.

The definition I work with in this dissertation describes quality of life as the extent to which people can realise their own ideas and beliefs about a 'good life', which is a life in accordance with their values. I studied the personally perceived quality of life in the setting of communities and explicitly asked people what they understood as a 'good life' and how they experienced their way of life. In a macro-discussion about quality of life and sustainability, however, one cannot work with perceived quality of life. As stated by Stiglitz, Sen and Fitoussi, both ideas about on the one hand general, objective, quality of life and on the other hand a personally perceived quality or 'good life' are important in the discussion on sustainability. Before we go deeper into this topic, first the concept of sustainability will be defined and then the way it is made operational in this research.

2.5 Sustainability

2.5.1 Defining sustainability

The word 'sustainability' derives from the Latin word '*sustenare*', literally translated as 'to endure', 'to support', and 'to sustain', which means that something can continue for the time being. This is the original meaning of sustainability. Nowadays, sustainability is also used in an ecological sense. The term became popular after the launch of the 'sustainable development' concept by the World Commission on Environment and Development (WCED) in the Brundtland Report in 1987, as a concept aiming "...to meet the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, 24).⁸¹ This originally political definition is quite general and was formulated as a political compromise between the North and the South, and a compromise between sustainability and economic growth. Some years before the Brundtland Report, the concept of sustainability appeared in the 1980 World Conservation Strategy (WCS), already defined in an international context: "For development to be sustainable, it must take account of social and ecological factors, as well as economic ones; of the living and non-living resource base; and of the long term as well as the short term advantages and disadvantages of alternative actions".⁸² The aspect of quality is clearly incorporated in this definition. Since the publication of the Brundtland Report, 'sustainability' has been used in a wide variety of contexts and situations, whether or not in combination with 'development', running the risk of becoming meaningless or insignificant.

To determine the boundaries or limits of sustainability, it might be easier to define it in the reverse: when the boundaries of sustainability are passed, we face unsustainability. In an attempt to determine these limits, Siebert (1982) and Opschoor (1987) elaborated the concept of 'Environmental Utilisation Space', as a measure of the amount of environmental pressure that an ecosystem can be subjected to without being seriously damaged and diminishing the possibilities for making use of natural resources in the future. Goodland uses the terms 'source and sink capacities': "Source capacities of the global ecosystem provide raw material inputs – food, water, air, energy; sink capacities assimilate outputs or wastes" (Goodland, 1995, 6). Ecological sustainability entails the continuation of both functions. Spangenberg defines the available environmental space as an opportunity space, with an upper limit for resourcing consumption (the ceiling) based on the carrying capacity of the earth. The socially motivated lower limit (the floor) defines the minimum resource availability that is necessary in order to lead a qualitative life (Spangenberg, 1998, 10).⁸³ Sustainable development thus means that development can only take place as long as all boundaries are taken into account.

Sustainability cannot be detached from the aspects of space and time. The concept has by definition a long-term dimension. Time is incorporated in the word 'sustainable'; a continuation can only exist in a framework of time. In determining sustainability, economists and ecologists work with a different time span, often causing tension and mutual incomprehension. Where economists usually focus on a short-term period, long-term thinking is essential with regards to the resilience and the recuperative power of natural systems. The aspects of space and time are also important in relation to spill-over effects to other places and to the future and future generations. Space, together with energy and biodiversity, form the key-elements for sustainability and they are essential for the availability of other supplies and resources (Boersema, 1997, 2001). Regarding energy, the most urgent topics are (1) the emission of carbon dioxide resulting from human activities and its contribution to the enhanced or anthropogenic greenhouse effect and (2) the availability of new and sustainable sources of

energy. Biodiversity is essentially significant for preserving life in general and for important biochemical processes such as regeneration.

2.5.2 Sustainability and quality

Ideas about a linear concept of time stimulated ideas about progress in a profound way. Ideas about progress are incorporated in the idea of sustainable development, which consists of two, often conflicting, concepts. Where sustainability is about continuity, development is about change. Usually, development is seen as economic growth, which in most cases can only be realised with additional impact on the environment. As we have seen in chapter 1, the Millennium Ecosystem Assessment (2005) makes clear that maintaining our present unsustainable level of production and consumption will have negative consequences for the general quality of life, because of the effects on ecosystems and nature's functions, affecting poor countries in the first place. Economic practices should fit within the limits of the ecological system, and take seriously the Environmental Utilisation Space, a more efficient use of energy and resources, and no spill-over of environmental impact in space and time. When economic activities cross the ecological limits, this will lead to unsustainability and loss of quality.

Ultimately, the trade-off between economic interests and environmental concerns boils down to ideas about the aim and the direction of development, and in the deepest sense to ideas about quality of life, basic values, and worldviews. Where sustainability in itself is about continuity and maintenance, quality is about the content of what is maintained. This distinction is also made by Stiglitz, Sen and Fitoussi in the search for measures regarding the concept of sustainability: "The report distinguishes between an assessment of *current well-being* and an assessment of *sustainability*, whether this can last over time. Current well-being has to do with both economic resources, such as income, and with non-economic aspects of peoples' life (what they do and what they can do, how they feel, and the natural environment they live in). Whether these levels of well-being can be sustained over time depends on whether stocks of capital that matter for our lives (natural, physical, human, social) are passed on to future generations" (Stiglitz et al, 2009,11).

Developments that are continued or maintained do not by definition lead to more quality.⁸⁴ Therefore, in the discussion on sustainable development, underlying values in relation to the aims and direction of development and progress are crucial. The meaning and effects of concepts such as prosperity, welfare and well-being need to be considered thoroughly, in order to be able to establish sustainable developments that contribute to the quality of life in general. The International Panel on Climate Change (IPCC, 2000) did a first attempt to develop a model on values and worldviews and how these worldviews, or scenarios, might affect environmental problems. The IPCC study not only focused on the question of how to deal with the natural world, but also to what purpose. Questions regarding these worldviews deal with the scale of possible developments and whether they should have an economic or environmental focus.

The IPCC presented four scenarios along two dimensions (see figure 2.1). These dimensions indicate the relative orientation toward economic or environmental concerns and global and regional development patterns, respectively.⁸⁵ For the four resulting quadrants, four different narrative storylines, or scenarios, are developed. The first scenario (A1, economic and global focus) describes a future world of rapid economic growth and an increasing globalisation. This scenario relies largely on technological advances as solutions for environmental problems.

The second scenario (A2, economic and regional focus) describes a heterogeneous world, focusing on self-reliance and preservation of local identities. The third scenario (B1, environmental and global focus) aims for a sustainable development, both ecologically, socially, and economically, by means of rules and conventions. The fourth scenario (B2, environmental and regional focus) describes a world based on local solutions, solidarity, community spirit, and civic duty.

In a follow-up study, the Netherlands Environmental Assessment Agency (MNP) found that these four scenarios, or worldviews, cohere with certain value-orientations and specific environmental behaviour.⁸⁶ Instead of global versus local, this study uses the terms *Globalisation* versus *Regionalisation* and instead of an economic versus an environmental focus the MNP uses *Efficiency* versus *Solidarity*. This is outlined

in figure 2.2. The horizontal axis is strongly associated with the choice between market forces and government coordination (MNP, 2005, 7). Each worldview represents a different vision of quality of life, the way it should be realised, and on what scale it should be realised. Likewise, each worldview has different consequences for the Gross World Product, population growth, mobility, global energy-use, and food supply. I underscore the conclusion of the MNP that in essence, sustainability is about maintaining quality of life in the future, which partly depends on public opinion regarding desired quality of life and its distribution across the globe, together with a scientific understanding of the functioning of human and natural systems.

The above-mentioned worldviews make clear that certain value-laden visions of quality of life and normative views on development can be distinguished and make sense. To what extent and in what way these worldviews are translated into actual behaviour, however, still needs much research. Nevertheless, the studies underscore the importance of worldviews and

Figure 2.1 Four scenarios of the IPCC, 2000

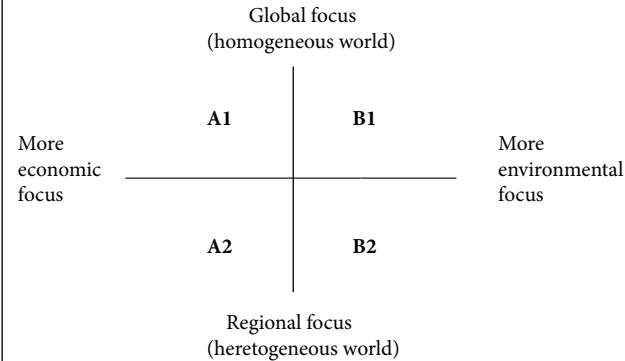


Figure 2.2 Worldviews by MNP, 2005



values in the discussion on sustainability and development. The actual behaviour choices and the way they are dealt with in the field research are subject of the next section.

2.5.3 Measuring environmental impact

To study the sustainability of the communities, I looked for methods that could give an image of their level of sustainability and environmental impact.⁸⁷ An analytic model that covers the environmental impact of a population very well in a certain time span is the IPAT-formula.⁸⁸ The environmental impact (I) of a population is the product of its population size (P), the total amount of products and services consumed per person or the level of affluence (A) and the total impact per product or service, defined by the influence of particular technologies (T): $I = P \times A \times T$. Reducing environmental impact means either (1) limiting population growth; or (2) limiting affluence and consumption, and using products with a lower environmental impact; or (3) improving 'green' technology, resulting in a reduction of emissions and the use of sustainable resources.⁸⁹ In this study, the IPAT-formula will be used as model that gives direction to the description of the environmental impact of the communities studied and its development, in regard to their population growth, their level of affluence and choices for less or other, more environmentally sound, forms of consumption and the role of technology in the community. Because this study has a qualitative character, and many quantitative data were not available in the communities in a way needed to use the IPAT-formula, the model will mainly be used to describe tendencies regarding the development of the environmental impact within the research groups.

Besides the IPAT-formula, specific indicators of environmental behaviour have been considered as well. These indicators should cover the main aspects of environmental impact of the communities and forestall spill-over effects as much as possible. In order to choose the right indicators, it is important to define the right scale and level, in which the environmental impact takes place. In this study, sustainability is discussed at the level of households and local communities in a predominantly qualitative way. The environmental impact caused by daily choices of the households and communities affects several scales, varying from the local to the global scale. Spatial spill-over effects can only be covered, when effects on the global scale are taken into account as well. Therefore, to be able to say anything about sustainable lifestyles of communities, specific daily choices need to be examined, with their related effects on space, use of energy and biodiversity at the global level.

A well-known index used to explore sustainability of lifestyles, is the 'Ecological Footprint', developed by Wackernagel and Rees (1996). Ecological Footprint analysis estimates the amount of ecologically productive land and sea area a person or a population would need to provide the resources required to support itself, manufacture products, and undertake activities, by calculating the use of energy, food, water and other materials.⁹⁰ The Ecological Footprint is a very strong communicative indicator, but for my research, however, it is not desirable to work with indexes. Instead of using one indicator or one index, a combination of clusters based on the principle of 'interconnected' environmental problems will be more useful, as argued in chapter 1. Such environmental behaviour clusters might make it possible to distinguish environmental behaviour choices within the separate communities and study specific underlying values and motivations for these choices.

As the point of departure for structuring the clusters for environmental behaviour, the set of Indicators for Environmentally Sustainable Household Consumption, as developed by the Wuppertal Institut, appeared to be best fitting for this study.⁹¹ The Wuppertal Institut indicators

are based on energy, material consumption, and land use, as key resources. Instead of defining household consumption at macro level (households as final consumers) or at micro level (consumer behaviour within the household), Lorek and Spangenberg (2001) chose for an ‘actor oriented approach’, emphasising areas that can be influenced by households. They defined the most important household consumption clusters and specified their environmental impact, from the extraction of resources to the processing of waste of consumed products.⁹² Since 70% of the total use of material, energy and land is represented by ‘construction & housing’, ‘food’ and ‘transport’, these clusters are seen as ‘priority fields of action’. On the base of these priority fields of action the clusters in this study are defined, in addition to land use, since most communities are occupied with agriculture. Because construction was quite hard to measure at local level, I chose to focus on the energy use within the communities. The four clusters, in which communal behaviour choices are studied, are summarised in table 2.1.

Table 2.1 Clusters of behaviour as used in this study	
Cluster	Items per cluster
Energy use	<ul style="list-style-type: none"> - The sources of energy that are used in the community: fossil and ‘green’ energy. - The direct energy use within the community. - Specific choices that are made concerning property and use of electrical appliances. - Possible ‘energy leakages’, indirect energy use by boarding out activities.
Transport	<ul style="list-style-type: none"> - The modes of transport used in the community. - The means of transport owned by the community. - Travel distances by car.
Nutrition	<ul style="list-style-type: none"> - Choices regarding the amounts and kinds of meat that are generally consumed. - The amount of organic products consumed by the community. - Choices regarding the purchase of food.
Land use	<ul style="list-style-type: none"> - Choices regarding land use, nature conservation, use of pesticides, manure, equipment and animals are studied.

The clusters ‘energy use’, ‘transport’, ‘nutrition’, and ‘land use’ form the basis for this qualitative research on sustainable behaviour choices in the communities. The main focus will be a reconstruction of communal behaviour choices, which are studied in relation to their religious worldview and values. The clusters cover the key-elements of sustainability. The use of appliances, heating systems, the consumption of meat, and transport, all contribute to the evaluation of direct and indirect energy use of the communities. Land use is described under the aspects of settlement area, agricultural land use, meat consumption and transport. Biodiversity is covered by the use of organic products and agricultural land use. Trading-off environmental impact in time, or space, or from one environmental problem to another, remains an important issue in the field research.

As mentioned before, this research has a qualitative character and focuses mainly on the motivation for environmental behaviour choices. The indicators for sustainability, summed up in the four clusters of energy-use, transport, nutrition and land-use, are used as focus points to be able to answer the question to what extent the lifestyle of these communities can be characterised as sustainable. It is not the aim of this study to analyse the impact on the environment of these communities in a quantitative way. The quantitative data that could be found in the communities are mainly used to show a tendency or trend when compared to historical data of the community and general data of the area. We can for example conclude

that a community uses considerably less energy per person than on average in that country, or that the affluence of the community is likely to increase. This study focuses on the processes that underlie behaviour choices, in order to find basic values in these religious communities that lead to a relatively low impact on the environment and a more sustainable pattern of consumption and production, as is the first research question mentioned in chapter 1. Where possible, quantitative data were gathered in the communities and these will be used as illustration of the qualitative data.

With this description of the concept of sustainability and the clusters of environmental behaviour, I finish defining the central concepts of this study and continue with an elaboration of the theory and practice of the main research method in this study: the method of participant observation.

2.6 Methodology

2.6.1 Participatory research: theory

This section gives an account of the methods used to study the relation between religious worldviews, (conflicting) values, sustainability, and quality of life, within the communities of Amish, Hutterites, Franciscans, and Benedictines. Besides interviews with 'key-people' outside the communities, and the study of literature and other sources like films, music, newspapers and magazines, the main research method was participant observation, combined with interviews, within the communities. These methods offer the best way to answer the questions of this research. In his article on studying Christian community from an anthropological point of view, Droogers (2003, 263) states that ethnography, with a preference for small-scale in-depth studies, continues to be a strong asset: "These studies are valuable for their qualitative plausibility, and can thus be contrasted with quantitative studies that serve as a basis for generalization (...). They show the qualitative processes behind the quantitative trends. Anthropologists are storytellers; they deal in cases, and thereby provide data that cannot be expressed in figures." Besides, in communities like the Amish, questionnaires are often not an appropriate tool. Specific terminology or jargon may cause confusion and sometimes surveys are distrusted.

Participant observation aims to gather scientifically useful data regarding a specific setting during a certain period, in which the researcher participates in the daily life and the environment of the research group (De Waele, 1992, 46). By participating in normal life-events, the researcher tries to build up sufficient mutual confidence and openness to get information. The observer is part of the context being observed, and he or she both modifies and is influenced by this context (Schwartz and Green Schwartz, 1969, 91). Participant observation is more than a technique; it is an approach with a set of appropriate methods to gather information. Zelditch (1962) mentions the following methods: participation is used to build relations, observation to describe events, informant interviewing to get information about others, and enumeration or sampling to collect countable observations and documents. It further includes good listening, natural conversations, checklists, and an open attitude towards the unexpected. Participant observation makes it possible to collect different types of data, both qualitative and quantitative. Observations in the daily context are important for comparing pronounced or written ideas with actual behaviour and problems concerning behaviour people have to deal with (Maso and Wester, 1996, 38). Participant observation may help to understand what is

happening in the culture and develop questions that are culturally relevant. With this method, a certain coherent, or holistic, understanding of the research group can be developed.

In fact participant observation is an ambiguous concept, for participation entails a distancing from observation and vice versa (Maranhão, 1986, 298). When the role of participant is too much emphasised, the researcher may risk losing objectivity and the research group may feel deceived when they find out about the real goals. When the researcher focuses too much on the observation part, it might create distance and impede entrance to key informants and activities. As participant observer, the researcher is never a straight 'participant' or 'observer'. In community studies, the role of 'participant-as-observer' has been most common, where an observer develops relationships with informants through time (Jackson, 1983, 41).⁹³ The researcher is a member of the group and the group is aware of the research activities. This role was applied in the fieldwork for this study among the religious communities. Being a participant observer challenges the researcher to balance being involved and being at a distance, subjective and objective, sensitive and factual. One needs to blend into the community in such a way that its members will act naturally and after that to distance oneself to understand what is going on and to be able to write about it.

One of the advantages of participant observation, in comparison with pre-structured questionnaires or interviews, is its flexibility (De Waele, 1992). During the research, the participant observer can adapt the questions and the focus of the study when new facts appear. Because of this flexibility and a closer contact with the field situation, the researcher is better able to avoid misleading or meaningless questions. However, this flexibility might become a pitfall when the focus gets lost. In this study the main research questions remain leading in the field research and focus on the basic values underlying behaviour choices with a relatively low impact on the environment and the way these behaviour choices have been maintained. Another advantage is the possibility to go 'backstage' in a culture. As researcher you may be involved in activities to which you would usually not be invited. It offers opportunities for richly detailed descriptions of behaviours, intentions, situations, and events in a particular community. The close and prolonged contacts may create a more confidential atmosphere for the respondent. The researcher usually has various opportunities to talk with the respondents. Because of the combination of conversation and observation, the objectivity of the method can be secured.

A disadvantage related to participant observation is its time-consuming character. Another disadvantage is that the researcher might have access problems resulting from gender, age, language, and cultural background, which can be an important obstacle for collecting data. Male and female researchers may gather different information, as they may have access to different people and may be approached differently. Another disadvantage can be the influence of the presence of the participant observer. It is important to find out what usually happens in the community and not what happens because of the presence of the researcher. However, this will never be completely avoided.⁹⁴ Furthermore, the participant observer must always be aware of biases resulting from his or her own interests, values, experiences, opinions, and involvement in the research group, and regularly evaluate the research process from an objective distance.

Participant observation studies cannot be repeated in the experimental manner of natural sciences, because the researcher is his or her own tool. Nonetheless, the methods used must be specified, so that the data will be as legitimate as possible. Characteristic of participant observation is the time gap between the occurrence of an event and its recording as data. This sometimes lengthy delay between research and writing may reduce the validity of the

observation. What happens in the time interval between the event and its final recording is of utmost importance. Another dilemma regarding the data collected by participant observation is what Maranhão (1986, 301) calls: “the mysteries of the passage from face-to-face interview to general theorizing”, the right interpretation of the data and observations. Likewise, the participant observer has to deal with ethical questions, like to what extent does he or she reveal the broad research goals to the community under study? In what way would that influence the outcomes? To what extent can the researcher be neutral? Regarding this study, it will have an effect in one way or another that I was a non-Hutterite researcher in a Hutterite colony, a PhD-student in an Amish community, and a Protestant in a Catholic monastery. Taking these things into account, the method of participant observation appears to fit the most suitable for studying the relation between religious worldviews, values and behaviour choices, and particularly the value considerations underlying these choices, in the daily practice of communal life. This brings us to the practice of participant observation in this research.

2.6.2 Participatory research: practice

The aim of the field research was to study the relation between religious worldviews, values, and sustainability in four specific communities. By studying the communities, I examined both cognitive and practical aspects of their religion and worldview, based on the dimensions as constructed by Glock (1973), and focused on experiences, rituals, beliefs, scriptures, and consequences of religion of the research groups. Values and ideas about quality of life were studied by interviews, but also in a more indirect way. During the field research I tried to understand the meaning of the values, situations with conflicting values, the relation with behaviour choices, and the role of the community in maintaining specific values. Through observation, literature, and information given by community members, outsiders, and experts, I studied the choices made by the families and communities regarding specific behaviour clusters and the motives and beliefs that underlie these choices. Also, I paid attention to the economic and social circumstances of the communities and their possible effects on sustainability. A more precise checklist with topics and questions, used as basis for observation, interviews, and literature study, can be found in appendix 2.

The communities were studied at several levels. In the first place, I studied the history, culture, and religion of the Amish, Hutterites, Franciscans, and Benedictines in general, using literature study and interviews. The next step was to distinguish specific branches or groups segregations within the larger communities. I chose to study the Old Order Amish, which is the largest traditional Amish community. The Hutterites have three branches, namely *Dariusleut*, *Lehrerleut*, and *Schmiedeleut*, and I did my field study among the more liberal branch of the *Schmiedeleut*.⁹⁵ I would have liked to study the most traditional branch as well, but I lacked time to build relationships to get access. With the Franciscans, I started with two communities that consist of both monastics and laymen, inspired by Franciscan philosophy of life. After that, I studied the practice of a monastery of Franciscan brothers and a monastery of the Poor Clares. The field study among the Benedictines was supplemented with a field study in two monasteries for Trappist brothers, particularly to study their farm work. The third stage was to choose specific local communities, described further in this section, for the actual field research.

Pilot studies

The field research started off with two pilot studies in the Netherlands, to practise the method of participant observation and to test the research questions. The first pilot was a participatory

study in the 'Franciscan ecological project *Stoutenburg*'.⁹⁶ *Stoutenburg* started in 1991 as a religious community, aiming to live and work in harmony with nature. When the project started, the Franciscan influence was particularly centred on the Cantic of the Creatures, which for the residents "expressed a form of solidarity with the Creator and creation" and it was this solidarity which they wished to establish. Recently *Stoutenburg* has become spiritually more diverse. The community is characterised by spirituality, communal living, care for the environment, and moderation. The second pilot took place in '*De Wonne*', a Christian, Franciscan-oriented, community.⁹⁷ This Dutch community started in 1979, with the aim "to live, pray, share and celebrate together, and open the house to people in need." The three characteristics of the community are contemplation, hospitality, and recycling of materials. Contemplation takes place during four daily services in the chapel and the celebration on Sunday morning; hospitality is given to a diversity of temporary housemates, and recycling takes place in the two second-hand stores of *De Wonne* and the processing of left-over market foods the community receives every week. In both communities I participated in the daily activities, including meditations, meals, and work. All the inhabitants were interviewed separately about their worldview, values, ideas about quality of life, behaviour choices and dilemmas. Also, I gathered data on the environmental impact by using the clusters of environmental behaviour as described in section 2.5.3. The results of these pilot studies are described in chapter 5 on the Franciscan worldview.

I learnt three important methodological lessons in these pilot studies. Firstly, they stressed the importance of studying communities with a largely shared worldview, in order to be able to draw conclusions about the relation between the worldview and sustainability in that community. One of the characteristics of the community of *Stoutenburg* is spirituality, but the way this is given shape and content by the inhabitants differs considerably among the residents, which makes it difficult to draw general conclusions. Secondly, the 'Rokeach Value Survey', used during the pilot, appeared not to be helpful to study the value-hierarchy of the communities in relation to sustainable behaviour. It will be more appropriate for quantitative research. In order to study clashing values and value-hierarchies in a qualitative setting, a combination of methods is needed, including observation and interviews, in which people can be presented certain practical dilemmas. Thirdly, the data collected on indicators for environmental impact turned out to be not appropriate enough to draw conclusions about the environmental impact, because these data can hardly be compared to other communities. Every community has specific circumstances to take into account and therefore the quantitative data that have been gathered, will be used to give an impression of the environmental impact and to show a certain trend in time or a tendency compared to the broader area. The indicators function as focus points in order to give an indication of the extent to which the lifestyle of these communities can be characterised as sustainable and the direction it is likely to develop.

Participant observation appeared to be an appropriate method of studying the research questions in the context of communities. The pilot studies underlined the importance of studying the relation between worldviews, values, and behaviour choices within a community setting. The method helped to gain insight in the motivation of community members, the dilemmas communities have to deal with, the role of underlying values in decision making processes, and the impact of the social context and social capital. Therefore, this method has also been used to study the other communities, namely the Amish, Hutterites, Franciscans and Benedictines, which will now be described respectively.

Amish

The Amish field research took place from April to July 2004. The starting point was the Young Center for Anabaptist and Pietist Studies at Elizabethtown College in Elizabethtown, Pennsylvania, where I was supervised by Professor Donald B. Kraybill, sociologist and leading American authority in the field of Amish research, and Stephen E. Scott, writer of several popular books on the Amish. The Young Center has a modest but interesting library of books and films on Amish life. Also, I regularly visited the Amish Pequea Bruderschaft Library in Gordonville, which possesses many Amish books and archives of newspaper articles.

To help me to gain an entrance to Amish communities, Stephen Scott introduced me to several Amish families in Lancaster County, the area where one of the first Amish communities settled in America and which nowadays houses the third biggest Amish settlement. Presenting myself as a student, wanting to learn about Amish faith and way of life, I was welcomed in the community, and being a farmer's daughter, experienced in working with cows and horses, certainly helped to open doors. My first host family functioned as an entrance to the wider Amish community and soon other Amish families started to invite me and introduce me to their relatives and friends. All in all, I lived and worked with three Old Order Amish families in Lancaster County, Pennsylvania, and stayed twice with a New Order Amish family in the largest Amish settlement in America, Holmes County, Ohio.⁹⁸ This Ohio farmer is a bishop and nature conservationist and runs an organic farm. I informed my host families that I was writing a report.

In addition, I visited about twenty-five Amish families in Lancaster and Holmes County: relatives of my host families, members of the church, parents at school, and other Amish who invited me to their homes. These visits shaped my impression of Amish daily life. To gather specific information on Amish worldview and religion, I attended Amish church services, youth gatherings, singings, and auctions. I spent two days at an Amish school: the first time I mainly observed the educational practice and the second time I was invited to the school picnic to celebrate the end of the school season. Sometimes accompanied by Amish and sometimes on my own, I visited many Amish shops and workshops, including small and bigger furniture workshops, a workshop for agricultural machinery, a draft horse raiser, various retail businesses, shops for fabrics and quilting, an Amish shoe shop, a hat maker, and a solar energy business. I also talked to numerous non-Amish who work with Amish, like taxi-drivers, agrarian extension agents, a midwife, and people from the neighbourhood, to complement my experiences with information from involved outsiders on economic, environmental, and social issues.

During the field research, most information was gathered by observation of and participation in Amish activities and by interviews. Amish were remarkably open to receive me as a guest and give information on issues like farming, energy use, transport, nutrition, and finances. For some Amish issues like attitudes, faith and values were hard to put into words, since many Amish are not used to talking about these things in a rational way. The two most frequent obstacles during the field research were gender and language in group situations. Traditionally, men and women are seated separately, sometimes because of religious tradition, as is the case during church services, but usually just because of different fields of interest. Although it was hard to get significant information from men in group situations, it was in most cases possible at a personal level. The language appeared to be a problem in group situations as well. Although all Amish older than 4 years can speak English, among themselves they speak their own dialect (Pennsylvania Dutch). It often happened that family conversations started

in English, but ended in dialect, since, as my host said: “It feels so natural that you’re here, that I forget you’re not Amish”.

As participant observer I was aware of the fact that becoming participant, to a certain extent, requires distance to be able to observe, both mentally and literally. Therefore, I regularly went back to the Young Center to write from a more distant and objective point of view about my experiences and observations. Another point of significance was the influence of my presence in the families. Even though I tried to hold back my opinion about things, often the people asked for it. And as I was watching the Amish daily life, they were watching me. After two weeks, one of the boys in my first host family told his mother: “I’d like a healthy lunch, like Martine, with lettuce and tomatoes”.

Halfway through the field study period, the Young Center organised a conference ‘Enhancing the Health and Well-Being of Plain Communities’, at which I presented my first results. After completing the fieldwork, I continued correspondence with three of my host families.

Hutterites

In February and March 2005 I did my field research in Forest River Colony (FRC) in North Dakota, in many respects an average *Schmiedeleut* Hutterite Colony. The first contacts were made via professor Rod Janzen, who has written several articles and a book on Hutterites. Forest River Colony has always had been open to visitors, which is not common among Hutterite Colonies. During the last decade, however, the colony has become less open towards visitors because of negative experiences, but the minister told me I was welcome, for at that time I lived in a community myself, consisting of 14 adults and 11 children.⁹⁹ I introduced myself as a Dutch student, interested in communal life and the relationship between faith, lifestyle, and the environment. I informed the German teacher, who had lived outside the community and attended university, and my host family about my research and the fact that I was writing a dissertation. At the time of the field study the colony consisted of 97 inhabitants, among whom were two American women who were considering becoming Hutterite.

During my field research I stayed with one of the families and participated in daily colony life, including the common meals, the work, and the daily church services. My activities varied from baking bread and butchering chicken to making quilts and participating in evening singings. These activities offered many opportunities to make contact and have conversations, particularly with the women. One of the Hutterite men remarked: “Men will tell you how things should be and women tell the truth”. Interviews were held with the ministers, the German teacher who is also responsible for the vegetable garden and orchard, the English teacher, the steward, the farm manager, electricians, one of the American women an historian, the head cook, and several others. Sometimes it was not easy to have a private conversation, since often many family members gathered in the living room when I came for a visit to ask me all kinds of questions as well. I joined the weekly youth meetings and participated for two days in the colony school.

In addition, I spent some days in three more conservative colonies in Manitoba, Canada, and visited a Hutterite bookshop there. I also had contact with former Hutterites in the USA and in the Netherlands and interviewed some scholars on Hutterites: Rod Janzen (2004), Astrid von Schlachta (2005) and had contact with Andrea Perterer (2007). I planned to visit a more conservative *Lehrerleut* Colony, but this colony was not open for research. I continued correspondence with my hostess on a monthly basis.

As with the field research among the Amish, the two most frequent obstacles during the

field research were gender and language in group situations. The jobs of men and women are clearly separated and therefore I mainly had contact with the women during the day. It was quite difficult to participate in the male jobs; nevertheless I worked in the chicken barn, accompanied a truck driver on his trip to a potato factory, and interviewed most of the men. More so than in the Amish community, Hutterites have a strict hierarchy. Being unmarried at that time and not baptised as an adult, I found myself at the bottom of the hierarchical ladder. During the communal chicken butchering, for example, I was placed between the younger girls at the assembly line. At the meals and in the church services, men and women are seated separately and according to age. Like the Amish, Hutterites speak their own dialect, which is hard to understand. Nevertheless, children from the age of 4 learn to speak English, so associating with people was no problem.

Franciscans

The fieldwork among the Franciscans started in the pilot period in 2003 in two Dutch Franciscan-oriented communities that are described above: the 'Franciscan ecological project *Stoutenburg*' and '*De Wonne*'.

In November 2005 I spent a week in the Dutch Franciscan monastery 'Sint Antonius van Padua' of Megen. The Franciscan brothers have lived in this monastery since 1689. Until 1967 the brothers taught at the Latin school near the monastery. Since the 1970s the Franciscan monastery has become a retreat centre for men, women and youth (17 years and older). Hundreds of guests are welcomed every year. In this monastery, guests do not reside in a guesthouse, but stay in the same location as the brothers and share their meals, coffee breaks, work in the garden, and daily services. This gives many opportunities to share the daily life of the brothers and I was able to have many conversations on daily life issues. Specific interviews were held with Sjoerd Hertog OFM¹⁰⁰, particularly on the relation between Franciscan worldview and the environment, and with Wim Pot OFM, on the issues of money, property and specific data on energy use, transport and nutrition. Pot is responsible for the garden. Recently, the garden has been changed from a vegetable garden to a 'Garden of Glory', full of liturgical and biblical plants and flowers. During my stay in Megen, I also visited the monastery of the Poor Clares in the same town.

In May 2006 I spent a period in Assisi to visit many historical places connected with Saint Francis' life, including *San Damiano*, the basilica of *Santa Maria degli Angeli* with the old *Portincula* church inside, the Sanctuary of *Rivotorto*, the hermitage *Eremo delle Carceri*, and the Basilica of Saint Francis. At San Damiano I had an interview with the Dutch Franciscan brother Loek Bosch OFM, who lived at the brotherhood there at that time. An important reason for visiting the Franciscan brotherhood in Italy was to verify whether there are differences between the Dutch and the Italian orders, in the country that houses the cradle of the Franciscan order and Roman Catholicism, regarding ideas about quality of life and sustainability issues.

In April 2007 and in July 2009 I spent a week at the monastery of the Poor Clares '*Sint-Josephsberg*' in Megen. I wanted to stay at the Poor Clares particularly because Franciscan women have always lived inside cloisters and not travelled around like the men. To provide for their needs, they possessed land and gardens. I was curious to find out whether particular ideas about gardening could still be recognised. The Clares came to Megen in 1721. Since that time, much has changed, but, as the sisters explain, the purpose of life is still the same. The sisters aim to be an evangelistic community, living in solidarity with each other, and imitating Christ through a life of prayer and simple work. They run a communion wafer bakery.

At this monastery, I was able to share meals with the sisters in the refectory. I also visited the Franciscan monastery in Megen again and talked with the brothers about any changes since my previous visits.

In addition to these field studies, I conducted several interviews: with Ria van Dinther osc¹⁰¹, abbess of the Poor Clares in Nijmegen, Netherlands; Professor G.P. Freeman of the Dutch Franciscan Study Centre; Dr Koos Leemker, who wrote his dissertation on Franciscan spirituality and the environment¹⁰²; Tini Brugge, who carries out research among Dutch Franciscan Orders regarding sustainability; and Michiel van Kooten, who is a Dutch Franciscan brother Conventual. I also visited the library of the Franciscan brotherhood in Amsterdam.

The Franciscan order appeared to be very open to this study on religious worldviews and sustainability, a theme that have particularly occupied Franciscans in the Netherlands. Both the Franciscan monastery in Megen and the two communities I studied during the pilot period were very hospitable and willing to help in finding data. I informed them about the fact that I was writing a dissertation. The monastery of the Poor Clares in Megen was warm and welcoming as well, but as is the common policy, the sisters keep their privacy and conversations only take place after a request.

Benedictines

Field research on the Benedictine worldview was spread over different monasteries in separate periods. In December 2005 I stayed in 'Lioba', a Dutch Benedictine Monastery with 22 nuns and one brother, where I participated in the daily church schedule and interviewed one of the nuns. I had visited this monastery three times before, usually in the week before Easter. I was very welcome as guest, but this monastery appeared to be hesitant towards research activities and did not allow me to note quantitative data for this dissertation. The Dutch Lioba monastery was founded in 1935 by Hildegard Michaelis, a German artist and weaver. In 1952, the community was accepted as a congregation in the Benedictine Order. The Benedictines at Lioba vary in age from 30 to 90 years old.

In spring 2006 I went to Italy, to visit some Italian monasteries, for two reasons, comparable to the Franciscan fieldwork. One was to visit the country where Benedict spent his life and the other reason was to compare Italian, presumably more traditional, monasteries with the more liberal Dutch monasteries. Surprisingly, except for some theological points of view (for example, as a Protestant I was not allowed to participate in Holy Communion in Italy, but I could in the Netherlands), Benedictine life did not differ very much.

In April 2006 I spent a week at the old Benedictine Monastery 'Vallombrosa' (Shady Valley) in Italy. I had two interviews with the abbot and several conversations with other monks. Since only a few of them could speak English, German or French, language appeared to be a huge barrier. Unfortunately, in spite of an appointment made earlier, the German-speaking brother appeared to be out during my stay. The Abbey of Vallombrosa was founded in 1015 by John Gualbert, who had a strong desire to reform both the church and monastic life. Gualbert adopted the Rule of Saint Benedict, but added greatly to its austerity and penitential character, in order to unite the ascetic advantages of the eremitic life with communal living.¹⁰³ After the Napoleonic wars the abbey was closed and in 1866, when the Italian government decreed the general suppression of the religious orders, the abbey became the property of a forestry firm. In 1949 the Benedictines returned to Vallombrosa, but it was only in 1961 that they could re-enter the monastery, which is still owned by the State. The present community consists of eight brothers. The youngest is 33, but all the others are 55 years and older.

In May 2006 I stayed at the Benedictine Monastery of Citerna, '*Spirito Santo*', where I had many opportunities to talk to two sisters in particular, who spoke English and French. The abbot of *Vallombrosa* had recommended me to the abbes. The English speaking sister invited me to join her during her *lectio divina*. At the time of the field study, the monastery of Citerna consisted of 20 sisters, of whom three were novices. The monastery was built in the 13th century and used to belong to the Franciscan Sisters, but since 1951 the Benedictine sisters have had their residence there. Silence, prayer, and reflection are very important for this community, the reason why they have two daily periods of *lectio divina*.

In 2007 I did fieldwork at two Trappist monasteries in the Netherlands. Although the Trappist order branched off from the Benedictine order, the Rule of Saint Benedict is still their basic rule for daily monastic life. In contrast to the Dutch Benedictines, the Dutch Trappists are still active in farming. For that reason I stayed at the Trappist Abbey '*Lilbosch*' in Echt in January 2007 and the Trappist Abbey '*Maria Toevlucht*' in Zundert in March 2007. At both monasteries I had an interview with the brother who is responsible for the farm. The Abbey of Echt has about 110 hectares for organic agriculture and 30 hectares for nature development. They also keep about 100 free-range pigs. The Abbey of Zundert keeps about 80 cows for meat, a French breed suitable for marshy ground, and the monks grow organic corn and wheat.

Usually I introduced myself as a PhD student, studying the relation between philosophy of life, values, and the environment. I emphasised that I wanted to learn more about the daily life of the community and wanted to participate in as many daily activities as possible. I stayed either in the monastery, the abbey or a guestroom belonging to the Order and participated in the daily services and work as much as possible. The main obstacle to field research among the Benedictine order was that guests have little contact with the monastics, eat separately, and can usually only talk to a brother or sister on request, so here it had the character more of observation than of participation.

In addition, I visited the Dutch Benedictine Abbeys of '*Sint Adelbert*' in Egmond and '*Sint Benedictusberg*' in Vaals. In the latter women are not allowed to stay overnight and I only visited the high mass. I also conducted interviews and correspondence with several scholars and religious people, among them Professor Wil Derkse, who is also oblate of a Benedictine monastery, and Anselm Grün OSB¹⁰⁴, who is cellarer of the Münsterschwarzach Abbey in Germany. Furthermore, I used literature and lectures from the Conferences of the OSB Monastic Institute 'One Heart, One Soul: Many Communities', 2006 and 'Rituals, Symbols, and Practices', 2001.

Participant observation appeared to be a well-fitting method for studying worldviews, values and motivations for certain behavioural choices in their daily context. Particularly among these four communities, with a longstanding history and tradition, who do not publish much themselves about their way of life and underlying motivation, it is important as researcher to spend time with the community members, in order to understand more about their religion, the social context, leadership, and decision making processes. There are hardly any internal community sources one may rely upon. Furthermore, I could detect specific clashing values or behaviour choices that seemed not to cohere with certain convictions or values, like the luxury bathrooms in the guesthouse of the Trappist monastery of Zundert, or the reason why Lancaster Amish will only use scooters, while for Ohio Amish cycling is not a problem. Studying four communities by using participant observation is however quite labour intensive. It certainly gives the opportunity to compare different value considerations and communal contexts, but I may have determined the value considerations of specific communities more intensively

when I would have focused on one or two communities. On the other hand, studying four communities gives the opportunity to compare the worldviews, value hierarchies, and motivations that underlie behaviour choices among the different communities. The following chapters present the outcomes of this participatory research.

Chapter 3 **Amish and the challenge of reflective change**

3.1 Introduction

Amish are well known for their horses and buggies, plain clothing, and homemade pies. Some people think of the Amish as an idyllic utopian community, others see them as old fashioned, conservative Luddites¹⁰⁵, still living the way their forefathers did a century ago. However, both opinions are stereotypes and reality is much more subtle. Amish society has been growing more diverse during the last fifty years, practising the same values and religious beliefs, but in slightly different ways. Some of these differences are hardly observable to outsiders, but for the Amish community these issues are clearly distinguishing. In this dissertation, the term Amish is used for the group of Old Order Amish, unless it is stated differently.

Rooted in a strong sense of community, tradition and shared religion, the fast-growing Amish community tries to maintain its cultural values and way of life, while coping with the challenges that come with living amidst the rapidly changing American society. Since their arrival in America, Amish have come to terms with the surrounding dominant society, in order to survive and to keep their identity. While for centuries Amish practised small-scale diversified agriculture, nowadays more and more of them start a small enterprise to provide income. Amish are not against progress and change, as long as they contribute to the maintenance of their community. For many years they have been selectively adopting and adapting modernities that fit in with their worldview. It need not be a surprise to see Amish girls on rollerblades, Amish women talking on a pay phone, or Amish carpenters using tools powered by air pressure. As an Amish man said: “If we got to the place where we didn’t change, we’d be a dead society” (Cited in Igou, 2003). Amish have succeeded in keeping their culture, religion, and values, while expanding enormously during the last century. Approximately 250,000 Amish (children and adults) live in over 427 communities or settlements in the United States and Canada nowadays (Young Center, 2011).¹⁰⁶

This chapter describes and analyses in what ways Amish religion and values relate to their communal behaviour choices and sustainability. Besides the questions about economic viability, the focus will be on the environmental impact of this community in relation to the Amish worldview and basic values. Therefore, this chapter will first give an introduction to relevant historical developments and the roots of their culture, traditions, and beliefs in section 3.2. To discuss the content and impact of their worldview, section 3.3 focuses on religion, values, and social organisation, which are to a large extent framed by historically developed traditions and beliefs. Specific attention will be paid to religious rituals, cultural symbols, and the role of social capital. Values play an important role in the way Amish cope with questions about modernisation and technology. This process of reflective change can be very relevant

in the discussion on sustainability and is described in section 3.3.4. To describe the consequences of Amish economy on sustainability issues, section 3.4 deals with significant developments within Amish agriculture and businesses. Section 3.5 will discuss Amish choices regarding energy use, transport, and nutrition, and the relation of these choices with their worldview and values. Amish environmental impact will be considered following the components of the IPAT- formula, namely population growth, affluence and technology. The last section of this chapter starts with a brief overview of important clashing values in Amish society, both with the outside world as well as internal clashes, and finally attempts to answer the question to what extent and in what ways the Amish worldview and values might contribute to sustainability.

My fieldwork mainly took place among Old Order Amish in Lancaster County. Besides, I also visited some Amish Mennonites in and near Lancaster and New Order Amish in Holmes County Ohio. For a more detailed overview of the fieldwork among the Amish the reader is referred to section 2.6.2. Since many of my hosts wish to stay anonymous, most Amish names used in this dissertation are fictitious.

3.2 Amish history and culture

The Amish community is rooted in the Anabaptist movement, which emerged during the Reformation in the turbulent 16th century.¹⁰⁷ Like Luther, the Zürich priest Zwingli preached salvation by grace and faith and not by ecclesiastical rites. He no longer accepted the power and authority of the Pope. Instead, Zwingli relied upon the Zürich municipality to establish his church reforms. His adherents however wanted a 'radical reformation', including a church free of any state control, absolute pacifism, and adult baptism. The latter not only became a religious heresy, but also a political offence, owing to the fact that church and state were connected and through baptism children automatically became citizens. By rejecting infant baptism, the Anabaptists disrupted the political tie between state and church membership. They became unknown and beyond control by the authorities and thus in fact stateless.

Anabaptism started in 1525, when three associates of Zwingli broke a newly-enacted Zürich law that obliged parents

Box 3.1 From my diary: Meeting my host family

The first acquaintance with my host family was an immediate plunge into Amish culture. Twelve children with miniature adult clothes warmly welcomed me and brought me to Rachel, their grandma next door, where Rebecca, my hostess, was surrounded by her seven sisters and eighteen nephews and nieces. The conversation was partly in English, because of me, and partly in 'Deitsch', the Amish German dialect. When all children, coats, hats, and toys were gathered, most of the sisters harnessed their horses and went back home in their buggies. I asked whether I could do something, and Rachel invited me to do the dishes, consisting of forty cups, forty ice-cream bowls, forty spoons, and many other things. Two families decided to stay for dinner at the grandparents' house and ingeniously the table was enlarged for thirty persons. After dinner and the dishes I went out for a walk with Rebecca's sister and we ended up on the patio singing songs with the children until dark. Inside the house a standing gas lamp was lit. When it was time to go to bed, we all knelt on the floor and Samuel, the father, recited a German prayer. I found the way to my bedroom with a flashlight and after setting the alarm clock to six o'clock, I fell asleep.

to have their babies baptised within eight days. They refused to baptise their children and instead baptised each other and many other adults.¹⁰⁸ Within four years all the first leaders would die a gruesome death and many other martyrs would follow.¹⁰⁹ The name 'Anabaptist', meaning 'rebaptiser', was given by outsiders.¹¹⁰ The Anabaptists called themselves '*Brethren*', meaning 'brothers'. In North-Western Europe, Anabaptists became widely known as 'Mennonites', after the Dutch priest Menno Simons (± 1496 – 1561), who left the Roman Catholic Church to become Anabaptist in 1536.¹¹¹ Because of the persecutions, Anabaptist ideas spread fast. The persecuted Anabaptists developed a strong distrust towards government and society, which is still perceptible in present-day Amish communities. Regularly Amish asked me whether I thought persecution would come back. Amish keep the remembrance of the persecutions alive with the 'Martyr's Mirror', a book with illustrations and descriptions of the lives of individual martyrs, stressing their faith and courage to be different. These martyr stories are taught at school.

Under the leadership of Michael Sattler, the Anabaptists drafted the first declaration of 'Brotherly Unity' in 1527, later known as the '*Schleitheim* Confession'.¹¹² A century later, in 1635, the North European Anabaptists met in Dordrecht, the Netherlands, and formulated a more extensive confession. This 'Dordrecht Confession'¹¹³ consists of eighteen articles and contains issues like adult baptism, washing of the feet, the choice of church leaders, the ban, and the '*Meidung*' (shunning). The ban is a final way to rebuke a person who disobeys the *Ordnung*, a set of mostly unwritten communal rules and norms, representing long-established traditions and newly agreed-upon choices. After being warned, the person is shunned for six weeks. This *Meidung* aims to stimulate apostates to repent. When the apostate confesses the mistakes, he or she will be forgiven and reaccepted in the community. In Anabaptist history, the practice of *Meidung* has often been debated. The Dordrecht Confession states that, although shunning in "eating, drinking, and other similar intercourse" of people who have left the church is important, they need to be rendered aid and assistance in times of distress, "otherwise, shunning would in this case tend more to destruction than to reformation" (Mennonite Conference, 1632). The Dordrecht Confession is still taught to Amish youth in preparing them for baptism.

Amish schism

Persecution of Anabaptists continued unabated in 17th century Europe. However, after the Thirty Years' War, which ended in 1648, food shortage was so pressing that in some areas Anabaptists were tolerated and even invited to work the fallow land. Over a thousand *Brethren* moved to the Palatinate and Alsace. Between them and the *Brethren* who stayed in Switzerland disagreements gradually developed, particularly on the issue of whether '*Treuherzigen*' (non-Anabaptists helping *Brethren* in need) were saved or not. The Swiss *Brethren* depended largely on the help of these non-Anabaptists, but the Palatinate and Alsace *Brethren* avoided outside contacts to keep the community pure. They feared that compromises with society would be detrimental and called for reforms within the Swiss community.

An important advocate of reform was Jacob Amann, of whose life little is known.¹¹⁴ In 1693 he was a charismatic leader of communities in Northern Alsace. A major point of his reform was confirming the *Meidung* of apostates. Another delicate issue was, as mentioned above, whether the *Treuherzigen* were saved or not. A third issue was the frequency of communion. Where the Swiss *Brethren* held communion once a year, Amann preferred twice a year to better guarantee the purity of the community, because someone who lives in sin cannot participate

in communion. With a biannual frequency, abuses could come to light earlier. These issues led to a conflict between Amann and the Swiss leaders and a split. Amann's followers were called 'Amish'.¹¹⁵ To avoid becoming 'like the world', Amann encouraged moderation and humility, demonstrated by plain clothes with hooks and eyes instead of prideful buttons. Amish appreciate these stories from the past, although the message seems to be more important than historical facts.¹¹⁶

Development of the Amish community

In the 18th century, most Anabaptists left central Europe to escape the (still) severe persecution. Many Amish fled to northwest Europe or to the east, as far as Russian Volhynia. Another group of about 500 Amish got on board in Rotterdam and left for America. The date is ambiguous; it took place between 1736 and 1770. They settled in Pennsylvania¹¹⁷ and at the beginning of the 19th century this Amish community consisted of 1,000 souls.¹¹⁸ Between 1820 and 1860, about 3,000 Amish crossed the ocean and moved to the West, especially Ohio, New York, Indiana, and Ontario. Some joined existing communities in Pennsylvania. Many leaders emigrated to America and the presumed 2,000 Amish remaining in Europe gradually merged with the Mennonites. The last European Amish community, in Ixheim, Switzerland, merged with the Mennonites in 1937.

In America, the 19th century immigrants were often less orthodox than the descendants of the first immigrants. To seek a common vision on religious life and a position within American society, Amish held annual conferences from 1862 to 1878, committing themselves again to humility, *Meidung* of the banned, and excommunication of disobedient members (Nolt, 1992, 133). However, these conferences could not prevent a separation, leading to two denominations: the traditional 'Old Order Amish' and the less orthodox 'Amish Mennonites'. Within a few decades many Amish Mennonite churches merged with Mennonite churches. At the beginning of the 20th century the Old Order Amish community numbered some 5,000 people.

Fast developments and technological inventions in the 20th century faced many Amish with a dilemma. The arrival of the car, telephone, and electricity grid accelerated the rise of less orthodox groups. The major changes came with the 'Beachy Amish' (1925 in Lancaster County), who allowed these innovations in their community, in contrast to the 'mainstream' Old Order Amish who wanted to deal with innovations in a more reserved and selective way. In addition, very conservative groups arose, regarding almost any change as a threat. Examples of conservative groups are the Swartzentruber Amish (1913) and Buchanan County Amish (1914). In the late 1950s and early 1960s the New Order emerged in Ohio. In 1966, some dissident

Table 3.1 Overview of Amish history

1525	Start of Anabaptism in Zürich, persecutions and spread of Anabaptism in Europe.
1527	Anabaptist 'Schleitheim Confession'.
1635	Anabaptist 'Dordrecht Confession'.
1648	Over a thousand Swiss Brethren moved to Palatinate and Alsace.
1693	Conflict between Jacob Amann and Swiss leaders, start of 'Amish'.
1736–1770	About 500 Amish moved to Pennsylvania.
1820–1860	About 3,000 Amish left Europe for America.
1937	The last European Amish community merged with Mennonite church.

families in Lancaster County affiliated with this Ohio New Order, because they disagreed with beliefs on shunning and the ban on the use of some items of modern farm equipment. Presently however, there is only one New Order congregation in the Lancaster settlement, among some 175 Old Order Congregations. In Ohio, some New Order settlements use electricity and tractors in the field, in contrast to the New Order Amish in Holmes County, where these innovations are not accepted. Because Amish are organised in a decentralised way, differences between churches are often determined by the region where the church is situated.

Amish and the State

Amish are opposed to personal litigation, the use of violence, and military service. They are conscientious objectors. Most Amish do not vote or take part in political activities. When I asked an Amish farmer about it, he replied: "I don't vote... but I pray republican!" Amish have a deeply-rooted suspicion towards the State and want to keep church and state separated.¹¹⁹ In the 20th century, Amish had three major conflicts with the State: on alternative national service, schooling, and Social Security, because new regulations clashed with Amish values and religion (Kraybill, 2003). Although usually Amish communities function autonomously with local leaders selected from their own church district, these conflicts made it necessary for them to cooperate with each other and even with non-Amish.

Because of their pacifist convictions and their objection to military service, Amish became conscientious objectors (COs) during World War I and World War II. In 1952 the State determined a new alternative service program, in which COs worked in government or non-profit organisations engaged in charitable, health, welfare, education, and scientific work. Most of the Amish held hospital jobs, but some leaders warned against temptations offered by the city and its environment and reports of smoking, drinking, and carousing reached the Amish communities (Keim, 2003, 58, 59). Because this was a major concern for the Mennonites as well, the Amish sent representatives to a Coordinating Committee, which included Mennonites. After years of negotiation with the State, the Amish, organised as the Old Order Amish Steering Committee, got permission to do alternative national service on Amish farms in 1969 (Nolt, 1992, 156).

The main points of the school conflict were the increasing scale and content of education and extension of the legal school age from fourteen to fifteen years (Meyers, 2003). Although Amish usually emphasise obedience, including to the State, these changes in school policy clashed with Amish values and religious beliefs. They did not want to lose control of education and have it pulled out of their rural cultural context (Kraybill, 2001, 173). After 35 years of struggle, Amish got legal permission for their one-room schools in 1972.¹²⁰ Chief Justice Warren Burger stated at Supreme Court: "Amish society emphasises informal learning

Table 3.2 Amish population growth in US

Year	Church districts	Population
1900	32	4,800
1910	57	8,550
1920	83	12,450
1930	110	16,500
1941	154	23,100
1951	202	30,300
1961	269	40,350
1971	367	55,050
1981	569	85,350
1991	898	134,700
2003	1,400	200,000
2010	1,826	250,000

Sources: Kraybill and Olshan, 1994; Donnermeyer and Cooksey, 2004; Young Center for Anabaptist and Pietist Studies, 2011.

through doing, a life of goodness, rather than a life of intellect; wisdom, rather than technical knowledge; community welfare, rather than competition; and separation, rather than integration with contemporary worldly society” (Supreme Court of the United States, 406 U.S. 205). Amish schools appear to be important for passing on their values and way of life and will be further discussed in section 3.3.3.

Social Security sponsored by the Government created special problems for the Amish when in 1955 its coverage was extended to self-employed farmers (Ferrara, 2003, 125). Amish do not want to participate in Social Security, because they see care as a task of the community and not of the state. Accepting the state-sponsored system would violate the principle of separation from the non-Amish world. Moreover, participation in Social Security is also seen as a lack of trust in God to provide the necessities of life for his people (idem, 129). After 33 years of resistance and negotiation, the Amish got permission to stop paying Social Security Tax for Amish employees in 1988. They have no official insurances, although my hosts participate in ‘Amish Aid’, an Amish insurance system, for which they pay a monthly 75 dollars per adult. In addition, their church collects 2,000 dollars every year for ‘*Armengelt*’ (money for the poor), to be able to offer help to other church districts. The most visible form of Amish insurance is their financial and practical mutual help. Amish bargaining with the outside world and reflective way of dealing with changes and modernisation will be further discussed in section 3.3.4.

Expansion

In the 20th century Amish society expanded enormously and doubled in number nearly every 20 years. Table 3.2 and figure 3.1 show Amish growth and expansion in the US since 1900. Nowadays, an average Amish family has about seven children, of whom more than 85% decide to join the Amish church (Young Center, 2009). This tremendous growth has many consequences for the future. In several areas farmland is getting scarce and expensive (see section 3.4.1). While some Amish move to newly-established settlements to be able to continue farming, others find new ways of subsistence. Many settlements face an explosion of small Amish businesses and in some areas Amish turn to factory work, which will be discussed in section 3.4.3.

Figure 3.1 Amish growth and expansion in United States of America



1900: approximately 5,000 Amish live in 32 church districts, in 16 settlements.

2003: approximately 200,000 Amish live in more than 1,400 church districts, in about 333 settlements.

Source: J.F. Donnermeyer and E.C. Cooksey, Ohio State University, 2004; J.A. Hostetler, 1993.

Furthermore, the tourist industry to 'the Amish heartland' has expanded rapidly.¹²¹ About 7 million tourists visit Lancaster County every year, spending over 1.3 billion dollars (Kraybill, 2004). These developments confront Amish with the question of how to preserve their culture in this fast-changing society. Before going deeper into this question, we will take a closer look at the content of the Amish worldview and culture.

3.3 Amish religious worldview

To understand the worldview of the communities, I studied people's experiences, rituals and symbols, beliefs, religious sources such as holy books, and the effects of religion in people's personal and communal life, by using literature, interviews, and participant observation during the field research. The most relevant aspects of the Amish religious worldview in relation to sustainability are discussed in this section, namely relevant religious beliefs, rituals and experiences and the church organisation in section 3.3.1, values and related behaviour choices in section 3.3.2, social structure and social capital in section 3.3.3, and reflective change in section 3.3.4.

3.3.1 Religion and rituals

Amish regard and accept the Bible as literally true and they have never drafted an additional theological treatise on the content of their faith. Although Amish people do read and study the Bible privately, non-ordained people forming groups for Bible analysis and theological discussion without the supervision of the ministers is usually discouraged, for this might lead to *Hochmut* (pride), and new theological ideas might be a threat for the community.¹²² Instead of theoretical analysis, Amish seek for the meaning of these texts for their daily life. Religious education therefore mainly consists of passing on good examples and hardly study of theological books or the Bible. Apart from the Bible, the 'Dordrecht Confession', mentioned in section 3.2, is a key theological foundation for Amish religious belief. The 18 articles of this confession, relating to distinctive Amish practices such as non-swearing of oaths, excommunication, shunning, and the rejection of violence, are used in classes to prepare young people for baptism.

Many visual rites and characteristics can be traced back to this literal interpretation of the Bible, like head covering (1 Cor. 11:5-6), foot washing (John 13), and prohibition of divorce (Mark 10). The text of Romans 12:2 "*And be not conformed to this world...*" spurs the Amish to preserve the purity of church and community by a proper separation from the world. They are not focused on conversion of the world, but on devotion to God and care for the community. The spirituality is quiet, pious and devout. Amish faith is manifested more in the way of life than by words; it is holistic and includes all aspects of life.

Amish faith is characterised by strong confidence in God and their communal life is based on obedience and reverence to God. During the church services I attended, preachers emphasised the sinfulness of men, and forgiveness and salvation through Christ. Some texts recurred in every sermon, like John 3:16 and Psalms 23 and 103.¹²³ On my question as to what they see as most important in life, many Amish answered: "Going to heaven". Amish resign themselves to inexplicable things. This is particularly visible in the way they accept and deal with death. They believe that all life on earth is placed under God's authority and they rely on the idea that God has a reason for every fatal accident. Like many families, my host family had

lost a child.¹²⁴ They were convinced that God had decided to take the child home. A memorial poem on the wall described God needing flowers for His garden and taking their child as a beautiful flower, who is now blossoming in Gods garden – a better destiny than life on earth. The poem ended with the expectation that they would meet again in heaven.

Religious experiences are usually described as: “knowing that God can see and hear us”, feelings of “being carried through hard times”, and “perceiving God through His creation”. Prayer is an important religious practice for Amish, although the way personal and family prayers are given shape differs among Amish families. In my first host family all members kneel every morning and evening for a standardised German prayer recited by the father, while my second host family holds religious family time after breakfast, including reading the English Bible and a Christian diary, singing songs and praying free prayers. Saying grace before the meal is common among all Amish. Other important Amish rituals are their church services, baptism, communion, selection of the leaders, and *Meidung*, which will be elaborated later.

Church community

Amish church services are held bi-weekly in a house or barn. Every second week Amish have the opportunity to visit other church districts or help relatives when church is in their place. Many preparations are needed to have church: cleaning the house, cooking a meal and placing the benches in all the rooms. Usually a church district consists of 25 - 35 families, as many as a house or barn can hold. The church service functions as an important meeting point and place for news exchange. During the service, men and women are seated separately, facing each other, on wooden benches without backs. Usually a service lasts three hours. It starts with two songs from the *Ausbund*, a collection of songs written by imprisoned martyrs of the 16th century, complemented with later songs.¹²⁵ Amish sing very slowly, without instruments. The second hymn sung in the service is always ‘*Das Loblied*’, or ‘hymn of praise’, followed by the first preaching given by a minister who preaches for an hour, by heart and without theological education. Thereafter the community kneels for a silent prayer. After prayer the people stand while the Luther Bible is being read, and are seated for the second sermon.¹²⁶ Two or more ministers or sometimes non-ordained men give *Zeugnis* (witness) to the sermon, after which the minister who had given the main sermon will say a few words. The service is completed with a long closing prayer read from a book, and final song.

From the age of nine the children are allowed to sit with the unmarried boys or girls. One of the boys in my host family was counting the days until he could go to the church service with the older boys. The younger children sit silently next to their parents, all service long. Most children get sweets and a plain toy or book to occupy themselves. Amish learn endurance and patience from an early age on.¹²⁷ Every service is followed by a common meal. When I asked the children of my host family whether they liked church, they answered: “Oh yes, very much! The singing, the preaching, and playing baseball afterwards. We like everything in church.” Church services appear to be very important for strengthening community ties and establishing a sense of belonging.

A person decides as an adult whether to accept the faith and rules of the church district. Becoming part of the Amish community is therefore a conscious choice, confirmed with the ritual of baptism. Usually Amish are baptised by pouring water on the person’s head. Baptism by immersion is quite rare. Amish need to be baptised before they can get married, the reason why most are baptised before the age of 25. Baptism is experienced as the most important

moment in Amish life: it means admission into the community and the 'body of Christ'. It is a lifelong promise, in which they also commit themselves to uphold the *Ordnung* for the rest of their lives.

Communion is an important Amish religious service, which is held only twice a year, in spring and fall. The preparation service two weeks prior to communion is called the '*Attnungsgeme*', or Council Meeting. Both meetings are only attended by baptised members. The Council Meeting includes an explanation of scriptural passages, investigation of possible personal impediments for participation in communion, and discussion of the rules of the church and other matters. Hostetler (1993, 225) describes the Council Meeting as a rite of purification, an important self-examination and restoration of unity within the community. The Council Meeting will be further discussed in the next sections. During the celebration of communion, all Amish members take bread and wine, symbols of the body and blood of Christ. Thereafter they wash each other's feet, which is a symbol of humility and service. Amish observe the foot washing as an ordinance based on the authoritative example and command of Jesus as described in John 13:1-15. Baptism and communion are important events for the collective perception of faith.

Church organisation

Amish congregations are independent and have their own leadership, consisting of a bishop, two ministers, and a deacon. This bishop provides spiritual leadership of the local church and two ministers assist him in preaching and teaching. The deacon assists the bishop in various duties and administers funds for the poor. Ministers and deacons are chosen by democratic nomination, followed by a casting of the lot. All members can propose a male candidate, and in most church districts any man with two or three nominations is considered. For each of them the bishop takes an *Ausbund*, with one containing a special piece of paper. The man who chooses the book with the paper will be appointed for the rest of his life. Bishops are chosen from the group of ministers, likewise by casting of the lot.¹²⁸ Casting the lot is experienced as an expression of God's will. The chosen person is seen as appointed by God, which gives him much authority in the community. Because religion covers all aspects of life, the leaders have an influential voice in economic and social-cultural issues as well, in fact in all decisions that are connected with the *Ordnung* of the church.

The *Ordnung* includes the collective decisions of the local Amish community on religious, political, economic, and social-cultural issues and defines what is desirable and what is not, varying from the colour of trousers to the prohibition on driving a car. On the one hand, the *Ordnung* provides a communal guideline for living and practising Amish beliefs and values, and on the other hand it determines what distinguishes Amish from the surrounding society. It raises certain barriers towards the outside world to keep Amish focused on their own community and religious values. In fact, it defines the Amish communal identity. Important issues regarding the *Ordnung* of the church district are discussed in the previously mentioned Council Meeting. During the Council Meeting each member declares whether he or she agrees with the *Ordnung*. Harmony is a precondition for celebrating communion and collective approval of the *Ordnung* is an important means of reinforcing the moral order. In a situation of disharmony, communion will not be celebrated. The process of decision-making will be further elaborated in section 3.3.3 on the social organisation of the Amish community.

The Old Order Amish still practise the ban and *Meidung* of apostates as described in the Dordrecht Confession. The ban is an extreme measure for reprimanding a baptised person

who disobeys the *Ordnung*. Initially a person will be warned and corrected in a less radical way.¹²⁹ However, if a person persists in his (or her) choice, he will be banned for six weeks. During these weeks Amish avoid this person to encourage repentance. The social effects are enormous, both for the person in dispute as for the total community. If he confesses his mistakes in public, he will be forgiven and reaccepted in the community. If the person does not repent, he will be shunned for the rest of his life. The ban and *Meidung* work as deterrents in a preventive way and could be important factors for the high retention rate. Most Amish view them as signs of love, for they hope the shunned person will return onto the right track, although a number of excommunicated people express feelings of being misunderstood.¹³⁰

To recapitulate, Amish life is saturated with faith. The religious beliefs, rituals, experiences and church organisation as described above, build a religious framework and social structure which stimulate, formalise and maintain the practice of Amish beliefs and values and therefore play an important role in sustaining the Amish religious worldview and community. Before going deeper into the social organisation of this community, I will first describe and discuss the main Amish values, which form an important aspect of their religious worldview and a base for communal behaviour choices.

3.3.2 Values and cultural symbols

Amish are devout and conformist, have a strong sense of belonging, and respect tradition. This does not mean that all experience this tradition in the same way, as my host remarked: "Not every tradition is good, just because it is tradition. It has to be meaningful." The most important values are directly related to religious beliefs, like obedience and a total surrender to God, in order ultimately to go to heaven.¹³¹ To attain that, Amish communal life offers a structure for learning and practising social values, like obedience to people, patience, forgiveness, helpfulness, responsibility, community, non-violence, uniformity, and tradition. The more personal values like moderation and soberness, modesty, and a willingness to work, have become basic aspects of Amish identity, and are, like most Amish values, based on a literal interpretation of Bible texts.

Most values are reflected in the characteristic attitude of Amish that can be described as '*Gelassenheit*', a German word meaning resignation. This *Gelassenheit* influences all aspects of life. The martyrdom from the past is a typical expression of this attitude. The martyr stories are told as an example of faithfulness and love for your neighbour under all circumstances.¹³² Religious rituals, such as being seated on plain benches without backs for three hours during church services and kneeling for prayer are utterances of humility and devotion, which form explicit exercises in *Gelassenheit*. It is also practised in the slow way of singing from the *Ausbund* and the foot washing after communion. *Gelassenheit* is not only a religious attitude, but also a basic attitude in social relations. Amish are taught to obey every person who has authority over them, like the bishop, parents and teachers. For the sake of community Amish learn to 'give in' in deference to another (Zimmerman Umble, 2003).

The way the Amish community dealt with the tragic shooting accident of October 2, 2006, in Nickel Mines, Pennsylvania, demonstrates many Amish values and the attitude of *Gelassenheit* in practice.¹³³ A man entered the school with a gun and took the lives of five Amish girls, injured five others, and finally killed himself. Although the community was grieved, the leaders also pronounced that they had forgiven the murderer, and reached out to his family.¹³⁴ Despite this attitude of peace and forgiveness to outsiders, the earlier-mentioned ban, *Meidung* and excommunication inside the community may sound like

very rigid regulations with no room for forgiveness. This is an interesting example of the hierarchy of values inside the Amish community. The value of forgiveness is very important, but obedience to the *Ordnung* and commitment to the community are appreciated and valued more.

Generally, the Amish personality is quiet, self-controlled, modest, and patient. Their mentality is trained not to focus on competition and individuality, but to seek the best for the community. Children are warned against *Hochmut* and taught: “*Let nothing be done through strife or vainglory; but in lowliness of mind let each esteem others better than themselves*” (Philippians 2:3). Amish will rarely give prominence to themselves. Posing for a picture is not allowed, for it is seen as an expression of pride, as well as a transgression of the commandment not to make a graven image.¹³⁵ Instead of *Hochmut*, they strive for ‘*Deemut*’, humility. Children are taught to wait quietly for their turn and to forgive others. The teacher of a boy in my host family wrote in his report: “Thanks for being a willing and helpful pupil. It was a pleasure being your teacher, but I hope you can forgive me for the many things I did wrong.” At the Amish youth volleyball games I attended on Sunday evenings, usually no winners were announced. When someone missed a ball, the team encouraged: “Good try”.

Within the scope of this dissertation on religious worldviews and sustainability, it is interesting to discuss whether and in what way these Amish values are translated into specific behaviour choices. Some of these choices have become cultural symbols of Amish life and determinants of their identity. These distinguishing behaviour choices in relation to values will be further elaborated in the next section.

Box 3.2 From my diary: Minister’s hat

Rebecca’s brother in law has been ordained minister two weeks ago. Linda, his wife, asks me to join her to the hat maker, to buy a new hat for him. Amish wear a hat with a 3.5 inch rim, while the rim of a minister’s hat is 4 inches wide. Likewise, Linda has to buy new shoes, for the wife of a minister is allowed to wear higher shoes with longer shoelaces. Although it seems that all Amish are dressed the same, there are subtle distinctions, that an insider will recognise immediately.

Values and behaviour choices

Amish try to live in nonconformity to the world. This is demonstrated by their dialect, their plain clothing, the use of horse and buggy, and their housing, functioning to the outside world as distinction and to the inside community as confirmation of a shared identity (Kraybill, 2001). Although all Amish adults can speak English, among themselves they speak *Deitsch*, forming a bridge between history and the present community.¹³⁶ The dialect excludes outsiders and increases the distance from the world. My host referred to the English-speaking Beachy Amish, to show how language can diminish this gap and open the way to other influences: “We have a heritage from the past. It damages a culture if you take away the language.” Likewise, Kraybill (2001, 57) emphasises that the *Deitsch* dialect “creates a worldview, a way of perceiving reality that obstructs the discourse with modernity.”¹³⁷

Clothing is usually made at home of plain fabrics. Amish dress has a very simple style, avoiding all but the most basic ornamentation, and is meant to be functional. Women and girls wear a modest apron and cover their heads with ‘prayer caps’. Men and boys wear trousers with braces, plain shirts without pockets and a straw or black felt hat. Married men let their beards grow, but do shave their upper lips, as a symbol of pacifism, since, according to tradition, at the time of the Amish schism a moustache was associated with Prussian militarism.

This clothing style is uniform and leaves little room for individualism, although small differences are perceptible in sewing and cloths. Where for non-Amish this might sound like a limitation of freedom, my Ohio Amish host stressed the other side: "It gives me rest that I don't have to think about many things, like what clothes to wear or what car to buy. All my trousers are the same. I'm glad that I don't have to make such choices every day." Clothing has become part of Amish identity.

Amish reject the possession of cars and use horse and buggy as their main mode of transport. They fear that owning a car leads to individualism, distinction, social inequality, and too much personal freedom (Scott, 1998). It diminishes dependence on the local community. The horse clearly has a determinative role, as a minister emphasised: "As long as we stay with the horse, we can keep our community".¹³⁸ Travelling with horse and buggy prevents people from being alienated from their surroundings and Amish identity. Horses connect them with the rural area. The issue of transport in relation to Amish values is very interesting connection with the discussion on sustainability and will be discussed more elaborately in section 3.5.2. Likewise, horses play an important restrictive role in Amish farming as well, which will be further explained in section 3.4.1. The small-scale agrarian community, close to the land, rooted in traditions, and separate from the outside world, is valued highly in Amish life, because it offers a framework for teaching children the values of obedience, responsibility, and a willingness to work. The present shift to non-farm work that is going on in many settlements, owing to a lack of farmland, might involve a clash with these traditional values of Amish society. This will be further discussed in section 3.4.3.

Separation from the world is also visible in the absence of electricity lines and in the long lanes leading to Amish houses. Newly-built houses in more densely populated areas such as Lancaster County, however, appear to be located closer to the roads, which is a signal that the attitude towards the outside world is changing slightly. Amish houses are typically practical and plain, with solid and durable furniture. Carpet is prohibited, for it is seen as a superfluous luxury. In fact, it is also very unpractical without a vacuum cleaner. Floors are mostly covered with wood or vinyl. It is remarkably silent in the houses, for televisions, cd-players, radios, and even musical instruments are absent, for they might bring along values and worldviews that are not appreciated by Amish.¹³⁹ Telephones will not be found inside the houses either, but are installed in the barn or in a shanty near the house. The cell phone and car radio, which have been introduced owing to the new enterprises, bring in new questions on the use and control of these appliances.¹⁴⁰ Also, their values regularly clash with State regulations. The way Amish deal with such clashes, as well as with new technology and modernity, will be further discussed in section 3.3.4. The environmental impact, related to their choices regarding technology, will be dealt with in section 3.5.

The above mentioned behaviour choices and cultural symbols emphasise togetherness and reinforce group cohesion. The community and its welfare are ranked above personal freedom and individual rights, what contradicts modern values such as individualism and self-expression. Kraybill argues that "in return for giving themselves up for the sake of the community, the Amish receive a durable and visible ethnic identity" (Kraybill, 2001, 29). That does not alter the fact that some Amish have had to give up their dreams about education, certain jobs or hobbies when they committed themselves to the church. The next section will discuss the social structure of the Amish community and the role of social capital in keeping the religious and social-cultural values and coherent behaviour choices.

3.3.3 Social structure and social capital

Amish social structure is small-scaled, compact, local, informal, and flat. The traditional community, relatively separate from the outside world, with strong social capital, is experienced as highly important for keeping and sustaining their faith, identity, important beliefs, values, and communal behaviour choices. In this section I will discuss three elements of the Amish social capital, namely the social network, the process of socialisation, and the role of the *Ordnung*, which are essential for sustaining their community and religious worldview. The section ends with a brief description of the transformation of Amish work and its effects on the social structure and traditional values, what will be further dealt with in section 3.4.

Social network

The social structure of the Amish community provides for building a strong social network, which is an important element of social capital. Besides the church community of 25-35 families Amish have a substantial family network they can rely on. On average, they have about 75 to 80 cousins, most of whom live within a radius of 20 miles, providing for a huge support system.¹⁴¹

Although Amish do not live communally, much time, money, and property are shared and used to sustain the community. Their social framework is characterised by a high interdependence. Work and leisure time are often integrated. People work hard and make many hours, but they also easily make room for a chat or a visit. This freedom, however, is only granted to people who run their own business and it becomes difficult for Amish working for a non-Amish employer. Despite hard work the pace of daily life is slower than in the outside world. Leisure

Box 3.3 From my diary: Barn raising

At 9 AM we enter the yard where the 'barn raising' has started. The barn was burnt down and preparations for rebuilding have been made the week before. Today, hundreds of Amish have come to help and loud hammering fills the air. The women sit aside and watch the men. They have provided food and beverages. David (my host) told me that, with good preparations, a barn can be rebuilt within one day. It is impressive to see so many men working together, young and old, to help a 'neighbour' out.

time is usually filled with practical tasks, the so-called 'frolics'. The most common frolics for women are quilting and sewing. Men help each other with building a fence or constructing a shanty. From early on Amish learn that "sharing is caring". People in need are helped out by relatives and church members, with the 'barn raising' as the most widely known and telling example (see box 3.3). Another form of helping out is the organisation of auctions for families confronted with high medical costs. Amish have no insurance, but are assured of help from the community in times of need. These mechanisms of social trust and reciprocal help are strong elements of their social capital.

Socialisation

The social structure of the church community includes a clear process of socialisation, in which the Amish faith, values, and behaviour choices are transferred. This process of socialisation starts with the (extended) family, complemented by the school and the church. Gender roles, responsibilities, and expectations are made clear from childhood on. Girls are brought up to become good housewives and boys learn honest skills to earn a living. In an Amish community elderly and young people live, work, and recreate together. It is quite common for three

generations to live under the same roof and naturally the older generations play an important role in the transfer of values. The elderly are valued and held in high esteem and children are taught to obey and respect them. I will highlight two specific elements of the process of socialisation, namely the Amish school and the period of *Rumspringa*.

The Amish school is, in addition to the family, crucial for the transfer of values to the next generation. When Amish feared the American primary school system would cause their children to drift away from their values, they struggled for their own school system.¹⁴² Now, while paying American school taxes, many Amish communities run their own schools with an average of twenty-five children from eight grades all in one room. These eight grades are taught by one Amish teacher, usually a young unmarried woman. The lessons are in English and focus on four R's: besides reading, writing, and arithmetic, they learn the religious language, High German, to understand the German Bible, prayers, and *Ausbund* songs. Their education is focused on obedience and learning by heart, rather than developing your own ideas. Amish attend school until their fifteenth birthday, after which they learn practical skills. Higher education is suspicious. Too much knowledge might lead to *Hochmut*, independence, and abuse of power. For some Amish the choice for higher education is a reason for leaving the community.

The school system is integrated in the Amish way of life. Brothers and sisters share the same classroom and pupils might have the same teacher for years. Parents are very involved in the education of their children. During the field research, I was invited to the school picnic, to celebrate the end of the school year. Although this picnic was organised on a Monday, from 11 a.m. to 4 p.m., practically all parents, both men and women, and other relatives were present and participated in the preparation of the food and the volleyball game. But not only at special events, also on normal school days I found parents at school helping during the lessons.

Furthermore, the two teachers of my host family spent a night at their house to get better acquainted with the family of their pupils. Even at home, the boys spoke English with their teachers, as they were used to do at school.

The period of adolescence is called '*Rumspringa*', meaning 'running or jumping around', and is characterised by a certain relaxation of rules.¹⁴³ *Rumspringa* is an important period in which Amish youth need to decide if they will be baptised and join the church. Usually they socialise with friends in one of the 'gangs', ranging from groups organising parties, to more serious gangs organising singings, meals and games. Over the last 50 years, the retention rate has gone up, what might be caused by growing differences between the community and the outside world.¹⁴⁴ Although the Amish community has changed, the outside world has changed in a much higher tempo. The

Box 3.4 From my diary: School day

Esther invited me to join her to school. She is teacher at a one room school. It was pet day and all children had brought animals and even their little brothers and sisters to school. We started with a reading from the Bible. After that, all children stood up and prayed Our Father aloud. They formed a choir in front of the class and sang 5 songs out of a songbook. The writing lesson contained a test. Esther started with a word for grade 1, then for grade 2, and so on until all 8 grades had been given 30 words. The children checked their spelling themselves and told the teacher their score. The Bible verse for today, which all children had to copy, was Proverbs 13,11: "Wealth gotten by vanity shall be diminished, but he that gathereth by labour shall increase." After that the children played outside with their animals. It is a way of teaching that is only possible because the Amish can run their own schools.

schools appear to be important for socialisation. Meyers (1994a) found that persons who attended Amish schools are less likely to leave than those who went to public schools. Furthermore, Amish living close to urban areas and those who are part of congregations with the least restrictive *Ordnung* are most likely to leave the Amish. Other factors that appear to influence leaving the community are being firstborn, being unmarried, and increased outside contacts. Regarding factory work, it was not the work itself that appeared to be a problem, but the increased income and leisure time that open possibilities for exploring the world. Amish who choose to be baptised give reasons such as the wish to marry an Amish person, the simple lifestyle, community support, respect for parents, a sense of belonging, and specific religious reasons.¹⁴⁵

The Ordnung

Formally, communal decisions on religious, political, economic, and social-cultural issues within the church district are taken twice a year by all baptised men and women at the Council Meeting. These decisions become part of the *Ordnung* and require complete consent of the community, since every member confirms the implications of a decision for daily life. When consideration on a certain issue appears to need more time, it can be postponed to another Council Meeting. However, in case of an impasse, when a person refuses to comply and has no religious foundation for this opinion, he will be excommunicated from the church, and if the person is not penitent, eventually shunned.¹⁴⁶ In practice, the opinions of the elderly and the ordained church leaders are often overriding. Church leaders can be very determinative for the atmosphere in a community. Since church leaders are always male, Hostetler (1993, 108) calls it a 'patriarchal-democratic decision process.' Each church district determines and maintains its own *Ordnung*. However, because Amish have much interchange with neighbouring church communities, and bishops within a certain region meet on a regular basis to talk about important issues, the rules in the region are usually rather similar.

The *Ordnung*, as a clear set of obligations, rules, norms, and prohibitions, together with the ban and *Meidung* as sanctions, strengthen the predictability and social trust in communal relationships. Since all members agree on these procedures, they are very strong elements in the social capital of Amish society. Also, the *Ordnung* plays an important role in maintaining Amish values, as well as the level of adapting to modernity and allowing technological innovations. Because their social capital is embedded in a shared worldview, Amish have been able to maintain their community by a functional cultural guarding of the boundaries. The issue of dealing with modernity and new technologies in relation to Amish values will be further discussed in section 3.3.4. I will conclude this section by introducing a comprehensive cultural change in Amish society: the shift to nonfarm work.

Transformation of Amish work

The main and most appreciated source of income used to be the small-scale farm, but increase in land prices in some areas have impeded the foundation of new farms.¹⁴⁷ Over the last twenty five years, many Amish in Lancaster County and Holmes County have started small businesses, varying from quilt shops to the production of wooden gazebos, often supplementing farm work. Now, in some communities, fewer than 10 percent of the households receive their primary income from farming (Young Center, 2009). The role of women is changing as well, since women run 25% of the Amish enterprises in Lancaster County (Kraybill and Nolt, 2004).

The church has quietly allowed this development. For many church leaders businesses are perceived as the lesser choice of many evils. Among the Amish entrepreneurs, however,

I got the impression that some would not choose to become full-time farmer again if they had the chance. My host, who has a tree-trimming business in combination with a small farm, was struggling with the fact that he felt he had to succeed his father on his farm and give up his business. In some areas, like in Lancaster, the church prefers small businesses at home to working for a boss elsewhere, for it keeps fathers with their families and away from non-Amish employers. Nevertheless, small businesses are threatening separation from the world. Where farms used to be located far from the road, now signboards invite visitors with texts such as: *'We're open'* and *'Guests Welcome'*. Still, despite this shift to nonfarm work, the Amish remain a distinctly rural people, living on a five-to-ten acre homestead with vegetable gardens and pastures for the horses.

The differences between farmers and businessmen are substantial. Where farmers face the same prices for milk and corn, enterprises vary greatly in their products and dynamics. In contrast to some other areas, Lancaster businesses are small-scale and companies with over twelve employees are divided. Many Amish fear that children who do not grow up on a farm will not learn the value of hard work and will earn too much money too easily. A farmer's daughter told me: "When you don't work at a young age, you don't know how to handle money. You get too many conveniences without working hard and end up with financial problems." The shift towards an entrepreneurial society is one of the biggest changes in Amish community in the last 50 years and will be further discussed in section 3.4. Here we continue with an elaboration of the reflective way of dealing with modernisation and technological innovations, which strives to maintain their basic values and viability of their community.

3.3.4 Reflective change

Generally Amish are sceptical about technology and modernity, although they cautiously and selectively make use of modern technology.¹⁴⁸ Most technological advances are not considered immoral in themselves, but the Amish concern is mainly about where innovations might lead. They fear that modernity will erode their community, segment social relationships, encourage individualism, and de-contextualise people and activities from their social context (Kraybill, 2001). As an Amish man remarked, it is not just what or how you use technology, but "what kind of person you become when you use it" (Igou, 2003). Because Amish leave school at the age of fifteen to start to work, they are mainly open for practical developments that fit into their way of life. Amish reject higher education and are reluctant to science.

Still, modernisation has not passed by the Amish communities. In order to maintain a viable community, Amish have been open to necessary changes. Their daily life nowadays is quite different from a century ago. Especially in the last few decades, they have applied a reflective modernisation in order to safeguard their (economic) survival, while preserving their cultural values and quality of life. The term 'reflective modernisation' does not refer to the Amish as a meditative society, but emphasises the selective adaptation and implementation of new technologies and modern developments, as a result of considering the practical consequences of these innovations in relation to their religion and values.¹⁴⁹

When questions arise around technology, often introduced or developed by innovators within the community, Amish leaders confront this technology and its effects on the community with their values. As a result of this confrontation, decisions are made as to which innovations are accepted, rejected, or modified, leading to compromises. In this process of weighing technology, some specific considerations can be distinguished.¹⁵⁰ Amish will resist developments and technologies that intrude family life and threaten their identity, like

power-line electricity, so keeping the community disconnected from the outside world and preventing inevitable debates over many new appliances that would come along. Innovations that contribute to the preservation of their culture and community are adopted without any problem, like rollerblades or gas refrigerators (except for the most conservative Amish). Interestingly, for many Amish the reason why possession of the car or the telephone has been rejected in the past is not relevant, since the rejection has become a cultural symbol in itself. Being asked for during the field research, they often answered: "It is just not Amish", illustrating that it has become part of their identity.

In general, we can distinguish three main considerations:

1. A change or new technology and its effects must correspond with cultural and religious values and symbols. Values like obedience to God and the church, pacifism, modesty, and separation from the modern world, are safeguarded as much as possible. The struggle for their school system is a good example of this preservation of values, leading to a clash with the State. Devices like television and Internet, and changes in cultural symbols such as clothing and transport are taboo. Discussion on these issues often led to schisms in Amish society.
2. Innovation and technology must not endanger group cohesion or promote individualism, a reason for prohibiting higher education. Amish prefer small-scale operations in farms, schools, and businesses. Larger and more modern machinery enables farmers to work more independently and might undercut the role of communal work (Kraybill and Olshan, 1994, 46). Technology requiring specialised knowledge will be mistrusted, for technology must be accessible to the whole community as much as possible. Communal wisdom and traditional beliefs and practices are valued more than scientific findings (Young Center, 2009).
3. Dependence on the outside world will be avoided as much as possible, to safeguard Amish values and cohesion. Therefore, Amish businesses are preferred over working for outsiders. They want to keep their say in issues like insurance, energy supply and holidays. Doing business on Sundays is strictly forbidden. Amish are more likely to accept new technology for economic purposes than for consumption and communication (Kraybill, 2001).

These principles refer to the extent to which Amish are open for negotiation. The possession of cars or connection to the electricity grid is not negotiable, because accepting these changes would lead to a series of consequent changes. When an innovation has big implications, this reflective process, usually characterised by quiet consideration of experiences, can last for years. In theory, Amish communities decide collectively whether to accept, reject, or modify an innovation, and the outcome becomes part of the *Ordnung* of the local church community. In practice, however, often the opinion of the religious leaders and the elderly is followed and accepted. Amish society is decentralised and the local bishop can be very influential. In the community of my fieldwork, the former bishop had made a clear stand against the motorised lawn mower. The present bishop did not have any problem with the mower, but felt he could not abandon the former bishop by allowing the mower now. It often depends on the willingness of the religious leader to change, how many innovations can be implemented in a church district. Other things that can play a role are the informal social position and standing of the innovator within the community and the pace of technological changes. A non-recurring change will be accepted more easily than a change involving a series of innovations.

Reasons for technological change come from both the outside and the inside of Amish

society. From the *outside*, laws and regulations force Amish to investigate new technology, like for example automatic milk coolers to keep the Grade A certification for their milk. On principle, they obey American law. However, when the American law collides with their culture, they confront the effects of the regulations with their values and decide whether to accept the rules or ultimately to negotiate. Examples of negotiations, with the help of non-Amish sympathetics, are the Amish schooling system as described in section 3.2 and the exemption from the use of the slow-moving vehicle reflective emblems and triangles in some strict settlements. The main reason for innovation from the *inside* is the economic viability of their society. Technology which improves economic development will be accepted more easily, as long as it remains within religious and cultural boundaries. In the past Amish were agricultural innovators (see section 3.4.1) and still they still develop new technologies themselves, like LED buggy lights, lamps, and battery chargers using solar energy, as well as new horse-drawn machinery.¹⁵¹

Technology is more likely to be allowed along a spectrum from school, house, farm, business, to portable workshops used for construction outside the community. In school and the house, where the family gathers and children are taught Amish values, modern appliances are avoided as much as possible. When innovations would intensify connections with and dependence on non-Amish, they are likely to be rejected. Some church districts turn a blind eye to co-operation with non-Amish, for that is preferred above factory work.

This permanent confrontation of innovations with their values characterises Amish reflective change and results in a collective decision to adopt, reject, or adapt an innovation. Adaptation leads to interesting compromises, in which the hierarchy of values becomes clearer. Although Amish are not connected to the electricity network, the use of electricity is not banned in all cases. Many families, for example, have access to a freezer, either in a public store or at the neighbour's house. This compromise helps families to preserve their food, supporting self-sufficiency, while it keeps electricity outside the homes. Specific choices regarding technology on the farm and in businesses will be further discussed in section 3.4 and choices regarding energy and transport will be analysed in section 3.5. This section continues with an illustration of the process of reflective change, namely the discussion on the use and possession of the telephone.

An example: the telephone issue

Telephone use has been an issue among Amish for many years.¹⁵² When the phone appeared at the beginning of the 20th century, a number of Amish purchased a phone for their home. Around 1908 Amish bishops banned the phone, because they feared it made spreading gossip too easy and it literally connected Amish houses to the larger world, threatening the wish to be separated. The *use* of the phone however, particularly for emergencies, was never banned. After 1940, community phones gradually appeared, shared by several families. These telephone shanties are typically found at the end of lanes or beside barns and sheds. Since more and more Amish start small businesses on their farms, some church districts allow phones inside shops for economic reasons. A growing number of families have private phones outside their homes now, but their use is limited to necessary and business conversations.

Prohibition of phones inside the house is still in force, because of the disturbing effect on conversations, family life, and rest. Amish appreciate face-to-face contact and a phone call increases distance and individualism, and might reduce visiting. Besides, the telephone orients communication away from the home toward the outside world. It is not the use, but the

abuse of the phone Amish leaders worry about (Kraybill, 2001, 190-197). They are concerned that such a technology might change the community, as well as the individual. By the turn of the 21st century, growing discussion focuses on the use of fax machines, voice mail, answering machines, and cell phones. Although cell phones are discouraged, many contractors use them for coordinating their work crews on outside jobs. The exclusion of phones from the house might be difficult to enforce with the use of cell phones. Since cell phones have started to offer the possibility of taking photographs, GPS, and connection to the Internet, it is possible that they will be banned or restricted within the coming years.

Recapitulating

We can conclude that Amish society offers a solid structure for preserving faith and community, the main aspects of their perceived quality of life. A cultural guarding of the boundaries has had considerable success in keeping the community separated from the outside world, although these boundaries are challenged from time to time, both from the inside and the outside. Important Amish values are moderation and soberness, modesty, obedience, patience, forgiveness, responsibility, helpfulness,

and a willingness to work. In the hierarchy of values, religious values are seen as most important. Furthermore, the community is ranked higher than personal desires and freedom of choice. Amish have strong confidence in God. Their culture is anchored in their history and they generally appreciate their traditions. Their social capital is embedded in a shared worldview and practised in a community setting, characterised by reciprocal trust, dependence and care. Social networks within the community include clearly distinguished roles, expectations and rules as laid down in the *Ordnung*, and social control. The change from an agricultural towards an entrepreneurial community generates major challenges to the cultural values and social structure of Amish life.

Amish are not blind to the practical benefits of many technological innovations, but they are deeply suspicious of their social and spiritual implications (Zimmerman Umble, 2003). They wish to safeguard their religion, values, and culture as much as possible. Modernisation has not passed their community by, but Amish appear to be able to control technology and modernity to a certain extent. This process of reflective modernisation is a fascinating example of how values can play an explicit role in behaviour choices affecting daily life. Amish appreciate their self-imposed limitations and restrictions, because they help them to preserve and maintain their traditions, core values, and quality of life. Although the outcomes of this reflective process need not necessarily be sustainable, it definitely opens up perspectives for sustainability once these values lead to choices with a low impact on the environment.

We will now take a closer look at how the Amish economy has developed over the years and how the Amish deal with necessary changes, balancing traditional values and economic viability. Then, we will discuss the environmental impact and the sustainability of the Amish economy in relation to their religious worldview.

Box 3.5 From my diary: Using the answering machine

During a visit to an Amish man who was ordained minister the week before, I was taken out to the telephone shanty next to the barn. Amish friends had sung six songs on the answering machine as encouragement. With eight Amish adults and about 15 children we flocked together around the small shanty to hear the songs over and over again: the answering machine served as alternative cassette recorder.

3.4 Amish economy

The central theme of this section is the Amish economy, and particularly the comprehensive change from an agricultural towards an entrepreneurial community. In section 3.4.1 I will successively discuss two aspects of Amish agriculture: the role of horses and tractors and diversified farming. The impact of Amish farming on the environment will be discussed in section 3.4.2 and includes energy-use, erosion and water pollution, and organic farming.

Box 3.6 Two portraits of an Amish family economy in Lancaster County, Pennsylvania

Samuel (32) and Rebecca (31) have four children (9, 7, 4, and 2 years old). They live next to Rebecca's parents. Her father is the bishop. The oldest 3 children attend the nearby Amish school and the youngest is at home.

Samuel and Rebecca have a farm of 45 acres, of which 10 acres are used for the production of sweet corn, strawberries, melons, and several vegetables (peas, spinach, lettuce, tomatoes, asparagus, beans, rhubarb). Most vegetables are sold at a roadside stand, which is mostly Rebecca's job. She also bakes bread and pies for the roadside stand. The produce and Samuel's work as tree trimmer now form the main income. The cows were sold years ago.

The remaining land is used for haymaking, soybeans and pastureland for the mules and horses. Samuel uses organic fertilizer and the content of the septic tank as fertilizer. In the vegetable garden Samuel and Rebecca use some pesticides. They have an irrigation system based on gravity, which is only used in dry periods.

The tree business owns a small truck, a small crane, and a woodchopper. Ben, a non-Amish American, works for the business and drives the truck. It is quite expensive to have him as employee, for tree trimming is a dangerous profession with high insurance costs. Samuel has no insurance.

David (45) and Esther (41) have five children, ranging from 11 to 1.5 years old. Esther is pregnant. They live under the same roof as his parents, each at one side of the house. After having been a carpenter for six years, David decided to take over his father's farm. In his view, he earned too much and he had too much free time as carpenter. He wished to be closer to nature.

David and Esther now run a combined arable and dairy farm. They have 69 acres of land, of which they use 38 themselves. The remaining 31 acres are rented out to another Amish farmer. David used to milk 45 cows, but some years ago he sold nearly half of them. His oldest child was too young to be a real help ("although she works hard") and his father was too old to assist. Now he milks 25 Holstein cows. Including calves he owns 50 cows. One half of the land is used for forage corn and the other half for grass and alfalfa. To prevent erosion, David works on small fields and applies rotation: four to five years of corn, then four to five years alfalfa. This alfalfa is sown only once, and the following years grass will gradually predominate. David also sows clover and rye. He uses 7 mules for fieldwork, 1 horse for the buggy and a pony for the children. He uses 5,000 gallons of cow and horse manure per acre per year and applies 300 gallons of artificial fertilizer per acre of corn and 200 gallons per acre of grass/alfalfa. He uses herbicide spray for the weeds between the corn, about 2 to 3 quarts per acre. He gets advice on his crops from a non-Amish adviser. The fields are never irrigated.

Besides the farm, they run a quilt shop, taken over from David's mother 2 years ago. Esther does not quilt herself, but coordinates the shop, purchases fabrics, and designs the patterns. The quilting is placed out to other Amish women. Regularly David receives groups of tourists, whom he shows around on the farm and the quilt shop.

Section 3.4.3 describes Amish businesses and looks at the development of small enterprises and factory work. This section ends with a discussion on Amish economy and sustainability.

3.4.1 Agriculture

Working the land, with the participation of all family members, is deeply rooted in Amish culture. The family farm and the garden, which is usually the domain of the women, offer many opportunities to teach children self-discipline, responsibility, cooperation, and “to enjoy working”, as expressed by an Amish farmer. Seasons determine the pace of life and school times are adjusted to agricultural life.¹⁵³ Until the beginning of the 20th century, Amish and Mennonites were known as innovative farmers. Amish were among the first who irrigated their land and used crop rotation, manure, clover, and alfalfa to keep the land fertile (Kollmorgen, 1943; Berry, 1977; Stoltzfus, 1973).¹⁵⁴ On their arrival in America, Amish invested more than others in farms, animals, and land, to ensure farms for their children (Coşgel, 1993). They continued to do so, because when a family was able to set their children up in farming, these children were likely to remain Amish (Ericksen, Ericksen and Hostetler, 1980).

Since the beginning of the 20th century, the introduction of many new technologies in the American society placed the Amish society into the previously-described dilemma whether to accept, reject or modify these innovations. Particularly the development of new farm technology raised discussion, because these innovations affected one of the basic aspects of Amish culture and economic viability. Nevertheless, the Amish communally decided to accept some new developments, but also to restrict their way of farming to a form that can fit in their religious worldview. This section will discuss main aspects of Amish farming, namely the choice for a horse-based way of farming and the small-scale diversified farm, as well as the way they deal with nature. Specific environmental issues like the use of energy, fertilizers and manure will be discussed separately in section 3.4.2.

Horses and tractors

Until the invention of the tractor in the 1920s, Amish allowed several technological innovations on their farms, like mechanical hay loaders and corn binders, driven by steam and petrol engines. In fact, before the twentieth century, Amish farmers were among the first to adopt, and even invent, new developments in technology (Coşgel, 1993). However, the tractor appeared to be a different issue. At first, they used tractors as well, but discussions due to an earlier ban on the car eventually led to the prohibition of the tractor as means of transport (Kraybill, 2001). Since 1923 the tractor has only been allowed on the farmyard for stationary power, used to fill silos with corn, and not accepted in the field. To prevent the tractor being used as a car, Amish decided to have tractors with steel wheels instead of rubber tyres. With a restriction on the use of tractors, the traditional Amish also wanted to make a stand against the more liberal Beachy Amish, who allowed tractors in the field, and they feared that tractors would diminish the amount of human work.

For fieldwork, Amish stick to draft horses and mules. Most machines that can be pulled by horses or mules are allowed, even when they are provided with a petrol engine. Amish state that as long as these machines have steel wheels and are pulled by horses, the small scale and labour intensity can be preserved.¹⁵⁵ The main reason for allowing machines is economic necessity. Since this ‘necessity’ is debatable, the use and kind of machines differs among different Amish church districts. Some Amish argue that mechanical and large-scale agriculture will damage the soil in the end. Horse-drawn machines do not depend on

the speed of the tractor and can be operated manually, which makes it easier to adjust the machine to the needs of the soil. A non-Amish farmer noticed a difference in the results of his Amish neighbour: "It gave him a control flexibility that I had never experienced and left me feeling sort of humble. I'm still not sure which of us has the better technology."

The horse does not allow unlimited expansion. Amish farm size is limited to the land one family can cultivate and depends on the kind of soil and natural environment. Usually Amish farm less than 80 tillable acres, but the amount can differ considerably in different states. In the 1990s, an average New York Amish farm had 58 acres, while a non-Amish farm in New York consisted of 285 acres (Blake et al., 1997). In 1900 a typical Lancaster County Amish farm was 80–100 acres, but in 1970 many Lancaster farms were subdivided into farms of 40 acres and less, which is the bottom line in this area (Place, 2003, 199). Nowadays, the Amish settlement in Lancaster County is facing severe development and population pressures. In this area, an estimated 5,000 acres of farmland are being converted to non-agricultural use every year (Ibid, 192). Because affordable farmland for the upcoming generation has become scarce and expensive, some Amish decide to move to other states, although not all areas are appropriate for the Amish way of farming.

Diversified farming

Amish farms are highly diversified and to a large extent self-supporting. Most Amish have a four- or five-year rotation of corn, oats, wheat or spelt, barley, and hay, often containing grass, alfalfa, timothy and clover. Crop rotation keeps the fields covered for nearly four years in a row, preventing erosion of the land. In addition to crops, most farms have meadows or pastures. Amish farmer David Kline remarked that "grass and legume heal the land". Many Amish keep cattle, heifers, pigs, chickens, and horses. James (2004), from Ohio State University Extension, found that the small diversified Amish farms relying on horse-powered equipment have remained surprisingly competitive even in a market dominated by huge farms with massive machinery investments.¹⁵⁶ Although Amish farmers produce for the market, profit maximisation is not the main goal. They aim for a sufficient income and room to practise their faith. They have low costs owing to horse farming, low equipment costs and use of human labour. Most of the livestock feed is produced on the farm.

A somewhat ambivalent crop grown by Amish is tobacco. In Lancaster County they started raising tobacco soon after the tobacco industry was established, around 1839. In most settlements established by Lancaster Amish smoking cigars and pipes is allowed, but smoking cigarettes is prohibited for that is too worldly.¹⁵⁷ Although smoking tobacco is forbidden in other settlements, growing the crop is ideal for large families, since it is a labour intensive crop. Still, growing tobacco is not an undiscussed issue within the Amish community. Opponents of growing tobacco state that using tobacco is a waste of money and harms people's health. Non-smoking is often indicative of more liberal churches (Igou, 1992). Amish clinging to growing tobacco often belong to more conservative church districts. For long tobacco remained Lancaster County's largest cash crop, worth about \$22 million a year (Lowry, 1997). In 1992 about one-third of the Amish farmers in Lancaster raised tobacco, but since tobacco prices fell a number of years ago and have remained depressed, more and more farmers have replaced tobacco with other crops.¹⁵⁸

Dealing with nature

Amish see the earth as God's creation and tilling the soil has religious significance because of the

way they interpret the Bible.¹⁵⁹ Amish rarely use words like biodiversity or nature conservation, but talk about being a good steward of God's creation. My Amish host considered attaching a sign to his barn with the text: "The cows are not my property. God is the owner and I want to care for them as good steward." An Amish bishop said: "We should conduct our lives as if Jesus would return today, but take care of the land as if He would not be coming for a thousand years".¹⁶⁰ An Amish minister explained why he preferred farming to other work: "Farming is working with creation. There is something in the soil that man is attracted to. Man was made from the soil you know and he likes to see things grow. (...) The farm is healthier and you're closer to God."¹⁶¹

Generally Amish leave much room for woodlands, hedgerows, and meadows, resulting in 'ecological' edges and corridors.¹⁶² The various crops with different sowing and harvesting times lead to a mixed landscape with much room for birdlife. The bobolink for example, which is a good indicator for birdlife on farmland, appears more frequently on Amish than on other farms.¹⁶³ However, in Lancaster, where land is getting scarce and expensive, less space is available for nature that is not economically relevant. This more intensive way of farming might also affect animal welfare. The number of animals per square acre is increasing in Lancaster County. Furthermore, small scale does not always mean that animals have much room in the barn or much fresh air. Still, in general we can say that Amish treat their animals quite well, although exceptions can be observed, as the recent discussion on Amish running puppy mills may illustrate. Amish Delights clearly distance themselves from animal abuse and cruelty, by stating that "the vast majority of Amish and Mennonites do not run puppy mills nor do they abuse animals. The age old adage truly applies here - a few rotten apples *do* spoil the reputation of an entire community of people, at least they do in the press."¹⁶⁴

Future of Amish farming

While the number of farms in the US is declining, the Amish continue to establish new successful farms with a supportive community life. However, it is no longer possible for all Amish families to obtain a farm for their children. In densely populated areas of Pennsylvania and Ohio, the continuation of the small-scale Amish agriculture is threatened by higher land prices, while declining commodity prices lead to lower incomes.¹⁶⁵ In these areas many Amish are (partly) leaving farm life for businesses or factory work.

The cost of farming depends very much on the area where Amish live and the cost of land. In Lancaster County, one pays \$10,000 - \$12,000 per acre. In other states farmers only pay \$2,000 - 3,000 per acre, making farming financially more tenable.¹⁶⁶ In general, Amish businesses are much more profitable than farms and more and more farmland is bought with the profits of supplementary small businesses. Although Amish owners do not always farm their own land, ownership allows the community to retain a rural base separate from the larger society. In rural Kentucky, Wisconsin, and New York about 75% of the Amish are farmers, but in bigger settlements like Ohio, Pennsylvania, and Indiana this number has decreased greatly.¹⁶⁷ Some add greenhouses and small businesses to the farm or rent out their land and choose paid employment off the farm. Others choose to start a small enterprise on their property. To give an illustration, the sources of income of two of my host families are portrayed in box 3.6.

Changes in the Amish agricultural system are not without effects. An agricultural community needs a different social structure from that of a business-oriented community. Many Amish fear that diminishing agricultural activities and involvement will lead to changing values. People with more free time and prosperity will gradually tend to materialism. Amish worry that as soon as children have worked for hire, they are neither prepared nor willing to take over the family farm, as one said: "How can farming be sustainable if children do not sustain

the practices of their parents?”¹⁶⁸ This will be further discussed in section 3.4.3 on Amish businesses. I will first analyse the environmental aspects of Amish farming in 3.4.2.

3.4.2 Amish farming and the environment

Having discussed the small scale, horse-based, and diversified Amish agriculture, I will now deal with the question of whether this way of farming can be seen as sustainable and what can be said about the impact on the environment. To answer these questions, I will discuss the issues of erosion and water pollution, use of chemicals, energy use and organic farming.

Erosion and water pollution

In more densely populated areas a decreased Amish farm size has led to an increased concentration of animals, which yields more manure per acre. A problem is that most Amish farmers apply manure on the basis of disposal needs rather than crop nutrient needs, leading to a greater potential for runoff (Place, 2003, 194). This is particularly the case when manure is spread on frozen ground throughout winter, which is possible with horse drawn equipment. The Amish practice of mouldboard ploughing increases the incidence of erosion (ibid). Land scarcity leads to maximisation of land use, and fewer waterways are left to catch the runoff. Also, in some Amish areas wastewater contains too many nutrients. During the last decade, they have been forced to apply environmental measures owing to state regulations. Particularly in Lancaster, pollution of the Chesapeake Bay by runoff from manure and synthetic fertilizers has been a huge problem since the 1970s. Fifty percent of the farms in Lancaster County are owned by Amish. The EPA (Environmental Protection Agency) is taking serious measures to stimulate the Amish to apply new farming practices that cause less water pollution, such as fences to prevent livestock from drifting towards streams and buffers to reduce runoff.

Lack of knowledge about environmental problems and resistance to government interference are important reasons for the slow reduction of pollution caused by the Amish way of farming. In general, Amish are reluctant to accept advice from outsiders like extension agents. However, when an adviser is accepted, Amish are generally positive about measures to protect the environment. Lancaster Amish growers, for example, reduced their use of pesticides through Integrated Pest Management, coordinated by Pennsylvania Department of Agriculture (Auman-Bauer, 2004). A local advisor acted as liaison with the Amish community. Place (2003, 197) also noticed that “word is slowly spreading through the Amish community that manure management and erosion control are important means of protecting water quality and improving soil conditions on farms.” However, when such an approach appears not to be effective, the Amish will have to face fines and penalties for causing pollution.

Furthermore, no-till farming is increasing among the Lancaster Amish; this is partly due to adaptation of planters to horse drawn methods for no-till farming, making the technique accessible to Amish farmers.¹⁶⁹ Although no-till farming decreases erosion, it might also require increased herbicide usage. Amish organic farmer Kline is very critical about the technique and emphasises the decrease in wildlife due to the use of extra chemicals: “To champions of agribusiness, that is progress. We farm the way we do because we believe in nurturing and supporting all our community: people, land and wildlife” (Kline, 1990, xxi).

Energy use

An important environmental advantage of Amish agriculture is their efficient use of energy.

Most non-renewable energy is used for diesel-powered milking and cooling equipment on dairy farms and other agricultural equipment driven by a petrol or diesel engine.¹⁷⁰ Nevertheless, Amish farms use less fossil fuel than their non-Amish neighbours, because Amish make much use of horsepower, manpower and wind energy. Some Pennsylvania Amish farmers are experimenting with bio diesel.¹⁷¹ In the late 1970s two quantitative studies were published on energy efficiency and yields of Amish farms. Craumer (1979) found Pennsylvania Amish to be 30-40% more energy-efficient than non-Amish farmers. Another study found energy efficiency and yields on Amish farms differing greatly from one region to another (Johnson et al., 1977).¹⁷²

Besides reliance on human labour, the use of draft animals, and the non-use of electricity, the energy efficiency of Amish farms also stems from specific agricultural practices such as crop rotation, use of manure and application of pesticides (Perterer, 2005). In general, the use of fertilizer, pesticides and herbicides among Amish and non-Amish differs in kind as well as in amount. Amish spend less on artificial fertilizer than their mechanised neighbours. Besides economic reasons for using less, they also need less, owing to crop rotation and the use of legumes and manure (Moore et al., 1999; Stinner et al., 1989). Water Quality Agent Hoorman (2004) concluded that Ohio Amish farmers purchased very little commercial fertilizer and used limited amounts of herbicides. However, Blake et al. (1997) found not so much difference in amount of chemicals between Amish and non-Amish in St. Lawrence County (NY). Because Amish use manure and legumes, they apply fertilizer with less nitrogen.

Organic farming

A small but growing tendency toward organic production can be noticed among the Amish as well. Although this growth is mainly prompted by financial reasons, the philosophy and labour intensity of organic farming connect well to Amish ideas about farming.¹⁷³ Together with Old Order Mennonites, Amish started co-operatives to be able to sell their organic products in a way that fits with their culture and community. Two examples are Lancaster Farm Fresh in Pennsylvania with 22 members and Green Field Farms cooperative in central Ohio with more than 110 Amish members.¹⁷⁴ An important reason why Amish hesitate to become organic farmers is the certification process. It takes three years of farming without chemical inputs before the land is clean from pesticides, during which the farmer has high costs with low profit. Other reasons are fear of outside influence and lack of knowledge. On the other hand, more and more leaders view the return to chemical-free processes as a way to stay competitive while keeping families together and helping Amish to return to farming (Abraham, 2008). The rise of Old Order organic cooperatives will definitely contribute to this process.

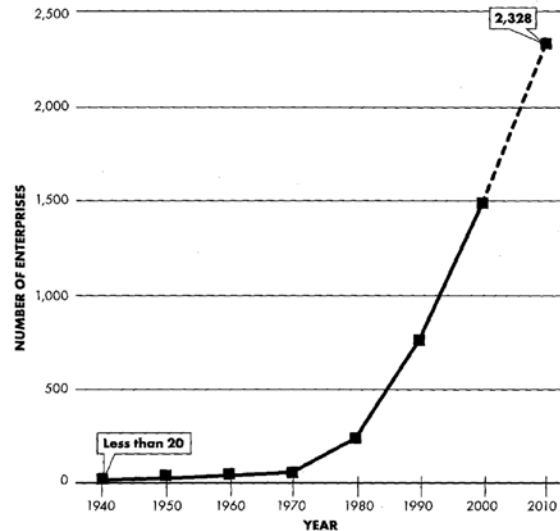
Recapitulating

To finish this section on Amish farming and the environment, we can conclude that Amish diversified, labour-intensive agriculture is not entirely sustainable in the ecological sense, but certainly has aspects that lead to a low environmental impact. Amish farms use less fossil fuel than non-Amish farmers. The choice to use draft horses and mules for fieldwork and not heavy machines makes the land less compact and affects the size of the fields. Most livestock feed is produced on the farm, saving much indirect energy for transport and processing. Small scale farming, in combination with crop rotation and ecological corridors and woodlands, leads to a mixed landscape and room for birds and wildlife. The rise in land prices threatens the extensive way of Amish farming and water pollution by nutrients is becoming a big problem.

In contrast with other Amish settlements, the Lancaster Amish are relatively open for cooperation with the authorities on environmental protection. The influence of extension agents, however, also results in a growth of no-till farming and use of pesticides. Organic farming might be a promising solution to compensate for decreasing income in some areas. The small scale and intensive use of labour fit very well with the organic way of farming and might be applied on a broader scale.

The next section will focus on the influence of the rise of small enterprises and factory work on the social structure of the community, Amish values, and the environment.

Figure 3.2 Estimated number of Amish Enterprises in the Lancaster Settlement, 1940-2010



Source: Kraybill and Nolt, 2004, 37

3.4.3 Business

Lack of affordable land and jobs for their children lead some Amish to leave their church district and move to other settlements.¹⁷⁵ Others choose to stay and start a small business. In many districts, working for non-Amish employers is discouraged, for Amish would lose their say in working hours and circumstances, making it hard to combine their jobs with other activities in the community. The growth of Amish enterprises is stimulated by technological developments as well. Since in mainstream American agriculture horse-drawn machines were gradually replaced by tractor-drawn or self-propelling machines, they could not be purchased anymore, and Amish had to develop these themselves. An Amish man described this change towards an entrepreneurial society: “In the past you had to have a Bible and a wife and 80 acres. Now you can have a Bible and a wife and two acres and a shop.”¹⁷⁶ This section will describe two aspects of Amish business, namely the development of small enterprises and the influence of factory work.

Small enterprises

Amish settlements always had a small number of shops, but in the 1980s a huge expansion of Amish enterprises took place, as shown in figure 3.2. The first businesses were closely connected with agriculture and daily life. Later Amish started to produce for non-Amish as well, selling furniture, quilts and products for tourists. In 2003 the Lancaster settlement included nearly 1,600 Amish enterprises with an average of 11 per church district (Kraybill and Nolt, 2004, 36). One-third of these enterprises are occupied with part-time or seasonal work, supplementing the family income. Two-thirds work all year round and generally these enterprises employ four to six employees each. At the beginning of the 21st century, 20% of Lancaster Amish own a business. Occurring most often are construction work, groceries, and

carpentry shops. Amish enterprises have low overhead costs, and they pay no pension or Social Security to Amish employees. Amish are hard working and reliable people, and most Amish enterprises are financially successful.¹⁷⁷ They have a 5% failure rate over a three-year time period. A non-Amish business adviser mentioned as important to their success rate the Amish commitment to collaboration as a model rather than competition: "New entrepreneurs are taken under the wing of existing owners and helped to learn the pitfalls as well as the successful practices learned from experience."

Amish enterprises are characterised by a flat social structure and they have little hierarchy. Employees can easily get a day off for communal picnics, barn raisings, harvesting, weddings, or a school picnic. The offices are simply furnished and usually computers and other devices are lacking. Businesses are part of Amish life and thus covered by church authority, which means that the community has the last word on issues such as technology, size of the enterprise and large investments.¹⁷⁸ Most Lancaster Amish enterprises are small-scale shops at the farmyard, close to the family. However, since the end of the 1990s, some Amish businesses have settled at an Amish 'industrial park' near New Holland. In 2003 a second park was established in Lancaster County.

Technology use in Amish businesses is strikingly selective, as discussed in 3.3.4. Kraybill and Nolt (2004, 113) found that 66% of Amish enterprises used diesel engines, 60% used air power and 40% used hydraulic power. 49% Of the enterprises used 12-volt electricity, while 51% had access to 110-volt electricity, whose source might be a generator, an inverter, or a public utility line at a construction site.¹⁷⁹ The rising cost of fossil energy is driving Amish to find cheaper and more efficient ways of energy use and new forms of energy, like the Amish enterprises EZ Repair, which makes use of used frying oil, and Sunline Solar, which converts devices to solar energy. Environmental aspects of Amish enterprises are discussed further on in this section.

Kraybill and Nolt (2004) distinguish between 'cultural resources' and 'cultural restraints' influencing Amish enterprises. The cultural resources include values, norms, customs, skills, and family ties, providing cultural and social capital needed to run a business. Important elements are the work ethic, skills learned at the farm, networks to rely on, thrift, and a religiously-founded plainness. Amish cultural restraints can be a hindrance to entrepreneurship, like their rejection of higher education, lawsuits, insurance, individualism, and too many contacts with the outside world. The values of *Gelassenheit*, humility and self-denial clash with business practices such as competition and advertising. Furthermore, Amish businesses have to deal with government regulations, like certifications and licences for Occupational Safety and hygiene. Another issue is the zoning law, which restricts the size of home-based businesses in many counties. Furthermore, the Child Labour Law prohibits certain shop work for teenagers, which is a serious problem for Amish children leaving school at eighth grade. This is discussed in section 3.6.1. The rise of Amish business requires an ongoing negotiation between their cultural resources and restraints and with the outside world. This process is a good example of the reflective way of dealing with changes and modernisation as described in section 3.3.4.

*Factory work*¹⁸⁰

In Midwestern communities, many Amish work for outsiders. In Elkhart-Lagrange (In), the third largest Old Order Amish settlement in the US, more breadwinners work as factory workers than as farmers nowadays. They are facing a rapid increase in the population, coupled

with limited and expensive farmland, which makes it difficult to start farming. In contrast with the Pennsylvania and Ohio Amish, Indiana Amish started to do factory work as early as the late 1930s. At that time, small enterprises were not a real option and, as an Amish minister argued: "It just sort of happened. When farmland became scarce, it just was practical for men to work in factories." (Meyers, 1994b, 171). In the last decades, the number of Amish shops in Indiana has been rising as well, although factory work is still the main source of income (ibid).

Ironically, the first factories produced modular homes for military bases, and nowadays Amish produce recreational goods they would never buy. Meyers (1994b) argues that the main reason for factory work is economic survival. He states that a typical Amish has little concern for the final use of the product he is producing and sees work as a means to an end. Amish factory workers strive to be hard working and reliable employees and they frequently work and lunch together with other Amish or Old Order Mennonites. For 40% of the Amish factory workers *Deutsch* is even the most frequently-spoken language at work (Ibid, 179).

In contrast with the entrepreneurial culture of Lancaster, factories are not integrated in the Amish community, but seen as something outside their community, needed for economic viability.¹⁸¹ As Meyers (1994b, 172) states: "Work in an alien cultural environment is tolerated for at least eight hours a day, after which they can return to preferred Amish lifestyles." The strong pressure of production does not fit with the Amish culture and work pace, and Amish experience a conflict between their work schedule and the rhythm of Amish life. For factory workers it can be difficult to get a day off for a barn raising or religious holidays.¹⁸² Besides, the hierarchical structure of business clashes with the egalitarian model of the Amish culture and some Amish have problems when they find themselves in leadership positions in industry.

Factory work has an obvious impact on Amish culture and social structure. It keeps the father away from his family during the day and the upbringing has mainly become the task of women. Another change is that factory work outside the community less appeals to mutual help. Noteworthy is the decline in the number of children per family in Indiana. On average, in 1988 Indiana Amish farmers had 8.6 children, carpenters 7.9 children, shopkeepers 7.2 children and factory workers 6.6 children per family (Meyers, 1994b, 178). The same pattern can be observed in Ohio, where farmers have an average of 9.0 children and factory workers 6.4 children (Ibid). As an important reason for a decline in family size some Amish mention the lack of work.

Although a farmer has less leisure time, he is more flexible to participate in community activities or help somebody else out. Amish factory workers lack this flexibility and one expressed an internal conflict when other Amish make an appeal to him: "My group leader says: 'You get your work done and don't worry about them'. It's hard on me to turn somebody down. I feel I ought to take a minute and help a person out. What's hard on me is to tell a person I ain't got the time. That's the part about the factory I don't like".¹⁸³

Meyers is convinced that factory work will not lead to the demise of Amish society. Indiana Amish appreciate factory work for it has supplied employment for the community and has kept the Amish youth in the church, who otherwise might have left because of the financial risks, huge debts, low income, and hard work that comes with agriculture (Meyers, 1994b). The Indiana Amish clearly distinguish factory work, needed for the supply of income, from the culture and identity. By doing so, the kind of work has to some extent become detached from their society. This principle can be recognised by the Hutterites, as described in chapter 4.

3.4.4 Economy and sustainability

The rise of Amish businesses and factory work will inevitably change the traditional structure of Amish society. Many Amish see enterprises or factory work as the only way to maintain an economically viable community, now agriculture is becoming less cost-effective in some areas. Some Amish worry about their children growing up without roots in the soil. As early as the 1970s bishops warned that if children leave the farm they soon get away from the church, but this has apparently not happened. Despite the transition from agriculture to business or factory work as the main source of income, the Amish settlements of Lancaster and Elkhart-Lagrange have grown.

Although the businesses have no negative effect on the number of Amish communities, they might affect the lifestyle and identity of the Amish. An important difference between agriculture and businesses is that most agricultural wealth is invested in land and assets, while entrepreneurs have ready access to their profits. Compared with farmers, factory workers and entrepreneurs have more spending money and leisure time. Some Amish fear that this might lead to an increase in superfluous consumption, clashing with values such as moderation and modesty. My hosts observed an increase in material goods, like convenience food products and disposables, and activities like going out for dinner are getting more accepted. The number of Amish going on holiday is rising as well.¹⁸⁴ Some Amish fear that prosperity will, in the long run, ruin the church.

The change to a more entrepreneurial society also has many implications for the social structure of the Amish community. Where farmers cope with the same weather and prices for their products, and often work together during harvest time, the success of an enterprise depends largely on individual entrepreneurship. Communal and neighbourly assistance become less relevant. Businesses and factory work lead to a changing role for women as well. Where Amish women used to participate significantly in the family farm, they now become either merely housewives, or start their own businesses, like quilt shops or bakeries.¹⁸⁵ A quarter of the Amish enterprises in Lancaster County are now run by women. Furthermore, separation from the world is threatened, since the enterprises have opened their doors for

customers and in factories Amish work together with non-Amish men and women.¹⁸⁶ Because of increased contacts with non-Amish people, the use of English has increased, leading to the introduction of more English words into the *Deitsch* dialect. A significant question is how they can handle these changes within the framework of the Amish worldview and values, in order to maintain their culture, identity, and quality of life.

An important sustainability aspect of the relatively small enterprises in Lancaster

Box 3.7 From my diary: Solar energy

Today I visited Sunline Solar, a business on solar energy owned by an Amish and a non-Amish man. When Rebecca and her mother heard I went to Sunline, they both gave me a lamp that needed to be repaired. Elam, the Amish owner, recognised me from the school picnic and was surprised. He showed me his shop with LED lights and solar panels. Elam told his complete farm runs on solar energy. Sunline Solar is a modern business and Elam's companion worked on the laptop. An employee was busy with converting electric lamps to lamps running on batteries. He removed the wiring and put a LED lamp with a battery in. The company sells battery chargers on solar energy. This kind of business is only possible because a non-Amish is business companion. Clear appointments are essential to keep the Amish boundaries.

County is the low energy use, resulting from the absence of a connection to the electricity grid. Besides handwork, many Amish shops use pneumatic and hydraulic systems to power tools and machines, driven by diesel engines. Portable equipment is sometimes powered by gasoline engines. The enterprises use considerably less fossil fuel than non-Amish enterprises and often use and also develop alternatives, like skylight systems and devices using solar energy. The issue of energy will be further discussed in section 3.5.1. Many Amish have gone into carpentry, producing products such as furniture, toys, and gazebos. Amish furniture is advertised as of good quality, handcrafted, solid, plain, 'a reflection of a simpler time', and made to last. It is mostly made from American trees and usually contains no veneer or plywood.¹⁸⁷ Generally, Amish deal with material in a careful and thrifty way, and things are recycled when possible.

A large number of Amish enterprises appear to be economically sustainable (Kraybill and Nolt, 2004). It is more complicated to draw general conclusions about the environmental impact of Amish businesses. Obviously most enterprises make relatively low use of fossil energy fuels and generally Amish produce durable products. Because the enterprises are usually located in the community, commuter traffic is limited, but they attract cars from customers. Further research and data are needed in order to be able to measure the environmental impact of the shift from agriculture to enterprises. The same applies to factory work. Factories are mainly owned by non-Amish and therefore Amish factory workers have no far-reaching influence on the policy of the businesses where they work. The environmental implications of these factories go beyond the scope of this dissertation.

An overall interesting principle in the discussion of values and sustainability is the Amish reflective way of modernisation, as discussed in section 3.3.4. This elaborate system of evaluating innovation and change helps them to keep their communal values and their culture, even in the areas where Amish men are working outside the community. Amish mainly adapt changes and new forms of businesses in the service of maintaining their community. Nevertheless, they are concerned about how these changes might influence the community and the individual in the long term and consider their process of modernisation cautiously. This principle of reflective modernisation might offer interesting possibilities for sustainability, as long as ecological limits are taken into account. Sustainability aspects of domestic life, regarding energy use, transport, and nutrition, are the subject of the next section.

3.5 Sustainability and environmental impact

The previous section on Amish economy described the gradual change within Amish society from an agriculturally based community towards a community with supplementary work in businesses and to a lesser degree in factory work. This shift has consequences not only for the economic situation and social structure of the Amish community, but also for its environmental impact, both directly and indirectly. In this section I will first discuss specific behaviour choices of the Amish community regarding energy use, transport, and nutrition that are relevant in the discussion on values and sustainability. Then I will describe the development of the environmental impact of the community following the components of the IPAT-formula, and deal successively with population growth, the level of affluence and choices for less or more environmentally sound forms of consumption, and the role of technology.¹⁸⁸

3.5.1 Energy use

Amish are not connected to the electricity grid, but limited use of electricity outside the house is allowed - one of my host families has a freezer in the neighbour's garage. Justification for the rejection of connection to public utility lines has changed over the years. The early reasons, in the 1920s, were avoiding physical connection to the outside world and a stance against the less orthodox Beachy Amish. Nolt (1992, 217) states that the quick adoption of new technologies by less orthodox Amish who broke away seems to have pushed the Old Order church to more firmly oppose such innovations as dangerous to community and church stability. Now, 110-volt current in the house is mainly rejected because of what comes with it: computers, televisions, unnecessary appliances and gadgets, confirming the wish to remain separated. Electricity is seen as the hotline to the modern world. Not all appliances which replace handwork are judged as progress. The spectrum along which the use of electricity is gradually allowed, runs from the plain Amish school and house where electricity is absent, to further outside the community where the use electricity is allowed for economic reasons.

Amish sources of energy vary from fossil fuels like gas, kerosene, and coal, to renewable sources such as wind, solar energy, hydropower, horsepower and human power. Battery-supplied 12-volt current has always been allowed. When in the 1970s Amish started with small enterprises, they replaced electrical motors on shop equipment with hydraulic or air pumps, powered by a diesel engine, which soon became known as 'Amish electricity' (Kraybill, 2001, 209). In many communities generators are allowed for specific economic purposes, like welding, bulk tanks and some carpentry tools. In the 1980s and 1990s, inverters gradually came into use, which can invert 12-volt current into 110-volt current (Ibid, 206). Because these inverters depend on a 12-volt battery, the number and size of appliances that can be attached are limited. Recently, the Amish have been looking for new forms of energy, like solar energy and used frying oil. The energy-issue clearly symbolises the ongoing tension between tradition and values on the one hand and economic viability and modernity on the other hand.

Amish use lamps running on kerosene, coal oil, propane gas, solar energy, or skylight systems. Common are pressure lamps, burning gasoline or naphtha, and filled with compressed air (Scott and Pellman, 1999). Most Amish use batteries for buggy lights, flashlights, and other small devices, and many have battery rechargers connected to a diesel motor or running on solar energy. Instead of central heating, the homes have one or more heating stoves on the ground floor, running on coal, kerosene, propane, or wood. My Ohio host was pleased with his wood stove and remarked: "We can face the oil crisis!" Family members usually stay together in the living room, which is therefore the only one room that needs to be heated. Amish have no television, radio, or access to the Internet, for these devices might bring along values and worldviews that clash with their philosophy of life.

Amish cooking stoves may be wood, kerosene or coal fired in the more traditional communities, but in many of the change-minded communities, propane gas state-of-the-art cooking stoves are used. Kitchen appliances usually work on air pressure. Most Amish churches allow refrigerators and freezers which run on propane gas, manufactured by Amish companies.¹⁸⁹ To pump water out of wells, most communities use compressed air which is produced by an air pump on a diesel engine in a barn or shed, often several hundred yards from the well. A minority makes use of windmills, hand pumps, or waterwheels. Usually water is heated by gas, though other sources might be used as well. Nearly all Old Order Amish use washing machines, driven by a 2 or 3 hp gasoline engine, or powered by compressed air or

hydraulic pumps (Scott and Pellman, 1999). They usually dry their laundry on the clothesline, either outside or inside. A new development is the use of Spinners to dry wet clothing in the winter and on rainy days. These high-speed stainless steel sputnik-like spinners are powered by compressed air.¹⁹⁰ For ironing Amish use flatirons heated on the stove. Most clothes are hand-made. Some women use a treadle sewing machine, but most operate their sewing machines either by compressed air, electricity from an inverter (via a battery), or electricity from a small generator on a portable Honda gasoline engine.¹⁹¹

As described in section 3.4.2, Amish use less fossil energy on the farm than non-Amish farmers. They use no tractors in the field, but work with draft horses or mules. A small Amish minority prohibits the use of any agricultural equipment driven by a petrol or diesel engine, but most allow selective use of this equipment, for it enables them to stick to the horse while it adds to a better yield. Conservative Amish still milk their cows by hand, while many Old Order Amish districts allow suction milkers running on air pressure, driven by a diesel motor (Scott and Pellman, 1999). The milk is carried in buckets to the tank, since most settlements do not allow milk pipelines and milking parlours, thus limiting the size of dairy farms. The most conservative Amish store their milk in milk cans, cooled in streaming water, by a metal spiral or automatic coolers using diesel. This milk gets 'Grade B' quality and is sold for a lower price to cheese factories.¹⁹² Amish with a cooled milk tank, using a diesel engine and an agitator on a 12-volt battery, can get 'Grade A'. The 'milk tank bargain' is elaborately discussed by Kraybill (2001, 202-206).

Table 3.3 gives an overview of the total yearly direct energy use as described by my two host families in Lancaster County, to give an illustration of the energy use by two typical Amish families. As described in box 3.6, Samuel and Rebecca have a tree trimming business and produce vegetables, while David and Esther run a dairy farm and quilt shop. To compare this energy use per family with the energy consumption of an average American family, the residential energy consumption is given in the right column. As we can see, the direct energy use of these two families is considerably less than that of an average American family.

Not only the availability of devices is different, the use of energy is different as well. Like the heating, the lighting is centralised in one or two rooms as well, and most rooms in the house are dark in the evening. Since it takes some time to light a propane gas or naphtha lamp, it is easier to light a candle or use a flashlight when going to the bathroom. It is quite common for Amish to move through the house in dim light or even in darkness. However, while we had to abandon our baseball game one evening because of the darkness, one of the Amish boys lamented: "Oh, why don't we just have lights, then we could play!"

Without connection to the electricity grid and in the absence of many electrical devices in the house, shops, and Amish enterprises, the direct energy use of the Amish is considerably lower than that of the average American. However, with the increase of Amish enterprises, the tension between traditional values and modern technology is likely to grow. I expect that many discussions will rise on the source and use of energy and appliances, owing to the more intensive contact with non-Amish in doing business, the dependence on non-Amish in some branches (e.g. for selling products or for transport), government rules for businesses, and the growth of possibilities coming along with new, accepted, sources of energy such as solar energy. There will be a continued need for reflectivity in order to keep their hierarchy of values clear and maintain their quality of life.

Table 3.3 Total yearly direct energy use of two Amish families in Lancaster County in 2003

Residential Energy Consumption per single family, USA, 2001*	
<u>Samuel & Rebecca (6 persons)</u>	
Propane gas: 25 bottles = 500 pnd \approx 10,000 Btu = 10.54 MJ	Natural gas:
Propane gas: 1,800 gallon = 6.81 m ³ / \approx 650 MJ	3.98 quad. Btu = 4,195*10 ⁹ MJ
Diesel(truck): 250 gallon = 45,944 MJ	Electricity:
Kerosene: 187.5 gallon = 710 litre= 25,560 MJ	3.01 quad. Btu = 3,173*10 ⁹ MJ
In addition: a lamp on solar energy and a battery charger on diesel.	Fuel oil, including kerosene: 0.59 quad. Btu = 622*10 ⁹ MJ
<u>David & Esther (7 persons)</u>	
Propane gas bottles: 25 bottles = 500 pound \approx 10.54 MJ	Average US family size = 3.14**
Propane gas house: 500 gallon = 1.89 m ³ / \approx 185 MJ	
Propane gas farm: 1,000 gallon = 3.79 m ³ / \approx 370 MJ	
Diesel (mostly farm): 1,500 gallon = 275,664 MJ	* Source: U.S. Census Bureau, Statistical Abstract of the United States 2006, table 896.
Kerosene: 600 gallon = 2,271 litre = 81,756 MJ	
Gasoline: 300 gallon = 1,136.4 litre \approx 42,000 MJ	** Source: Fact Sheet US Census 2000 Demographic Profile Highlight
In addition: wind energy for pumping the groundwater, running on gravity and a battery charger on diesel.	

3.5.2 Transport

Riding with horse and buggy is the characteristic Amish mode of transport, a choice rooted deeply in their religious worldview. Although most Amish are well aware of its conveniences, they reject the possession of cars, because it diminishes dependency on the local community and might lead to individualism, social inequality, uncontrolled mobility, and too much personal freedom (Scott, 1998, Kraybill, 2001). When the car appeared at the beginning of the 20th century, the opinions within Amish society were divided, eventually leading to several divisions (Scott, 1988). The Old Order communities feared that the car would further disrupt their community and the taboo on car ownership intensified in the 1920s.

Box 3.8 From my diary: In the buggy

One evening we returned from a family visit, when the buggy ride made me very aware of the confined and sheltered Amish world. I was seated on the second bench in the small and narrow buggy, hearing the hoofs clatter on the asphalt. My view was limited. Before me I saw the hats and head coverings of my Amish host family, and I could just catch a glimpse of the road. Cars rushed by, but the people in other buggies were recognised and greeted. It was evening, the buggy light illuminated a small part of the road, and I thought: "This is how you (Amish) live in this world. You have a clear view of your own confined world and let the rest pass by".

The choice to stay with the horse is based on the Amish appreciation of the local community and a slow way of living. It prevents them from being alienated from their surroundings and their identity. Among Old Order Amish, cars are still seen as a disintegrating force in the community. They fear that cars will draw people to the city and bring undesirable status, comfort, speed, freedom, independence, and convenience (Scott, 1998). Another threat is the need for car insurance, since Amish do not want to be insured by worldly insurance companies. Although both ownership and operation of a car are prohibited, riding along with someone else is permitted to a limited extent. As is the practice in many Amish businesses, my Amish host has a non-Amish employee who drives the truck for his tree trimming business.¹⁹³ The truck is owned by the company and not used for private trips. Amish use public transport and taxis for longer distances, although the total number of travel miles is generally low. This distinction between use and ownership, or “use and abuse”, is an often-made Amish compromise to keep modern conveniences under control.

Variety of buggies and horses

There are at least 90 different kinds of buggies among the Old Orders in North America (Scott, 1998). The types and styles of these buggies vary according to local habit and church rules, and they differ in size, shape, and colour. Buggies can be open or closed, with one or more benches, buggies for church and for work. From the age of nine, children are allowed to drive on a side road and around the age of 12 most children are driving well. Usually, a boy gets his own buggy at the age of 16. Buggies used to be made from oak, poplar, and hickory, but more and more fibreglass is used. The top is made from canvas or vinyl. Usually, a buggy lasts for as long as 30 years. An average Amish owns about three buggies during his life. Except for the most conservative, who use lamps burning kerosene, all Amish use battery-powered lights. I visited an Amish entrepreneur who invented buggy lights with LED-lamps and a battery-charger using solar energy (see box 3.7).

Amish usually use ‘Standard Bred’ horses, which generally can be used for the buggy for 15 years, sometimes longer. Recently the American Dutch Harness Horse is getting more popular.¹⁹⁴ The Amish horse breeder in Lancaster County I visited was positive about the stature and power of this horse. The average speed of a buggy is eight to ten miles per hour. A good horse can travel about 20 miles at a stretch, after which it needs some hours of rest. Horseshoes need to be replaced every ten weeks and can be used three times. A leather harness costs about 300 dollars, although the cheaper nylon harnesses are getting more popular. The estimated costs for horse and buggy transport on a yearly basis are outlined in table 3.4.

Table 3.4 Costs for horse and buggy transport on yearly basis (excluding forage – most Amish grow their own grass and oats)

Horse – 15 years, purchase price \$ 1,875	\$ 125
Veterinarian (variable):	\$ 25
Horse shoes	\$ 110
Buggy 30 years, purchase price \$ 3,000	\$ 100
Buggy maintenance	\$ 30
Harness 30 years, purchase price \$ 300	\$ 10
Harness maintenance	\$ 10
Horse blanket etc. 30 years \$ 150	\$ 5
Remaining costs	<u>\$ 15 +</u>
Total costs approximately	\$ 430

Source: Scott, 1998 and personal interviews

Safety

Use of the fragile horse-drawn buggies is not without danger and often traffic accidents result in damaged buggies and injury or even deaths.¹⁹⁵ To improve safety on the roads, the Lancaster Amish made an exception in their desire to keep their distance from the government and formed a co-operative to produce a Buggy Driver's Manual. The first chapter opens with the admonition to 'Do unto others as you would have them do unto you' (Matthew 7,12). Another safety measure is the creation of buggy roads. In Holmes and Wayne County, Ohio, two-lane trails have been constructed, with a paved lane for bicycles, skaters and walkers and a crushed limestone lane for buggies.

For road safety buggies must be visible, which clashes with the Amish wish not to put much emphasis on oneself. Since 1954 Amish have used reflective tape on the buggies, but later they were obliged to add red flashers and fluorescent triangles. Especially for the conservative Amish these conspicuous signs are troublesome and they got legal exemption for the triangles. Most Old Order Amish however use the triangles, because they decided that it was more important to be safe than to be inconspicuous, also because the safety of others is at issue.¹⁹⁶ In areas with many settlements road signs warn motorised vehicles of the possible presence of slow-moving buggies on the road. Indiana Amish have been urged to change the material used for the buggy wheels, because of damage to the roads. The Holmes County Amish Steering Committee has donated \$ 144,000 over the last three years to a Road Maintenance Fund to pay for pavement and shoulder repairs (The Times Reporter, 2006). In 2005, horse manure became a problematic issue in Wisconsin Amish areas (Barrionuevo, 2005).

Other modes of transport

Public transport and taxis are used for longer distances, to visit family and friends or go to hospital. Some Amish even travel to Mexico or Canada for less expensive health care. In many settlements non-Amish have fulltime jobs as taxi drivers for plain people. These Amish taxis vary from a passenger car to a 14-person van. The use of hired vehicles is not unlimited: indiscreet and unnecessary use is 'frowned upon'.¹⁹⁷ In some settlements, young Amish boys get their driving licence during *Rumspringa* and purchase a car, which must be sold when they get

Table 3.5
Total yearly car miles of two Lancaster Amish families and the average American family (2003)

<u>Samuel & Rebecca (2 adults, 4 children)</u>		<u>Average US passenger miles per car*</u>
taxi-use:	2,704 miles → 1,352 miles per adult	15,275 miles per person (in 2003). In 2001, US averaged 1.57 persons per vehicle.
business:	20,000 miles	
holiday:	none	
additional transport:	scooter and horse & buggy	
<u>David & Esther (2 adults, 5 children)</u>		* Source: Center for Sustainable Systems University of Michigan, Fact sheet Personal Transportation.
taxi-use:	2,400 miles → 1,200 miles per adult	
travelling for work:	none	
holiday:	max. 2 days visiting friends or family	
additional transport:	scooter and horse & buggy	

baptised. In liberal communities these cars may be used for the family. The New Order Amish settlement at Guthrie, Kentucky, uses tractors with pneumatic tyres for transport on the road – one of reasons other settlements choose steel wheels. Some Old Orders use bicycles, like the Amish in Holmes County, Ohio, and Elkhart and La Grange Counties in Indiana. In Lancaster County bicycles are prohibited in most communities, for they are seen as fancy sports equipment.¹⁹⁸ Here scooters and rollerblades are used. Travelling by aeroplanes is strongly disapproved of and in many settlements prohibited. More liberal Amish are allowed to travel to Europe, by plane or boat, for a historic trip. Holidays have increased and changed character. Where they used to consist of visiting other settlements, they are now more directed to recreation and tourism.

To illustrate the travel miles of a typical Amish family, table 3.5 outlines the total yearly travelling of two of my host families in Lancaster County. As a comparison, the right column displays the average US passenger miles. The data of the two Amish families show the difference in car miles of a family who started a business outside their property and a family who combines farming with a quilt shop at home. Samuel started a tree trimming business and his employee drives about 20,000 miles per year to get to their customers. As long as these miles are needed for his business, it was not really a point of discussion within the community. I presume clashes with values will rather occur regarding the use of the radio, the length of working hours outside the family and when the truck would be used for visiting or shopping. The second family hardly used a taxi, but on the other hand attracted many tourists visiting their quilt shop by bus or car. An important difference in the use of cars is that, generally, Amish travel with considerably more persons in a vehicle than the average Americans.

3.5.3 Nutrition

The Amish diet is to some extent comparable with the American diet from before the Second World War. Typical components of the menu are meat, potatoes, gravy, eggs, vegetables, bread, pies, and cakes and it contains a considerable amount of fat and sugars. Nutrition habits vary amongst Amish settlements and even amongst various occupations (Shenberger, 2004). My Ohio Amish hostess clearly perceived a difference in the content of lunch boxes of children of farmers and factory workers. The former had a much simpler lunch with homemade bread and fruit, while the latter contained bread from the store and snacks. But also family traditions play a role: in my first host family cakes and cookies were available at most meals, while in the second deserts were limited.

Farmers' families keep large gardens to grow their own food, like potatoes, onions, peas, spinach, lettuce, tomatoes, asparagus, beans, rhubarb, corn, strawberries, peppers, and cabbage. In more densely populated areas Amish gardens are becoming smaller. My Ohio host observed that non-farmers "get smaller gardens and go to big grocery stores once a month instead." Vegetables and fruit are frozen or preserved by canning, to provide for winter. Some families grow their vegetables organically, others use herbicides and pesticides. Rural families often have their own milk cows and some make cheese, cottage cheese, yogurt, and ice cream. Those near urban areas usually buy these items at the supermarket or cheese houses. Additional necessities for the meals are bought at Amish stores or American supermarkets. Organic food is purchased more and more. My host family thought this was a good thing, mainly for health reasons. Box 3.9 describes the nutrition choices of two of my host families and where the food is purchased.

Box 3.9 Nutrition in two Amish families in Lancaster County

Samuel & Rebecca (6 persons)

Samuel and Rebecca are positive about organic food, especially for health reasons. Just before my visit, they had bought a half cow (organic). Other, not organic, meat is purchased in bulk at big meat sales and canned. This family eats meat at practically every meal: beef, pork or chicken meat. They hardly consume fish. On average the cook uses “a quart of meat per day” for 2 adults and 4 children (1 quart equals 4 cups). They eat their own home grown vegetables and hardly buy any. Most vegetables are frozen for winter. Beans, potatoes, tomato juice, and jam are canned. The vegetables are not organically grown, since they use some pesticides. Rebecca bakes her own bread from organic whole wheat, purchased at Nolt’s Mill. The family say they want to buy more organic food, again: mainly for health reasons. Most shopping is done at a nearby Amish shop or is brought by a family member who works at an Amish market. They buy milk at the nearby Amish Lapp Valley Farm. They grow their own strawberries and the remaining fruit is purchased at Kauffman’s, an Amish grower nearby.¹⁹⁹ Once every six weeks Rebecca goes to Aldi by taxi, for ‘big shopping’. The family loves cornflakes, chips, and pretzels.

David & Esther (7 persons)

This family does not use pesticides in the vegetable garden – all vegetables are grown organically: asparagus, beans, peppers, peas, lettuce, cabbage, etc. Pesticides are only used for the potatoes. They usually eat what the garden gives. The food that is purchased is not organic. In the winter they buy some vegetables, like lettuce, tomatoes, and carrots, supplementing the preserved and frozen vegetables from the garden. Fruit is bought at the local Amish grower. Practically all food is locally purchased. The family eats meat at almost every meal. They use about one and a half pounds of meat per day (= 680 gram). Chicken meat, sausages, and meatloaf are the most frequently eaten kinds of meat. They buy meat from people they know, a local butcher who butchers it himself. The quality is good and that is an important reason why this family buys it.

Amish prepare most of their food from scratch, although some also use instant foods. Since women learn cooking and baking from childhood on, Amish cookbooks contain several recipes that only mention ingredients, without amounts and baking temperature. Breakfast consists of elements like ‘cornmeal mush’, cornflakes, cooked cereal, baked eggs, (homemade) bread or toast with butter or jam, crackers with warm milk, pancakes with syrup and baked sausages or bacon, fruits, tea, juice or coffee. In some families breakfast is finished with ‘shoo-fly’, a typical Pennsylvania Amish pie.²⁰⁰ Farmer families consume the main meal of the day at noon; Amish working outside have this meal in the evening. The main meal typically consists of noodles, macaroni or potatoes, meat, cooked vegetables, salad, and bread and is, especially in Pennsylvania, finished with pie. The lighter meal may consist of soup, bread, cheese, meat, vegetables (cooked or as salad) and fruit. Snacks are fruit, cookies, crisps, and pretzels. Amish drink much tea, often made from homegrown mint and in summer cold tea or water.

In Amish culture, common meals and picnics are seen as special times for socialising. Church services always finish with a common meal, provided for by the family in whose house the service is held and their extended family and friends. This after-church lunch usually consists of coffee, (homemade) wheat and white bread, jam, applesauce, pickles, pretzels, red beets, cheese, cheese spread, ‘church spread’, and ‘*snitz*’.²⁰¹ The dishes were done by the women.

At weddings the meal usually consists of 'roast', a mix of bread filling and chicken, mashed potatoes, coleslaw, applesauce, and 'creamed celery'. Pies, doughnuts, fruit, and pudding are served as desert. Usually a large number of 'wedding cakes' are baked as well. To be able to have dinner with all 200 or 300 guests, the meal is usually eaten by turns. Religious holidays such as Christmas and Easter, and birthdays, are usually celebrated with good foods, and rarely with decorations or gifts.

The University of Tennessee studied the relation between Amish diet and obesity (Bassett, Schneider and Huntington, 2004). Although the diet contains much fat and sugar, and Amish report 'higher-than-normal' caloric intake values, they have a very low percentage of obesity (Amish 4%, US 31%). This is a result of the physical labour and activity involved in Amish culture. On average, Amish men have 42 hours and Amish women 39 hours a week of activity, like feeding the cattle, doing the laundry and gardening. They practice about six times more physical work than the 2,000 participants in the survey from 12 Western countries. Amish men make an average of 18,500 steps and Amish women 14,000 steps daily, while most Americans do not even walk half that much. In Amish communities that shifted to a more industrial society, more obesity occurs.

Recapitulating, the change from an agrarian towards a nonfarm society has many implications for nutrition as well. Where rural families keep large gardens and grow most of their own food, non-farmers get smaller gardens and go to the bigger groceries more often. Vegetables, potatoes and fruit are not always organically grown. Generally, the Amish diet can be compared to the traditional American diet of 100 years ago. The meat consumption is less than the average American consumption, but still rather high.²⁰²

3.5.4 Environmental impact

The environmental impact of Amish society will be discussed on the basis of the components of the IPAT-formula, to wit population growth, their level of affluence and environmentally sound forms of consumption, and the role of technology.

Population growth

Since the beginning of the 20th century, Amish society has shown a very rapid population growth, mainly owing to high birth rates and high retention rates. In 1900 the Old Order Amish population totalled about 5,000 people, living in about 20 communities, divided over 32 church districts, while a century later (2010) it has grown to approximately 250,000 Amish, living in 427 settlements in the United States and Canada, with a total of 1,826 church districts (see also figure 3.1). This means the population has doubled nearly every 20 years, as outlined in table 3.2.²⁰³ A new Amish church district is founded approximately every five weeks and more than 150 churches have started since 1990 (Donnermeyer and Cooksey, 2004).

The mean Amish family has got about seven children (Hewner, 1998). However, family size varies with two important factors: occupation of the household head and Amish denomination. As described in section 3.4.3, in Indiana, on average, farmers have 8.6 children, carpenters 7.9, shopkeepers 7.2, and factory workers 6.6 children per family. Wasao and Donnermeyer (1996) found in Holmes County, on average, New Order Amish to have 4.7 children, Old Order Amish 5.2 children and the strict Andy Weaver Amish 6.3 children. They found an average of 5.3 children per family. This study differs from the other studies mentioned, in that Wasao and Donnermeyer report the average size for all households, while the other studies are based on families with completed fertility. The rapid population growth influences the environmental

impact of the Amish community significantly. Amish, however, do not perceive their big families as a problem; rather as a blessing and a precious gift. Although in most church districts birth control is not debatable, it seems that in communities making a shift to other occupations, the average family size is gradually declining.

Affluence

In my fieldwork area, many Amish have seen an increase over the years in materialism and consumption - not only among entrepreneurs, but also among some farmer families. Where the use of disposable nappies created a small scandal in the Amish community forty years ago, now their use is more common and accepted in many church districts. In 2005, Wal-Mart opened the first Amish outlet in Ohio, including a section for electricity-free appliances and some speciality items for Amish, like blocks of ice. They also added a parking lot with hitching posts that can hold up to 37 buggies. Another example is an increased use of disposables at larger picnics and auctions, instead of reusable hard plastic plates and cups. The convenience of these disposables is valued more than the environmental impact of the products. In fact, most Amish I asked were not aware of the pollution cohering with these disposables.

On the other hand, the average consumption rate is still very low, compared with the surrounding society. Amish do not follow fashion and wear homemade clothes. They do not wear make-up, jewellery, and other ornaments. Furniture is solid and used until it is worn-out. In my host families, toys and games for children are purchased second hand and other playthings, like clay, are home made. Many Amish women enjoy to visit yard sales for toys and kitchen tools. Televisions, CD-players, cameras, and computers will not be found in Amish homes. An Amish man explained to me: "We don't put our kids in front of TV sets; we let them work and be creative." Generally, an Amish man acquires three buggies during his lifetime. The value of moderation is well observed and maintained in the community.

Technology

The way in which Amish deal with technology has been described in section 3.3.4 and is characterised by a weighing of its effects on important values and social organisation. Amish attempt to find a balance between preserving their identity and values and keeping an economically viable community. Regarding environmental impact, this reflective modernisation works in two directions. On the one hand, it slows down the acceptance of certain devices which use fossil fuel engines, although generally the use of energy has increased among the Amish as well, owing to the use of machines driven by gasoline or diesel and an increased amount of car miles. On the other hand, because of certain self-imposed restrictions, the Amish have become very creative in developing new technologies for their community, running on solar energy, air pressure, bio diesel, gravity, and horsepower. Most technology used by the Amish has a relatively low environmental impact.

Recapitulating

The high fertility rate is a significant aspect of the Amish environmental impact. Although having children is closely related to their religious values, it seems that the family size is gradually going down when Amish communities are open to other than agricultural occupations. At the same time, this openness to other occupations appears to lead to increasing affluence and new questions about technology use. Reflective modernisation is the way along which Amish try to regulate the acceptance, adaptation, or rejection of innovations and new technologies.

Choices for certain technology are usually not motivated by concepts such as ‘sustainability’ and ‘environmental impact’, which are rarely used by Amish and thus often play a marginal role in decision-making processes. The decisions are based on their values, tradition, and culture. Thus, although generally Amish lifestyle choices are not prompted by environmental factors, their values of modesty, soberness and moderation in many cases restrict the environmental impact resulting from their way of life.

3.6 Amish worldview and sustainability

The Amish lifestyle, with its relatively low environmental impact is generally not directly motivated by care for the environment, but by tradition and values like moderation, modesty, patience, helpfulness, responsibility, uniformity, a willingness to work, and separation from the modern world, which are rooted in the community. For many Amish families living and working close to the land and the community are important aspects of their quality of life. Values such as reciprocal help and sharing are highly important. The community with its strong social capital helps the Amish to keep their identity and at the level of the church district self-imposed limits are drawn and upheld, in order to maintain the quality of life.

This final section will discuss the relationship between the Amish worldview and sustainability and will deal with clashing values in section 3.6.1 and promising values for sustainability in section 3.6.2.

3.6.1 Clashing values

Amish have clear values, rooted in their religious worldview and tradition. Often these values are threatened by regulations and developments in the outside world. Besides, Amish society itself faces many changes, leading to a clash of values inside the Amish community. When I asked my Ohio Amish host how his community deals with these clashes, he answered: “If there is a clash of values, we choose the path that hurts the least”. This section briefly describes a number of clashes that are relevant for the themes of this dissertation.

Clashes with the outside world

American State laws and regulations regularly clash with Amish values. Amish typically do not get involved in national politics, unless laws impede their ability to follow their religious values and beliefs or to make a living. Section 3.2 described three major conflicts Amish had with the State in the 20th century, on alternative national service, schooling, and Social Security. Two problems Amish are facing at the beginning of the 21st century are: new regulations for ID-cards to include a picture, and zoning rules. Amish have always had permission to have ID without a picture, because of their internal prohibition on taking pictures, but since security has intensified after ‘9-11’, this rule has been reviewed. Amish travel to Canada or Mexico to visit family or for cheaper health care. The Intelligence Reform and Terrorism Preventions Act of 2004 requires travellers by land and sea to carry a passport, beginning in 2008. Amish are getting much help from outsiders to resolve this problem, by exploring whether a fingerprint or retinal scan could be used instead of a picture.

Zoning rules have caused many conflicts with the State already and are expected to become an important issue in the coming years. Zoning rules are applied for land use management, aiming to protect agricultural land from development. This affects the Amish in a complex

way, both protecting the viability of agriculture, but also restraining Amish ventures into non-farming enterprises (Place, 2003, 198). In many areas, the size of home-based businesses has been restricted. In Michigan, Amish had problems with adding a home for their parents to their house, as is common in their culture, since new zoning rules prohibit extra houses on an area of 40 acres. In Central Pennsylvania, some Amish families were forced to remove their horses from their property, since a township zoning ordinance prohibited horses from being kept in areas zoned for high-density residential use (Smeltz, 2005).

Another issue that clashes with Amish agricultural and business practices is the Child Labor Law. As long as Amish children worked on the farm, child labour was never seen as problematic and was accepted as apprenticeship learning. Now that Amish children are starting to work in non-agricultural enterprises after the eighth grade, this is labelled as child labour and thus prohibited, also because in workshops children might have to work with dangerous machines (Bontrager, 2003). An Amish entrepreneur disagreed with the rule: "In our businesses children got much more supervision than at many technical schools". In some Pennsylvanian Counties the Child Labor Law is not a problem, because businesses located on the farm are still labelled agricultural.²⁰⁴

In relation to agriculture, Amish are facing an increase in regulations to reduce nutrient pollution and erosion regulations. Place (2003) noticed that Amish are calling for a voluntary programme of manure management, because they believe that the environment will be better served by farmer education rather than government oversight. The influence of conservationists and environmental agents will be important for the sustainability of Amish agricultural practices. On the one hand, information on nature conservation and water and soil protection still too often pass the Amish community by unnoticed. On the other hand, when an outsider is accepted in the community, the advice is followed easily, since Amish have no higher education and respect authority. This has also had negative effects on the environment, since many Amish apply pesticides, insecticides, and herbicides on the advice of extension agents. It is important that outside advice connects to local knowledge, local experience and local environment, in order to maintain a viable way of farming. Within Amish society knowledge of sustainable agriculture techniques is growing.

Despite all restrictive regulations, the Amish relationship with the State is somewhat ambivalent. The Amish community finds it hard to accept some of the methods used by the state, as can be illustrated by the 'raw milk case' in 2006, in which an Amish Ohio farmer had to go to court for selling raw milk in an unlabelled container to an undercover agent (The Associated Press, 2006).²⁰⁵ Although many regulations limit the Amish way of living, they also need the State to enable them to continue their way of life, since they have also been given many legal exemptions over the last decades. When a law or regulation clashes with their culture and values, Amish often get help from outsiders to negotiate with the State in order to find alternatives.

Internal clashes

Within the community, Amish population growth is a development that might entail many internal clashes of values. While children and family life are cherished, they also confront Amish society with problems of maintaining their communal agrarian lifestyle. On principle, Amish will not practise birth control.²⁰⁶ At the same time, the numbers show a decline in family size among non-agricultural families. As one of the reasons some mention the lack of work for teenagers after eighth grade. Owing to this lack of jobs for their children and a lack

of affordable land, some Amish moved out to other settlements. The main group however decided to stay and to start a business or become an employee. It is a challenge for the Amish community to keep their values and social cohesion within such a changing economy.

As described in section 3.4.3, business life clashes with traditional agricultural values. While the agricultural community reflects values such as patience, trust, helpfulness, and uniformity, running a business might require other values such as heterogeneity and individualism, and the need for specific knowledge. Internal clashes that might result from the shift to an enterprise society have already been discussed earlier in this chapter and here I will confine myself to a brief list. Increasing occupational differences within the community clash with the value of uniformity. With ongoing modernisation the differences between farmers and businessmen may grow. Diversified businesses might decrease the need for mutual dependence. Work outside the house might also influence relations between husband and wife and between parents and children. The role of women is changing, and a growing number of women start their own businesses, usually on the farmyard. Contacts with non-Amish anglicise the *Deutsch* language. Since they need specific licences Amish businessmen need to follow courses. Businesses might lead to an increase in motorised transport. Although Amish may not own a car or truck, many of them hire non-Amish employees or own a car as part of their business, testing the limits of ownership. Many Amish mentioned the threat of increasing consumption, since those in business have more spending money and free time, which clashes with values such as moderation and soberness.

The shift from agriculture towards small-scale enterprises will presumably influence the environmental impact of the Amish. On the one hand, these enterprises need less land, but on the other hand, they might attract transport from customers and new technologies that need fossil fuels. It will depend very much on the way Amish enterprises develop. As long as they maintain the present low use of fossil fuels, continue to be creative in applying new forms of renewable energy, and produce durable products, the enterprises may be able to sustain their relatively low environmental impact. Another question is what the effects of the shift towards an enterprise community will be on Amish culture, social cohesion and growing affluence.

In Lancaster County, where this shift has been going on for 30 years now, Amish appear to be able to keep their identity, values, and quality of life, despite increased contacts with outsiders and changed occupations. Until now they have continued to succeed in keeping a balance between their tradition and values on the one hand and economic perspectives on the other hand. Amish entrepreneurs still keep connected to the land, because of their horses, gardens, and Amish farmers as neighbours. The *Ordnung* and social sanctions appear to function as clear guidelines for keeping the most important values. Overall, the process of reflective change as described in section 3.3.4 can be considered as an interesting example of how Amish weigh the implications of technology for their religious and social values and how this affects behaviour choices. Because of these limitations and restrictions on modernisation, Amish can preserve and maintain their core values and quality of life. Reflective change is therefore a promising contribution towards sustainability, which will be further elaborated in the last section of this chapter.

3.6.2 Promising values

Can we say that the Amish community is sustainable in the ecological sense? As discussed in this chapter, the Amish have a decreasing, but still high fertility rate, a slightly growing level of consumption, a way of farming that is not without pollution and erosion, and a shift towards

businesses that might bring along new technologies with an increasing need for fossil fuels. Although for most Amish environmental care and biodiversity are not specific values that are strived for, we can conclude that the Amish worldview offers many other, promising, values for sustainability in the ecological sense and the principle of reflective change in order to maintain these values over time.

Values

The most promising Amish values are their small-scale community life, uniformity, and the values of moderation, soberness and modesty. The Amish churches have consciously and cautiously limited themselves in order to preserve their community in which church and family life are tightly interwoven. Interestingly, the use of horse-drawn buggies and rejection of specific technologies, practised at the beginning of the 20th century in order to retain the Amish identity as separate from the modern world, nowadays have become symbols of Amish identity themselves. Instead of distinguishing themselves from the outside world by adult baptism and pacifism, as was the case in the past, they now distinguish themselves in the first place by their plain clothes, horses and buggies, and pace and direction of modernisation. These choices are not very likely to change.

Intentionally or not, the Amish value of community has led to a lower impact on the environment in many ways. Living close to the land and the community is connected to the use of horse and buggy transport (supplemented with limited use of taxis and public transport), a very inventive use of energy, and low consumption of fossil fuels. The horse-based farming affects the pace of the work and the size of the fields, and makes the land less compact. Most livestock feed is produced on the farm, saving indirect energy use. Small-scale farming, crop rotation, ecological corridors and woodlands create possibilities for biodiversity on the farm. The small scale and labour intensive way of farming will fit very well with the practice of organic farming, a practice that is slightly growing among Amish farmers.

The values of moderation, soberness, and modesty are very important for Amish and the relatively low rate of consumption is well observed and maintained in the community. Amish do not follow fashion trends and choose for solid and sustainable consumer goods. They repair and reuse their clothes and furniture until they are worn-out. Owing to the rejection of 110-volt electricity in the house, televisions, CD-players, cameras, computers, air conditioning, and many other devices will not be found in Amish houses. The need for material goods to satisfy personal desires is generally small, since their identity is not built on possessions or wages, but is embedded in the community. Amish identity is determined by faith, commitment to the church, and the rules of the *Ordnung*.

Reflective change

The process of reflective change is an interesting way of dealing with innovations in order to keep a preferred quality of life. The community confronts innovations and their effects with their values, on account of which they are accepted, rejected, or modified to acceptable compromises. The values at the top of their hierarchy are their religious values, the community and modesty. The Amish view of technology and modernity is sophisticated, involving the adoption of innovations as long as they contribute to their religious and social cultural values and social cohesion. While in the modern world 'new' and 'young' are synonyms for improvement, Amish examine whether the effects and unintended consequences are really improvements for their way of life. This permanent evaluation of innovations helps them to

further economic viability, while preserving their values and quality of life. Amish are not against technological innovation, but they put human quality of life before modernisation as such and overaccumulation of wealth. The communally accepted and practised *Ordnung* is an essential aspect of preserving their values and identity.

Communal structure

The Amish way of life cannot succeed and be maintained without the framework of Amish culture and community. The community of like-minded believers and strong family ties provide security, identity, and a strong social capital Amish can rely on. The small scale of the community, the local orientation, the relative community-based self-sufficiency, and the patriarchal-democratic decision-making processes provide the boundaries which maintain Amish religious values and social structure. Many adolescents decide to remain as baptised members in the community, with its familiar slow-paced, supportive, and unambiguous religious lifestyle. The percentage of youth remaining in the church is now at its highest since the 1930s. Amish are well aware that they need the community to be able to maintain their way of living, not only in an economic sense, but also in a social and moral sense. As my Ohio host emphasised during my visit, the communal decision-making regarding what is essential creates a framework for life that eliminates many choices, and helps to focus on what gives quality to life.

Amish have primarily a religious, social-cultural, and traditional motivation for their moderate lifestyle and economic choices. Despite the comprehensive changes the community is facing, they appear to be able to maintain their religion, community, and quality of life. An important aspect is the self-contained community that collectively decides about economic and technological changes, while preserving their values and identity for future generations. I expect that their communal behaviour choices will be well maintained because they are rooted in a community-based supportive value system. The Amish will probably continue to change. As long as they stick to the values of community, moderation, and soberness, the relatively low environmental impact may be expected to remain. They can, in some ways, be seen as modern in their ability to reject or modify developments and technologies that might affect their quality of life. This principle has sustained the close-knit community in the 20th century and might offer a promising example regarding sustainability in a broader context.

Chapter 4 **Hutterite worldview and communal living**

4.1 Introduction

The Hutterites, or ‘Hutterian Brethren’ which is their full name, are a communal branch of the Anabaptists and are amongst the longest existing communal groups. They have traditionally withdrawn from society into rural security and formed relatively closed communities where life could more easily be modelled after their religion. They use the metaphor of Noah’s Ark to describe their communities as a God given provision to survive in this world. Hutterites see this life as a preparation for a life hereafter and strive for submission to the will of God. Like the Amish, they have their own language, *Hutterisch*, and characteristic clothes. In 2006, 460 Hutterite colonies existed in the US and Canada each with an average of about 95 members, besides one in Japan and one in Nigeria.²⁰⁷ The Hutterites have been remarkably successful in maintaining their identity and expanding their population.

Hutterites are named after Jacob Hutter, under whose leadership the basic tenets of Hutterite beliefs, including communal life, shared property, pacifism, and adult baptism were developed in Moravia in the 16th century. Later they moved to Transylvania and Russia and in the 1870s they moved to the United States. On the plains of Canada and the United States they now live in colonies, where they practise a near-total community of goods. All property is owned by the colony, income is shared, and individual members receive what they need from the common resources. Most Hutterite colonies depend on farming or ranching, although recently a growing number are getting into manufacturing as well. The colonies are largely self-sufficient. They construct their own buildings, maintain and repair their equipment, grow much of their own food, and make their own clothes. Communal life and shared property are important Hutterite characteristics and are basic aspects of their theological conviction.

In contrast to the Amish, the Hutterites have embraced advanced technology on their large-scale farms, mainly motivated by economic reasons. Hutterite thinking shows a fundamental dualism, in which the spiritual and the material are separated. Spirituality is clearly expressed in domestic life, but hardly at all in economic activity. Hutterites are known for their effective use of land resources, disciplined work patterns, moderation regarding consumption, and a motivation for communal rather than individual satisfaction. Their communal living, their dealings with technology, and the developments that are going on in Hutterite economy as well as in the social domain, are very interesting issues as far as sustainability and environmental impact are concerned.

This chapter describes and analyses in what ways Hutterite worldview, culture, and social capital relate to the choices they make in the policy of their colony and the impact of these

choices on sustainability and environmental impact. To better understand Hutterite culture, I will first describe their roots and the relevant historical development of the community in section 4.2. Hutterite religious worldview will be discussed in section 4.3, focussing on religious beliefs and practices, rituals, values, social organisation and social capital. To analyse the effects of Hutterite economy on sustainability issues, section 4.4 deals with the development of agriculture and manufacturing within the colonies and describes the agricultural system of one specific colony as a case study in section 4.4.2. Choices regarding shared income will be discussed in section 4.4.3. Although Hutterites attempt to be separated from the outside world, by rejecting televisions, radios, and in most colonies access to the internet, farming equipment technology generally matches or even exceeds that of non-Hutterite farmers. This will be dealt with separately in section 4.4.4, while the challenges of technology and modernity are the subject of section 4.4.5. Section 4.5 discusses Hutterite choices regarding energy use, transport, and nutrition, and their environmental impact following the components of the IPAT- formula, namely population growth, affluence and technology.²⁰⁸ The chapter ends with a brief overview of important clashing values in Hutterite society, concluding with promising values that might contribute to sustainability

In 2005 I did my field research in Forster River Colony (FRC) in North Dakota, in many respects an average *Schmiedeleut* Hutterite Colony.²⁰⁹ In addition, I visited three more conservative colonies in Manitoba. I also interviewed a number of ex-Hutterites in the USA and the Netherlands and some specialists on Hutterite life. For a more detailed overview of the fieldwork among the Hutterites the reader is referred to section 2.6.2.

4.2 Hutterite history and culture

Hutterite history begins in 1528 in Moravia.²¹⁰ At that time Anabaptists were severely persecuted in Central Europe and Moravia became a refuge for many Austrian Anabaptists, protected by sympathising noblemen, especially the Liechtensteins.²¹¹ This area had already had a religious reformation in the 15th century and had become more religiously tolerant. The Moravian group of Anabaptists wished to follow the example of Christ's first disciples who shared their possessions, and this desire led to the foundation of the first community in Nikolsburg in 1528.²¹² A dispute on pacifism divided the group into 'radical pacifists' who refused to pay war taxes or use the sword, and more temperate Anabaptists. The pacifists decided to leave Nikolsburg, because they did not wish to be defended by Liechtenstein's sword, and established communities, called *Bruderhofs*, in Austerlitz, Rossitz and Auspitz in Moravia.

In Moravia, two major disputes arose, about community of goods and leadership. Jakob Hutter was asked to mediate and in 1533 he became leader in Auspitz.²¹³ Hutter prepared the

Box 4.1 From my diary: Dressed Hutterite

At the evening of my arrival, I was introduced to the minister, Jovetter. He ordered the girls to give me Hutterite clothes, so I would not feel too different. The girls thought about other women who had about the same size and took me to several other houses to fit dresses. These women freely gave away the content of their wardrobes. I returned to my host family with eight dresses, four blouses and a scarf. Where the Amish told me that I needed not to adapt my clothes because I was not an Amish, the Hutterite minister asked me to wear their clothes so I would feel part of the community. That Amish form of hospitality was an acceptance of who I was, while the Hutterite form of hospitality was a welcoming of me in their colony and culture.

Anabaptists for persecution and taught them to make a complete break with the past and share their goods, emphasising complete obedience to God, self-denial and renunciation of personal property. A severe persecution in 1535 nearly wiped out the entire Austerlitz community.²¹⁴ Over 2000 Hutterites were executed. Jacob Hutter was burned at the stake in 1536. During his short leadership he built a socially and economically viable *Bruderhof*. In a few years the community recovered. Many missionaries were sent out into Europe, of whom 80% became martyrs. The converts travelled to Moravia. One of them was Peter Riedemann, who while in prison in 1540 wrote his *Rechenschaft*, what is still recognised as the Hutterite declaration of faith.

From 1554 to 1592, the so-called 'golden years,' Hutterites faced unhindered development and growth. About 100 new *Bruderhofs* were built. During the Moravian period the Hutterite communities accommodated up to about 30,000 persons. The first Hutterites described their community as clockwork, in which one cogwheel drives another, or as a beehive in which all bees collaborate for a common purpose. The colonies had many crafts, like bookbinding, brewing, woodworking, shoemaking, tanning, thatching, milling, and weaving. Manufacturing weapons was not allowed for pacifist reasons. Merchandising was seen as sinful business as well, for it "makes the article more expensive for the poor; it is stealing bread from their mouths and forcing them to become nothing but slaves to the rich."²¹⁵ Hutterites became known for their pottery and ceramics.²¹⁶ Their reputation as capable and reliable craftsmen made the landlords trust them. Hutterites also developed medical bathing houses and schools in the *Bruderhofs*. They had a high standard of education, which can still be seen from all their handwritten books.²¹⁷ Since most Moravians were illiterate, these schools were quite exceptional. In the 16th century Hutterites wrote countless tractates and the fact that all Hutterites could read furthered their identity. During these 38 years of relative peace a strong internal discipline developed.

Decline and revival of the communities

The Turkish War (1593-1606), Thirty Years War (1618-1648) and the Counter Reformation caused waves of persecution and hardships to the colonies. Hutterites were tortured, their possessions were confiscated and *Bruderhofs* were burnt. In 1621 one-third of the Hutterites were killed. In 1622 the remaining Hutterites were forced to leave Moravia. Some went to Transylvania, while others fled to Hungary, where up to 3,000 people stayed in Sabatisch.²¹⁸ Gradually the Sabatisch Hutterite community declined. Soldiers and Hungarians plundered their provisions. Although they gave up community of goods in 1685, religious life and services stayed Hutterite. Maria Theresa intensified persecution and after her reign (1740-1780) very few Hutterites lived in Hungary.

The Hutterites who went to Transylvania were invited by Gabor Bethlen, Prince of Transylvania. A group of 186 started a community in Alwinz in 1621. During the next two years hundreds of Hutterites arrived in Alwinz. They were treated well and protected by Prince Bethlen. However, the Alwinz community declined owing to the war between the Habsburgs and Turkey (1658-1661). The *Bruderhof* was plundered and burnt. Few Hutterites survived and communal living was abandoned in 1695. Sixty years later, two Carinthians, Andreas Wurz and George Waldner, who were deported to Transylvania, breathed new life into the *Bruderhof*.²¹⁹ In Alwinz they met former members of the Hutterite *Bruderhof*. They read Hutterite literature, became convinced about the necessity of community of goods, accepted the Hutterite faith, and started new colonies in Alwinz and Kreuz. However, in 1767 the Hutterites were dispersed again and found temporary refuge in Kräbach in Walachia, close to Bucharest.

Russia

In 1770, a Russian commandant recommended the Hutterites to go to Kiev (Hostetler, 1997). After casting the lot, about 60 persons went to Vishenka and settled on the property of Rumiantsev, an acquaintance of this commandant. They were given freedom of religion, permission to live in community and exclusion from military duties. They planted orchards, practiced traditional crafts and schools were established again. The community even had a windmill and ice chambers.²²⁰ Owing to some internal problems the community became more conservative and reluctant to change.²²¹ In 1796 Rumiantsev died and the Hutterites had to move. In 1802 they established a community of 202 persons in Radichev. This colony had a water wheel and windmill for energy, a silk-industry and a production of 12,000 litres of whiskey per year.²²² Because of their growth, the site could not provide for all needs. After a split and reunion, the colony became partly communal and partly private, after which Hutterite life gradually declined and children became illiterate.

In 1842 the Hutterites moved to the Molotschna Mennonites, 450 miles to the south.²²³ At this new location, Huttertal, there were 69 Hutterite families and a total of 384 persons. Their counsellor Johann Cornies placed the young men on Mennonite farms to learn modern agricultural technology. The move to Molotschna meant a radical change. Now their basic income started to be built on dairy cattle and agriculture. Between 1842 and 1868 five Hutterite colonies were established. Michael Waldner had a vision of the Ark as a community of the Holy Spirit and got a divine order to restore the community. He started a group living in community of goods in 1859. Because Waldner was a blacksmith, his followers were called *Schmiedeleut* (blacksmith-people). Other Hutterites, under the leadership of Darius Walter, were called *Dariusleut*.

Russia became more nationalistic. In 1864 a law made Russian the formal language in schools and military service became compulsory in 1871. The Hutterites explored new regions and in 1873 two of them travelled to America, after which the community decided to migrate.²²⁴

Table 4.1 Overview of Hutterite history

1525 :	Beginning of Anabaptism in Zürich
1525 :	Beginning of persecutions and spread of Anabaptism over Europe
1528 :	Moravian Anabaptists start sharing possessions
1529 :	Austrian Anabaptists flee to Moravia
1533 :	Jakob Hutter becomes leader in Auspitz
1536 :	Jakob Hutter burned at the stake
1554–1592 :	'Golden Years' in Moravia
1593–1770 :	Many wars and decline in Moravia and Hungary
1621 :	Founding of Hutterite colony in Alwinz, Transylvania
1695 :	Communal living abandoned in Alwinz
1755 :	Deported Carinthians restart colonies in Alwinz and Kreuz
1767 :	Hutterites flee to Walachia, near Bucharest
1770 :	Hutterites settle in Vishenka, Russia
1802 :	Hutterites move to community in Radichev, Russia
1842 :	Hutterites move to Molotschna Mennonites, South Russia
1874 :	Hutterites move to South Dakota, United States. Division in <i>Schmiedeleut</i> , <i>Dariusleut</i> and <i>Lehrerleut</i> .
1918 :	Because of World War I, Hutterites move to Canada. After the war many colonies established in USA and Canada.

America

In 1874, forty Hutterite families moved to South Dakota. Since the Hutterites wanted to live in a colony, they were excluded from the Homestead Act and had to buy more expensive land. The *Schmiedeleut* (Michael Waldner's group) settled in Bon Homme County and the *Dariusleut* (Darius Walter's group) in Wolf Creek. A third group left Russia in 1877 under the leadership of Jacob Wipf and restarted communal life in Elmspring Colony, South Dakota. Wipf was a teacher and the group was called *Lehrerleut* (teacher-people). A fourth group, the non-colony Hutterites, settled on the prairie in South Dakota and were called *Prairieleut*.²²⁵ They were homesteaders and soon joined the Mennonite church. A total of 1,265 Hutterites emigrated to the United States, of which 443 persons lived in colonies.²²⁶

The colonies had modern equipment, gasoline engines, and running water through pipelines from wells. Hutterites were among the first to use tractors for ploughing and dynamos produced electric light and power, building forth on the technology they had learnt from the Mennonites in Russia. In 1917 nineteen colonies were established in South Dakota and Montana, with a population of 2,000 persons. With the outbreak of World War I the American attitude towards the Hutterites, Old Order Amish and Mennonites changed. These Anabaptist groups spoke German, refused to carry out military service or to finance the war. Young men were compelled to go to training camps and underwent several acts of violence. Four Hutterites ended up in Alcatraz, after which two of them died. In 1918 most Hutterites moved to Canada. After the War many moved back to South Dakota.

During World War II the Hutterites were recognised as conscientious objectors. After the war many new colonies were established in the United States and Canada. In general, every fifteen to twenty years a colony divides as it outgrows its facilities. Hutterites are able to pay higher prices for land than most other farmers, inducing feelings of unfair competition.²²⁷ In 1960 an Alberta law announced that permission was needed to sell land to Hutterites. They started to settle in Montana and Saskatchewan, but here regulations were drafted as well.²²⁸ To cope with the restrictive legislation, the three branches formed a legal entity in the 1950s.

Although they have much in common, the *Schmiedeleut*, *Dariusleut*, and *Lehrerleut* usually function as independent groups. There is much diversity among the Hutterites, also within the branches. Still, *Lehrerleut* are seen as most traditional and *Schmiedeleut* as most progressive in their use of technology and contacts with the outside world.²²⁹ The latter group is the least frugal or moderate. *Schmiedeleut* women wear shorter sleeves and men have buttons instead of hooks and eyes on their Sunday coats, as the *Dariusleut* have. The *Lehrerleut* are best educated in the German language. All the colonies are now established in rural locations and are largely self-sustaining; that is, they grow and raise what is needed to feed an average population of between 50 and 150 residents. The size of a colony is based on how many workers are required to maintain the farm and other businesses. If a colony's population grows beyond what is needed, land is purchased to start a daughter colony.

Table 4.2 shows the distribution of colonies in 2006. In 2006 the community had grown to 176 Schmiedeleut Colonies, 149 Dariusleut Colonies, and 135 Lehrerleut Colonies. In addition, two new colonies have been established in Japan and Nigeria, making a total of 460 colonies, with an estimated 44,000 Hutterites. The growth of the Hutterite community is mainly a result of the high birth rate and high retention rate. Having briefly discussed Hutterite history, the next section will give an overview of the main aspects of the Hutterite religious worldview.

Table 4.2 Distribution of Hutterite Colonies by Province/State and Leut in 2006				
	Schmiedeleut	Dariusleut	Lehrerleut	Total
Manitoba	106			106
Saskatchewan		29	31	60
Alberta	1	98	69	168
B.C.		2		2
Total in Canada	107	129	100	336
Montana		15	35	50
Washington		5		5
North Dakota	6			6
South Dakota	54			54
Minnesota	9			9
Total in US	69	20	35	124
Total colonies	176	149	135	460
Source: The Hutterian Brethren Schmiedeleut Conference, 2006, www.hutterianbrethren.com , retrieved February, 5, 2011.				

4.3 Hutterite religious worldview

My study of Hutterite worldview included their communal and individual experiences, rituals and symbols, use of language, holy books and songs, religious practices, and the effects of religion in people's personal and communal life. This was studied by using literature, interviews, and participant observation during the field research. The most relevant aspects of the Hutterite worldview for the discussion on sustainability are discussed in this section, namely relevant religious beliefs, church services and religious education, and rituals in section 4.3.1, Hutterite values and cultural symbols in section 4.3.2, and the social organisation, social capital and physical organisation of the colony in section 4.3.3.

4.3.1 Religion and rituals

The Hutterite way of life is encompassed by its religion. Hutterite ideology is unique in its belief in community of goods, in which they clearly differ from the Amish. The idea of community of goods is based on Acts 2:44-47 and 4:32-35, describing the early Christians who held all things in common, and by John 12, saying that Jesus and the disciples shared everything. Communal living is believed to be the divine order of God, who from the beginning created all things for common use (Hostetler and Huntington, 1967). One of the FRC elders explained: "For Hutterites community is not just a way of life, it is a law, a rule. It is the only right way of life and people who do not live in community are seen as not good and real Christians."²³⁰ Important aspects of Hutterite communal living are the call to live in community, yielding yourself to God and fellow believers, and communal property. The individual must merge into the community like a kernel of wheat is merged into bread and grapes into wine (Harrison, 1997). Community of goods is seen as the highest command of love, involving the surrender of individual desires. Private property means ignoring God's order.

Hutterites believe in the absolute authority of God, who created heaven and earth and placed it in a divine order and proper hierarchy (Hostetler, 1997). All that is of God is seen as

spiritual, unchanging, and eternal, while all that is material is conceived as transitory, changing, and temporal. Hutterite thinking is characterised by a fundamental dualism, in which the spiritual and the material are separated. The human spiritual nature is seen as good and 'pleasing to God'. The material or 'carnal' is temporary and leads to death. This results in the wish to live in the colony, separated from the carnal world. Friedmann speaks about 'the doctrine of the two worlds', which are the Kingdom of God versus the Kingdom of the World.²³¹ He concludes that the Anabaptists "felt absolutely certain that they were citizens of that other (spiritual) world here and now, and accepted the values, the outlook on history and the social consequences which follow with this position as a matter of course" (Friedman, 1961, 100). This is particularly recognisable in the Hutterite worldview and religious beliefs, and is encouraged by the old sermons and writings, which still have a prominent place in present Hutterite religious teaching.

Hutterite beliefs are based on the Bible. The *Rechenschaft* (written by Riedemann in 1540) is regarded as the main declaration of faith. It describes a confession of faith and a vision of the Christian way of life, including community of goods and separation from the world. Another important religious source is formed by the books of sermons from the 16th and 17th centuries, still read in the daily church service. The Bible itself may not be interpreted, not even by the ministers.²³² Nobody is considered spiritually adequate to comment on the Word. Joevetter, the

minister of FRC, explained: "We now don't have the depth the old Hutterites had. New sermons will always be less profound. The old Anabaptists that were persecuted were much more spiritual and lived closer to God. Our lives have become much too easy." According to the German teacher of FRC the old sermons are maintained, because Hutterites fear that different interpretations might lead to a diversity of denominations as happened to the Mennonites. He said: "At the time the old sermons were written, the community started to fall apart. As far as that is concerned, the present time is not very different. The sermons still connect to our lives." When in the 17th century communal life declined, Hutterite religious study came to an end, and after that the Hutterite religious worldview has not really developed. Bible passages are repeated aloud and learnt by heart.

Like the Amish, Hutterites recite readings, songs, and prayers in High German, the religious language, furthering unity of thoughts and values. High German is used for all sacred and ceremonial occasions and binds the Hutterites together in spiritual activities. The German teacher of FRC prefers to hold on to the German language, for it sets the Hutterites apart from the surrounding world. However, he observes that many colonies lack a good German teacher, and therefore people have difficulty in understanding the sermons. Hutterites pray before and after meals and snacks, when they get up and when they go to bed. They have no sacred objects. Rites are centred on words.

Hutterites distinguish sacred and secular time. Sacred time is related to beliefs about creation and eternity and originates in God. The human soul has a beginning, but no ending.

Box 4.2 From my diary: Separation from the world

In the car on the way back I realised that the Hutterites are separated from the outside world more than the Amish are. Hutterites, especially the women, hardly get off the colony. When they do, they are accompanied by other Hutterites. They do not go on holiday; the only trips they make are visits to relatives in other colonies. Therefore, most Hutterites travel from island to island in the worldly sea. Hutterite society is a safe, but isolated, world on its own.

Secular time has both a beginning and an ending. It is the way to order events on earth. Rituals like the communal evening service and the singing are very slow, because people take part in sacred time and God's time is eternal. The ancient sermons fit into this vision of sacred time and are read to encourage the believers and to guide them through daily life. Since the colony is part of eternal sacred time, durability of the colony is important from a religious perspective. For a Hutterite sacred time gives meaning to secular time.

Church services and religious education

Most colonies have a specific place for church services; others use the colony school for services. During the service everyone has a fixed place; men and women are seated separately and according to age. The council members are seated in the front and face the community members. Songs, sermons, and prayers emphasise holy community life and separation from the world. Hutterites gather daily for the half-hour evening service, the *Gebet*. On Sunday morning the community has *Lehr*, a 75-minute service. The daily *Gebet* starts with a song from the *Gesangbüch* or *Gesangbüchlein*²³³, followed by the minister reading a 16th or 17th century sermon.²³⁴ These old sermons maintain Hutterite tradition, impede personal interpretations, and limit the minister's freedom to spread his own opinions and visions.

Thereafter the Hutterites kneel for prayer as an expression of submission to God. The colony of my field research uses a formalised prayer, chosen by the elders.²³⁵ This prayer is not longer than 5 minutes, because according to the minister: "it is hard for the pregnant women to kneel longer." The German teacher of FRC wished that the prayers would be freer: "The minister should better listen to the voice of the Holy Spirit and when he receives a prayer of 10 words, that should be enough." This however would be a clash with the Hutterite church culture. The *Gebet* finishes with another song and a central blessing, given by the minister. The oldest man is the first to leave in silence. When the youngest boy has left the room, the oldest woman follows. After the youngest girl has left the room, the board leaves last. The *Lehr* has the same structure, but contains two sermons. On Sunday children have their own meeting, led by one of the men in his house.

From Monday till Friday, one hour before and one hour after school, and on Saturday mornings, all children between five and fifteen years have 'German school'. The children learn to read and write High German and to recite songs, prayers, and Bible verses. One mother confirmed the necessity of it to her son with the argument: "Times can come that we have no books anymore and then it is good that you know songs and Bible verses by heart". The German teacher explains the Bible and teaches Hutterite history and rituals of life. All non-baptised Hutterites have Sunday school, in which the German teacher examines the preaching and answers questions.²³⁶

Rituals

The main Hutterite rituals are adult baptism, communion, election of the leaders by lot, and the process of exclusion, avoidance and rejoining the community in cases of 'sin'. These rituals will now be explained.

Baptism is one of the most important steps in Hutterite life. It is a vow to God and the community to remain steadfast and faithful. Here again the 'two worlds' are visible: in order to be baptised, the natural man must die so the spiritual man may be born (Hostetler and Huntington, 1967). Hutterites usually decide to be baptised between their 20th and 30th birthdays, the age at which someone can understand what it means to give up personal possessions,

to live in community and to accept possible persecution. Preparation for baptism consists of five-hour visits to the leaders on Sundays, for several weeks, to receive education on baptism and Christian life. The leaders need to confirm the request for baptism.²³⁷ Before baptism takes place, one visits the minister to confess all sins from the past. The minister takes them to God by prayer and the sins are forgiven. During baptism, the Hutterite affirms the baptism questions, after which the minister drips some water on his or her head. Baptism means surrendering to God and becoming part of the community. Like Amish, Hutterites must be baptised in order to get married.

Communion takes place once a year on the day after Easter and is attended by all baptised members. During the forty days preceding Easter the minister reads sermons about the Sermon on the Mount, in which Jesus gives practical lessons on the Christian way of life. Most Hutterites do not fast, because they see a righteous life as real fasting. They do not practise foot washing as the Amish do. Communion is the symbol of the brotherhood in Christ. The unity of the community as body of Christ is symbolised by bread, and wine refers to the blood of Christ.

The minister and other new leaders in the community are chosen by nomination and lot. The council, the colony board, usually nominates two men for a position, supplemented with names nominated by all baptised male members of the colony. The functions within the council will be further explained in section 4.3.3. Women cannot be nominated and are, unlike the Amish, not even allowed to vote. After prayer, one of the names is 'pulled out of the hat'. Casting the lot is seen as an expression of God's will. Nevertheless, a chosen minister first enters a probation period to see whether he functions rightly. If not, he might be put out of office. In Forest River Colony only the board and no-one else nominated two names. The youth of FRC disagreed with this process, for in their vision the board wanted to control the process and did not trust in God's guidance.

People who commit serious sins, like fornication, adultery, drunkenness, or robbery, will be excluded from the church community and common meals, comparable to the Amish ban and *Meidung*. Regarding lesser mistakes, Hutterites are encouraged to admonish, warn and rebuke each other. When a person disregards this, the matter is brought before the church. If the person will not listen to the church, that person is excluded and banned (Riedemann, translation by Friesen, 1999, 152-153). Hutterites distinguish between intentional sin and sin caused by the 'weaknesses of the flesh'. When a person wants to return to the community, he (or she) needs to confess and repent in public during a *Gebet*, after which the person falls under church discipline. During these weeks he is avoided, in order to give room to consider the decision to rejoin. The elders and married men judge whether an avoided person can be received into the community again. The aim of this process is reintegration in Hutterite community and to maintain the religious worldview and culture.

4.3.2 Values

Besides the already mentioned values of community, sharing of possessions, and avoidance of the world, important Hutterite values are respect for tradition, obedience, order, submission, self-denial, conformity, discipline, surrender to God, moderation, frugality, and a willingness to work. These values will be further analysed in the following.

In Hutterite culture, *Gelassenheit* reflects a basic attitude of accepting things as they are, but also an attitude of self-discipline and self-denial, more than is the case among the Amish.²³⁸ Inside the community it concerns acceptance of roles and positions and submission to

the rules for social living and the authority of superiors. To illustrate this, when FRC was looking for a new teacher, the council appointed a boy who could not refuse. An elder explained: "We chose for him. He did not choose himself, we appointed him. And he has to obey." Hutterites will rarely dispute with superiors or outsiders, which is partly because of a certain pride. The manure store at FRC, for example, was not built well and the finished storage could not be used. Confronting the contractor with the facts did not yield any result. Since Hutterites would never sue anybody, the store has been unused since and a new store has been built alongside. This attitude could also be recognised inside the colony of my field research, where a conflict was not openly discussed, but people choose to "pray for the person, that he might gain insight and repent."

Common personal characteristics can be described as obedience, order, seriousness, high morals, and in a sense pride. Hutterites are serious people. As the community changed from a voluntary affiliation to a more hereditary one, a change gradually occurred regarding *Gelassenheit* from a state of mind to the performance of appropriate behaviour (Peter, 1983, 229). Besides individual self-control, social control of the group has been encouraged from early on as well. This social control is now mainly based on traditions, customs, norms, and regulations.

The most visible symbols, besides the colony buildings themselves, are the language and clothing. In daily life Hutterites speak *Hutterisch*, their own German dialect, resembling particularly the language spoken in Carinthia, but also containing some Rumanian and Russian words. High German is used for religious matters. German and English symbolise two different realities: the community and the world. The language creates a separation from the surrounding world and strengthens group cohesion. However, the FRC German teacher observed that *Hutterisch* increasingly got replaced by English words: "We are losing thousands of *Hutterisch* words and are more and more speaking English." This is likely to influence the distance towards the outside world. Besides, the loss of *Hutterisch* dialect makes it more difficult to learn High German.

Clothes express communality, order, and modesty. Men wear black trousers or black jeans with braces, a black coat and a black hat or cap. Shirts might have different colours, although white is only worn on Sundays. After marriage men let their beards grow. Women wear long dresses, aprons (except for the *Schmiedeleut*), blouses and a coat. The length of the sleeves depends on the *Leut* a community belongs to. Dresses are usually checkered or flowered. Like the Amish, Hutterite literally obey the texts of 1 Cor. 11:5-6) on head covering and wear a kerchief or scarf, which is mostly black among *Schmiedeleut* and black with white dots among the other *Leuts*.

Hutterites respect hierarchy and authority. The 'inferior' serves and obeys the 'superior' and the latter cares for the former. God rules over man, man over woman, parent over child, old over young, people over animals. Although the Amish also recognise a comparable hierarchy in authority, this hierarchy is more emphasized and much stricter applied by the Hutterites. Practically all daily activities are organised along this hierarchy: the place one is seated at the table or the work a Hutterite do, it all depends on gender, age, and whether a person has been baptised and is married. Material things can be used, as long as the right relations and functions are taken into account. For this reason contraception is prohibited, although it may be used on doctor's advice (population growth and family size are the subject of section 4.5.4).

From childhood on, children are taught discipline, self-denial, and humility. Hutterites also respect tradition and, as a Hutterite woman of FRC said: "Hutterites are not very will-

ing to change". Children are taught historically-developed norms and behaviour, more than principles from which they make their own moral decisions. In his analysis of Hutterite society, Peter (1987, 117) states: "These norms need not be logically consistent, in the sense in which conduct deduced from generalized principles is understood to be consistent, but yield to some social, religious, or traditional consistency which might appear arbitrary if not properly understood by the observer".²³⁹

Since most values are interwoven with the practice of colony life, they are integrated in the description of the social organisation and social capital, which will be discussed in the next section.

4.3.3 Social organisation and social capital

Hutterite colonies are characterised by a strict hierarchy and clear roles. Age, gender, and marital status determine the place in the colony and the group someone belongs to. Communal harmony is encouraged by teaching young Hutterites to surrender themselves to God and their place in the community. This surrender is achieved by socialisation, supervision and clear sanctions. This section will describe the different roles within the colony, the process of socialisation, the role of social capital, the physical structure of the colony, and the balance between tradition and change.

Leadership and social order

The council consists of five to seven men and includes the first minister, a possible second minister, steward, farm manager, German teacher and sometimes two more persons, all elected for life. The minister is spiritual leader and has authority over all aspects of colony life, combining conservative religious values with progressive ideas about work and economic planning. The openness and firmness of the minister have much influence on the colony as a whole. The steward receives and pays all bills, and is the manager of the colony. The farm manager supervises the farm and fieldwork. The council consults with the advisory board, consisting

of the heads of subdivisions of the corporation. They make decisions regarding the day-to-day operation of the colony, job positions and colony discipline. All baptised men are allowed to take part in deciding on issues regarding economic, social and religious community life, albeit that the council may be overriding.

Hutterites have a strong patriarchal and hierarchical society. The man is seen as the head of the family. The divine order requires a woman to submit, going back to the story of Adam and Eve. Women are not allowed to vote and participate in the formal decision making process and cannot determine the policy of the colony. They may give their voice through their partner or father.²⁴⁰ The work of men and women is clearly separated. Men are the breadwinners, providing income. Women are not allowed to make money for the colony; they take

Box 4.3 From my diary: Butchering Day

Today is 'butchering day', which means that practically all colony members older than 15 participate in butchering 1,400 broilers. Even the butchering happens in a highly ordered way. Young men catch and electrocute the broilers, after which the broilers are plucked. The older men cut off their legs and move them to the women. All women are lined up from young to old. The youngest start with the outside of the chicken, plucking the last feathers, while the oldest persons go furthest into the chicken to remove fat and intestines. At the end the broilers are washed, dried, and packed. During the butchering the Hutterites were singing loudly and afterwards I was asked: "Did you have fun?"

care of the small children and the housekeeping of the colony.²⁴¹ Hutterites not only clearly distinguish gender, but also generations. Your status increases as you get older. This is visible in all aspects of the colony. In FRC, for example, the men had nominated one of the women as head cook, not because she was a good cook, but because she was the oldest unmarried woman. Eventually an older woman rejoined the colony and she was appointed. The women accepted the procedure and told me: “That’s being a Hutterite woman”. Even with the chicken slaughter, in which all adults participate, age plays a role, as illustrated in box 4.3.

Socialisation

Children are seen as a gift from God to the community and it is common to have big families, although family size is decreasing. Sixty years ago, a completed Hutterite family had an average of ten children. In 1995 an average completed *Dariusleut* and *Lehrerleut* family had 6.6 children and a typical *Schmiedeleut* family had five to six children (Perterer, 1998, 211). This will be elaborated in section 4.5.4. Hutterite education is quite structured and systematically taken care of by the colony. From the age of two or three children attend nursery (*Kleine Schule*), where they learn to obey and respect authority. They practise sharing communal toys, behave cooperatively and surrender their self-will. Children play, sleep, and eat in the nursery, while their mothers are working in the colony household. Usually the nursery is run by retired women, who no longer have to participate in cooking and baking for the community. Thus, the first community values are transmitted by the oldest generation.

From the age of five, children eat in a separate dining hall under supervision of the German teacher and his wife, and attend German School. The spiritual upbringing, including the communal meal, is the colony’s responsibility. Children learn to adapt to their position in the community. Between six and fifteen years, children attend primary school at the colony for the elementary grades. The teacher is either an English person, clearly instructed about Hutterite values, or a Hutterite who followed a teacher-training program, which is becoming more common among the *Schmiedeleut*.²⁴² The one- or two- room school is located in the colony. Higher education is usually declined as unnecessary and inconducive to the fear of God, although recently less conservative colonies have let their students graduate with a Grade 12 diploma.²⁴³ An important reason for this is the advance in farming and livestock technology used in the colony. In addition to formal education, Hutterites continue education with apprenticeships. They are assigned different jobs in the colony for a period to learn certain skills.

With the fifteenth birthday a Hutterite enters adulthood and starts to eat with the adults.²⁴⁴ Physically these teenagers are seen as adults, but religiously they are still immature and thus continue to attend Sunday school. The German teacher and the minister are responsible for the moral and social behaviour of the youth. Some deviant behaviour is tolerated by the

Box 4.4 From my diary: Hutterite teachers

When I asked one of the FRC elders why they have an English teacher and not their own untrained teachers like the Amish, he replied that the government only pays for the colony school when they have a qualified teacher. Now, one of the FRC boys is following a teacher-training program. One of the girls would have enjoyed being a teacher, but because women leave the mother colony when they get married, the elders chose a boy. The investment must remain in the colony. There is one trained female Hutterite teacher in this colony who promised she will never get married. The girl did not want to promise that and she had to accept the decision of the elders.

community, and these 'in between years' are a period of limited self-realisation.²⁴⁵ Ultimately, a socialised Hutterite is submissive, obedient, hard working, responsible, and does not show his anger. Work and social life are completely interwoven, since colony work is done with the peer group. Hutterites have not much leisure time, for most time is filled. Time for recreation consists of singing, reading, visiting, needlework, and walking. Holidays are filled in with visits to other colonies.

As is the case among the Amish, baptism is the moment a Hutterite has really become mature. After baptism a man receives the right to vote, more responsible work and more freedom to visit other colonies to find a partner. In order to get married, a Hutterite must be baptised, because commitment to God must precede commitment to a partner. For women not so much changes, except that they can get married. When she marries a man from another colony, which is usually the case, a woman leaves her colony and moves to her husband's colony. After baptism often the relation between parents and children becomes closer, since now they are all adult colony members. Hutterites retire when they are 50, which means they may decide how much work they do.

Social capital

The Hutterite community today consists of a closely-knit kinship group, and is characterised by strong social capital, by which Hutterites pass on and maintain their religious worldview, values, traditions, and desired behaviour. A colony offers much security and functions mainly like an extended family; in fact, it often consists of many relatives. An important aspect is the socialisation of young Hutterites. The transmission of values, religious beliefs, rules, and colony hierarchy starts at a young age and is carried out by the older generation, under supervision of the minister and the German teacher. From early on a Hutterite knows the difference between good and bad behaviour and what is expected. During the process of socialisation a Hutterite learns to be interdependent in a specific peer group, formed by gender, age and later complemented with baptismal and marital state. Most work is done with members of this peer group. Besides this peer group, Hutterites have a huge social network they can rely on, starting with the colony of residence. After marriage women move to their husband's colony and therefore Hutterites have family members in many other colonies, which are visited regularly. This circle of family members has become more important with the increase in means of communication. The broadest circle of the social network consists of other colonies, usually but not necessarily of the same *Leut*, with whom information and work forces are exchanged in busy times.

All practical needs are provided for by the colony, what is comparable to the way Benedictine and Franciscan communities deal with communal and personal possessions. A Hutterite never has to worry about finding sufficient living space or paying energy bills and never has to apply for a job. Within a colony, a person is assured that basic needs will be met, from the cradle to the grave. The downside of this structure is that it requires a total surrender to and acceptance of the colony authority system and limits. "Being of one mind, the desired goal of the religious and economic community, is paid for by intellectual and educational limitations imposed on the Hutterite individual" (Peter, 1987, 120).

The mechanisms of social trust and control are clearly present in the colony. Because everyone knows his or her place and function, a Hutterite can rely on the system. In fact, a colony cannot exist without social trust, since every person is needed to keep up colony life. Hutterite individuals have not much privacy. The colony has a huge social control system. As the

minister told me: "In a colony always 100 eyes are watching you". This social group control keeps up important traditions, norms, habits, and rules. Hutterites emphasise good behaviour, more than appropriate motives, and someone is judged by his deeds, with shunning and exclusion as extreme sanctions. When a Hutterite decides to be baptised, this not only includes acceptance of Hutterite faith, but also agreement with and commitment to colony life, including the social structure, behavioural consequences, responsibilities, rules, and control mechanisms. The shared religion and social structure can be seen as important means to Hutterite survival.

Physical structure

Settlements are established in rural areas and at quite some distance from towns and roads, to remain separated from the outside world. The design of the colony witnesses to modesty and order and is often a copy of the mother colony.²⁴⁶ The central building is the communal kitchen, which is surrounded by long oblong complexes in which two to four families live, each with their own front door. Every family has sufficient bedrooms, a bathroom, a living room and a kitchen without cooker. When a couple gets married, the colony provides for living space and furniture, which expands when the family grows. The houses are characterised by moderation and uniformity. Most dwellings at FRC were plain, with at most a painting, a clock, and a calendar in the living room. The furniture is owned by the colony and every house is furnished identically. The paths from the houses to the kitchen are very straight, surrounded by smooth lawns. The other buildings, like the school, workshops, and barns are usually built either at a right angle to or parallel to the houses. The population may vary from 50 to 150 persons. The colony settlement includes a mixed farming economy and gardens, occupying an area from 20 up to 150 acres. Hutterite economy will be discussed further in section 4.4.

Although the plans of Hutterite colonies might differ slightly, because of spatial and environmental differences, most are built according the same scheme. The foundation is usually a structure of concrete, and wood and corrugated sheets are mainly used for the buildings (Perterer, 1998, 109). In my host colony, the dwelling for one family consisted of two floors plus a very small loft. Small families usually live on one floor. In my host colony, two or three dwellings are located under the same roof. The total living area consists of 19 houses of 265 m² plus supplementary areas such as the kitchen, and totals 5,460 m² or 58,771 square feet. Since this colony houses 97 people, the average living place per capita is 56.3 m² or 606 square feet. Where the average American in North Dakota has 2.24 rooms per capita, the average per capita in FRC is 1.8.

As illustrated in section 4.2, the Hutterite community is growing because of high birth and retention rates, and new colonies are regularly established. In general, when a colony approaches a population of 150 persons, it will branch out and divide into a mother and daughter colony. Such divisions usually happen every fifteen to twenty years, although owing to decreasing family size, it may now be longer before a division takes place. New colonies offer possibilities for young men to obtain certain positions and leadership roles. Since in principle all appointments are permanent, the possibilities for young men in an existing colony are limited. Sometimes a colony divides before the maximum number of inhabitants is reached, when for example the preacher and the steward cannot collaborate very well. Deep-lying conflicts are solved this way.

Three times a day the community has a common meal in the central dining hall, where men and women have a fixed place, as in church: separated by gender and ranked by age.²⁴⁷

All meals are prepared in the central kitchen. When people have guests, it is common to get a meal from the kitchen and dine with the guests in their own place to have more privacy. In practically all colonies the minister and second minister eat together in the minister's house. They get this privacy to have time to discuss important issues. Every colony has a bell near the central kitchen, that rings when the meals are ready and to announce the start of communal duties or recreation. The bell is not used to announce *Gebet* or Sunday services, since that is what the non-Hutterite churches do. Instead, Hutterites knock on the doors or play a religious song on the intercom.

Tradition and change

Hutterites try to maintain tradition wherever this is possible, but will not hesitate to modernise their business if it contributes to the economic survival of the community. A clear line of demarcation is visible between the traditional social and religious structure on the one hand and the economic organisation, which is affected most by modernisation, at the other hand. This economic organisation is the responsibility of the council and in particular of the colony manager. The other Hutterites are not occupied with issues such as profits, yields and businesses. They have learnt to obey orders and to work hard. Because of this attitude of obedience and a willingness to work, the Hutterite communities have become efficient enterprises as far as production is concerned. The separation between the religious structure, aiming at conserving Hutterite tradition, and modern economic structure, focusing on high yields, is possible because of the fundamentally dualistic worldview. As long as worldly technological processes can be used to serve a spiritual goal, which is maintaining and expanding communal life, they may be used.

Particularly since the 1960s changes have been observable, regarding increasing technology and decreasing family size. Owing to technology, colonies have more specialised labour, which can be done by people on their own, encouraging individualism. The specialised work requires specific courses and a rational approach to problems. The spiritual life on the other hand is based on old sermons, in which new contributions are not appreciated. Rational questions about faith often remain unanswered, since faith is based on tradition and gives little room for personal growth. In more liberal colonies, the separation between traditionalism and modernity is growing, causing many problems. The challenges of modernity will be further elaborated in section 4.4.5.

Hutterites have been under pressure from the outside world in a number of ways. States tried to prevent expansion of farms and purchase of land for new settlements, as described in section 4.2. Another problem occurred regarding schooling. Certain Manitoba school districts attempted to force Hutterite children to attend regular schools, but did not succeed. Hutterites prefer colony schools, since public schools can lead to a breaking away of children from Hutterite life. Indirect pressures from the modern outside world have been a constant threat to the Hutterites.

Recapitulating

Hutterites are characterised by the call to live in community, in which they yield themselves to God and to the community, and by communal property. The colony wishes to live separate from the 'carnal' world as much as possible, in order to maintain the religious community. Tradition is very important for them and religious and cultural values will not easily change. The Hutterites have a dualistic worldview and the worldly economic structure is separated

from the religious values. The main goal of the colony farm and other businesses is to supply work and means to maintain the religious community.

Important values, relating to the communal organisation are obedience, submission and discipline. Hutterite colonies have a strict hierarchy and order. Values regarding the Hutterite lifestyle are modesty, frugality, sharing of possessions and a willingness to work. Like the Amish, the Hutterites reflect an attitude of *Gelassenheit*, although in Hutterite culture it is stronger related to obedience of authority. The Hutterite community consists of a closely-knit kinship group. Colony-members are highly interdependent and have a clear role and position within the community. The colony provides for all individual material needs.

Having described the cultural and social organisation of Hutterite colonies, I will now focus specifically on the economic part of colony life in the next section.

4.4 Hutterite economy

4.4.1 General Hutterite economy

Hutterites perceive work as an integrating element of communal life and a social means to contribute to the welfare of the group. Individual perception of time, money, and man-hours are not emphasised and only the council is concerned with the kind of business and its yields. Any person who can work is expected to work and is assigned a job by the farm or colony manager. Men are involved in work that provides income. Women carry out jobs related to the family, housekeeping, and preparation of food, and take weekly turns at baking, cooking and the dishes. The work pattern is predictable, regular, and for many Hutterites satisfactory. While working together, women are usually singing and when I participated in a job, they often asked: "Do you have fun?" or said: "I hope you have as much fun as we have". After finishing a task, Hutterites usually help others, in order to get everybody ready in time. Hutterites have a strong sense of responsibility toward the welfare and preservation of the community and their willingness to work does not depend on personal wage or prestige, for all profits are for the colony.

When the Hutterites moved from Russia to America, they changed from a colony economically based on the production of crafts to an agricultural community. Still many skills have been preserved, like bookbinding, clock repair, tinsmithing, furniture shops, and tailoring. In principle, Hutterites construct most of the colony buildings themselves, do most of their own machine repair, have their own electricians, produce furniture, and make most of their clothes. Further skills, less economically relevant, are manufacturing of mats, spinning of wool, knitting, quilting, and the production of traditional toys for the children in the colony. In some colonies old crafts such as broom making and shoemaking are still alive, but in most colonies they have disappeared and brooms and shoes are purchased. Some non-agrarian jobs are 'frowned upon', like commercial, cross-country trucking. It endangers communal life, since people are gone from the colony for several days and cannot attend *Gebet* and common meals. Also a job in merchandising is not welcomed. The council of my host colony, however, had chosen to get involved in both trucking and merchandising, for financial reasons. Although many Hutterites, including those within my host colony, strongly disapprove of these jobs, nothing is done, since they accept what is decided by the council.

Hutterite agriculture

The colonies in North America now largely depend on agriculture. The amount of land per colony varies from about 5,000 up to 13,000 acres, depending on the kind of agriculture and the climatological and geographical circumstances. Bennett (1967) argues that Hutterites were the most successfully adapted group who ever occupied the marginal region of the northern plains of the

Table 4.3 Example of a common farm business of a Lehrerleut Colony in Montana in 1994 as described by A.D. Perterer (1998)

Crops	Acres	Animals	Number
Grassland	5,500	Dairy Cows	120
Winter wheat	2,150	Beef cattle	400
Summer wheat	2,150	Sows	400
Barley	2,400	Pigs	3,600
Oats	70	Layers	10,000
Fallow	30	Chicken	5,000
Total	12,300	Geese	2,300
		Turkeys	1,200
Av. yearly income	\$ 2,000,000	Broilers	1,800
Av. expenditures	\$ 1,700,500	Ducks	1,000

United States and Canada. Because Hutterite farm operations are large scaled and diversified, they can cope better with market fluctuations than many small farms. Their economy is based primarily on producing crops, dairy, and raising animals and poultry. The mixed farms may include production of wheat, oats, barley, and potatoes, the raising of dairy cattle, beef cattle, hogs, laying hens for egg production, broilers, geese, ducks, and turkeys and sometimes beekeeping (Perterer, 1998). Table 4.3 gives an example of an average *Lehrerleut* colony farm in Montana. The diversification was initially the result of the wish to be self-sufficient, dating back to the first colonies in Moravia. Nowadays, Hutterites no longer strive for self-sufficiency. In South Dakota, Hutterites raise about 50 to 60% of hogs sent to market and about 80% of the 6.2 million turkeys in the state (Cobb, 2006). In Montana, over 90% of hogs raised in that state come from Hutterite colonies and about 98% of Montana's eggs come from Hutterite farms, using state-of-the-art equipment (Ibid.). In general, animal welfare is not an ethical issue discussed in the colonial setting. Farm animals are mainly kept for their economic value. The colonies stick to the State norms regarding animal housing and living conditions and usually will not go further than that. The energy-use of Hutterite colony farms will be discussed in section 4.5.1.

Hutterite farms are usually not organic farms.²⁴⁸ Resource use and conservation vary considerably among the Hutterites and depends on age of a colony, nature of its land and water, bank balance, and skills of the managers (Bennett, 1993, 183). Some examples of specific care for the environment can be mentioned. Sundale Hutterite Colony, North Dakota, raise their chickens without antibiotics or growth hormones. Milford Hutterite Colony, Alberta, works with DUC (Ducks Unlimited Canada) to protect critical grasslands surrounding the Milford Marsh, an important pintail breeding and staging area (Masterman, 2003). Manitoba Hutterite Colonies contributed \$ 300,000 to the University of Manitoba, to support the National Centre for Livestock and the Environment (Jorgenson, 2006). This Centre focuses on ecological care and preservation of farmland, maintenance of high quality livestock production and animal welfare, and public education. Although Hutterites are not allowed to go to university themselves, fearing their youth will be influenced by the world, they will not hesitate to make use of extension services and University Research Centres. On the other hand, Hutterites were fined for killing grizzlies and illegal trapping and trafficking of protected birds in Alberta.

In a 1978 study, Simpson-Housley found Hutterites have much less concern with wildlife preservation than non-Hutterite farmers, explained by the belief in the primacy of man in creation.²⁴⁹ Whether a colony participates in ecological care and nature preservation largely depends on individual interests and a willing council.

Expansion to non-agrarian businesses

Some Hutterite colonies have diversified into other businesses. About 10 to 12 colonies in the Dakotas and Minnesota have substantial manufacturing businesses beside their farms. One of the larger operations is Millbrook Industries in South Dakota, builder of the Hydron Module Ground Source Heat Pump, using the earth's warmth to heat and cool homes and businesses.²⁵⁰ Newdale Colony, South Dakota, has specialised in metalworking, manufacturing metal cladding for buildings and feed mill equipment. The operations are state-of-the-art; equipment includes the latest in laser cutters, CAD/CAM software, robotic welders and more. Starland Colony, Minnesota, operates a machine shop that makes steel tools and produces metal parts and accessories for complex commercial applications. While adhering to many traditional values and practices, Hutterites have become sophisticated businesspeople, finding industry opportunities and building very competitive businesses for the good of their colonies. Because of their scale, their diversified farming and other businesses, a relatively cheap labour force with a high work ethic, and their unique financial situation, Hutterite colonies are able to create more opportunities than many other farmers.

The growth in economic activities and the modern technology used in farming and manufacturing businesses might seem contradictory to the traditional social order and basic Hutterite values of moderation and austerity in daily life. Peter (1987) suggests that the rationalisation of economic activities among the Hutterites originates in the adaptive response to secure their survival within a given host society. "The ideal interests of Hutterites became traditionalised, while their material interests underwent a process of rationalisation." (Peter, 1987, 25) This growing separation of the religious and economic sphere has many implications for the social, cultural, and economic development of the Hutterite colonies. This will be discussed further in this chapter. First I will describe the agriculture of Forest River Colony and the choices made regarding environmental issues and animal welfare.

4.4.2 Agriculture of Forest River Colony

Forest River Colony owns 5,000 acres of land of which 3,200 acres are farmed. The remaining 1,800 acres consist of 1,350 acres of woodlands and the river, and of 450 acres of 'CRF land' (subsidised fallow land), for which the colony has an agreement for 15 years. This land is mostly used for wildlife reserve. At the start of the agreement they had to sow 4 native kinds of grass and 1 legume (like alfalfa). Thereafter they had to control the weeds and remove these with specific chemicals. The crops grown on the other 3,200 acres are described in table 4.4. Per person, the colony has 51.5 acres and farms 33 acres of land. In north west Central America, an average farm has 585 acres (Dimitri & Effland, 2005). Since the average household in North Dakota has a size of 3.2 people, this would mean that an average North Dakota farm has about 183 acres per person, which is much more than the colony has per individual Hutterite.

Crops

Usually FRC works with a four year rotation of potatoes, corn, soya, and wheat, to prevent exhaustion and erosion of the soil. The yield per acre is similar to or higher than the average

yield per acre in North Dakota, as outlined in table 4.4. Sometimes they grow corn two years in a row and then choose between soya and wheat. Manure is spread on the fields the year before the potatoes are grown. The main potato crop is sold to the J.R. Simplot Company (and used for McDonald's fries) and is very precisely controlled, because of Simplot's strict policy on chemical use. Another portion goes to a potato factory in Minnesota. During summer the farm manager and another elder test the potatoes in specific weeks, every two hours, night and day. No tracks of fertiliser may be found on the potatoes. They keep a record of which chemicals have been used, when they were used, who applied them, where the wind came from, etcetera. Because of the chemicals, soil, and fertilising, the farm manager explains it is best to grow potatoes on a specific piece of land once in the four years.

Table 4.4 Described average crop yield in FRC, compared with average yield in North Dakota

Crops of FRC (acres):	Described yield per acre (FRC):	Average yield per acre (ND, 2006)
1,600 corn	125 bushels	113 bushels*
750 potatoes	20 ton	13.46 ton (265 cwt)*
450 soybeans	30 bushels	31 bushels*
200 wheat	35 bushels	30 bushels**
200 carrots	20 / 30 tons	22 tons***

* Source: Farm & Range Guide staff, North Dakota, November 22, 2006.

** Source: North Dakota Wheat Commission, 2006.

*** Numbers for average carrot yield (for processing) in the US, 2000. Source: NDSU Extension Service, 2000.

Potatoes are a low residue crop, which means that after harvesting potatoes, the land lies fallow. To prevent erosion, the colony planted a row of corn every 260 feet. The colony uses GM-seeds for corn. The FRC farmer explains that there are several gradations of GM-seeds. The colony makes use of a seed that is modified to control one disease, as explained by the farm manager: "This seed is affordable and other modifications are not relevant for us." Corn is a high residue crop and after harvesting much is left on the land. In this part of the 'dust bowl' 65% trash cover is compulsory. FRC usually has a trash cover of 80%. Carrots are also a low residue crop, needing rows of corn. The corn is used for their own animal forage. The carrots are sold to a factory in Minnesota. FRC have permits to grow 505 acres of sugar beets, but these are rented out for 225 dollars per acre.

The use of chemicals varies considerably according to the field and crop.²⁵¹ It depends on the weather circumstances and the information given by the County Agent and the Experience Groups of Grand Forks University. To diminish the need for 'Liberty', they are going to use a genetically modified variety of corn that is resistant to the disease Liberty is used for.²⁵² When they have used Liberty, they have to wash the sprayer three times to remove all residues. The farm manager prefers products with the warning 'caution' to the ones with 'dangerous'. On the use of water and chemicals he said: "We depend pretty well on the University of North Dakota". Every two to four years, the farm manager follows a short course, necessary to keep the chemical licence. He wondered why people are allowed to use these chemicals in their gardens without licence, while he is required to have a permit. Chemicals are usually applied through irrigation canals. FRC uses 1,200 pounds of fertilizer. The colony's chicken and pig manure is sprayed mainly on the cornfields, totalling about six to seven million gallons on the

corn (3.5 to 4 litres of manure per square meter) on a yearly basis.

For irrigation FRC uses water from wells. The colony sprays 8.5 – 9 inches of water per acre as supplement to rainwater. The permit allows for 18 inches per acre, but the colony never uses that. The farm manager prefers some dryness to wetness, because a water surplus can easily cause certain potato diseases. Another reason is that since 1992 it has been relatively wet in this area and thus less irrigation has been needed. They had 12 inches of rain in 2004. The colony is trying out a new water system, monitored by the State Water Commission. When the river is high in spring the overflow is collected for recharge. Thus the colony needs less water from the wells. This method of water use is new in North Dakota. The irrigation system runs on 460-volt engines and electricity cables inserted under the fields. Two irrigation devices that are not linked to the cables are connected to a generator. Irrigation costs about 30 dollars per acre and 1,200 dollars for a whole field. A complete square field consists of 160 acres with a 130 acres irrigated circle. Most irrigation is needed in July and August. FRC has adjusted the nozzles of the irrigation arms, to reduce the amount of water used, resulting in water saving of 50% since 1973. They diminished the distance between the nozzles and the plants, to spray the water directly on the plants to prevent evaporation.

Livestock

Like most colonies, FRC used to have dairy cows, but after a skunk bit several cows all 25 cows had to be killed. Even the meat could not be sold. The dairy cows never returned since nobody really liked to run the dairy business. The women told me they would prefer three cows for their own use, but the men do not want to raise them.

Now the colony keeps 20,000 piglets on a yearly basis. Usually they keep the piglets for 21 days, until they weigh 250 pounds. In addition, they have 850 sows. During my stay, the colony had three kinds of pig barns: an old pig barn, some biotech barns, and a huge modern pig barn. The biotech barns consist of an open stall, in which the pigs get new straw every two weeks. When the pile of straw and manure is three feet high, it is taken out and spread on sandy land. It usually takes four to five years before the straw is completely decomposed in the soil. The soil improved considerably as a result. Even though the farm manager was very positive about the biotech barns, they will be torn down in the future. The

council of FRC wants to expand the intensive modern pig barn and gather all pigs there, arguing it is more efficient and convenient to work in this barn.

Besides the pig barns, FRC has a huge chicken barn with 54,000 layers, producing about 48,000 – 50,000 eggs per day. The chicken barn consists of thousands of wire cages, each cage housing four or five hens, in a space of about 550 cm² per hen. From 2012 on, this housing system with wire cages is forbidden in the European Union. The eggs are transported by a

Box 4.5 From my diary: The housing of the chickens

The council of FRC is not considering creating more space per chicken. The farmer focuses on a calm breed of chicken that do not fight in the cages. Furthermore, he is aware of the thickness of the eggshell and the number of eggs a chicken can lay per year. One of the women told me that they used to have another barn with less chicken. "In wintertime it was too cold for the hens to lay eggs. Now the chickens are placed close together, they are warm and lay eggs year round." Another Hutterite remarked: "Well, these cages are from Europe", as a kind of justification for the choice of the colony. In fact, this system will be forbidden in the European Union in 2012.

conveyer belt, automatically sorted by quality and packed in boxes of several sizes. At the end of each belt a young Hutterite checks the content of the boxes and places them on the pallets. Besides the layers, FRC regularly buys small chickens, feeds them for five to six weeks and then all the adults of the community butcher them. The main part of the chicken meat is sold and a smaller part is for their own use.

Ethical issues regarding animal welfare were hardly an issue in the colony. Animals used for production belong to the economic system, and because of the dualistic thinking, a direct relation with religious values is not made. The main goal of the farm policy on animal breeding is economic profit and only when different living conditions of the animals lead to higher profit will they be changed.

Environment and nature

Choices regarding agriculture are mostly motivated by economic arguments. When I asked the farm manager about what he thinks is important in farming, he replied: "To make money". 'Sustainability' is mainly understood in an economic sense: to have enough means to sustain the present colony and to save money for establishing a daughter colony in the future. This is a typical example of the way Hutterite dualism between a spiritual world and a material world works out in practise. When I asked the farmer about differences between the farming policy in the colony and the typical American way of farming, he replied that, except for the scale, there were no differences in policy. They strive for a high production with low cost price. Extension agents, the university, and the purchasers of the products have much influence on the mode of production.

Ethical questions on housing of animals, animal welfare, or environmental issues like use of chemicals were considered from an economic point of view. The reduction of water needs for irrigation is also motivated by economic arguments. The main goal of the agricultural enterprise is to maintain the colony and ethical or environmental arguments hardly play a role. One exception has to be made regarding the preservation of wildlife, which is also based on the fact that several men in this colony have a licence for hunting. A considerable part of the land (1,800 acres, which is 36% of all FRC land) consists of woodlands, the river, and CRF land, and most Hutterites love the surrounding woodlands and wildlife.²⁵³ Besides, the vegetable garden, which is cultivated under supervision of the German teacher, is mainly organic. This will be discussed in section 4.5.3. The energy use of Hutterite farming will be discussed in section 4.5.1.

4.4.3 Shared income

In Hutterite colonies, no wages are paid, but all income is collected by the steward, who pays all colony bills and controls the earnings and expenses. Rather all goods in the colony are communal possessions. Goods are distributed according to people's needs and on the basis of equality. Community of goods does not mean that everybody gets the same portion, but that everybody gets enough for his needs. Every family receives a certain amount of cloth to make their own clothes. A newly-married couple receives furniture, some kitchenware and other necessities. Inside the colony money hardly plays a role. When people need something, they can ask the steward, who must approve the proposal and the costs. Not all individual wants are satisfied, only requests which are considered 'socially approved needs'. Overall, Hutterite culture is characterised by austerity and limited consumption.

Most Hutterites receive a certain amount of pocket money, varying from 2 to 10 dollars per month.²⁵⁴ Besides this, to a certain limit, Hutterites are allowed to earn some money by

helping neighbours or selling home made products, and use this money for themselves or to buy presents. Male members in particular acquire more cash directly, because they usually have a larger network outside the colony. This money is called money for '*Eigennutz*' (self use) and in FRC people used it for buying presents or saved it for bigger purchases like a camera. Thus Hutterites do have some personal possessions, either purchased with pocket money, money for *Eigennutz* or received as gifts. In an interview with one of the FRC ministers, he made clear that private property does not fall under the colony's responsibility. We were talking about hunting. The minister said: "The community doesn't have guns, they are prohibited". His son however remarked that many Hutterites do have guns and use these for hunting. The minister replied: "That is personal property, that doesn't belong to the colony. And it is wrong that people own guns, it is personal property and it is prohibited." Apparently, the norms for personal property differ from the norms for communal property.

In FRC, the total yearly income is \$ 7,800,000. The yearly expenses are close to \$ 6,800,000 and thus the colony makes some million dollars profit per year. A small portion of these expenses consists of specific household expenses, which equal \$ 450,215 and are subdivided in table 4.5. Remaining expenses concerned the farm, the trucks and other expenses regarding work, for which numbers were not provided. North Dakota farm families spent an average of \$ 45,411 for living expenses in 2005, including vehicle operation and purchase (\$ 5,071) and non-farm interest expense (\$ 851), but excluding telephone costs (NDSU Extension Service, 2006). In the table these expenses have been omitted, because FRC counted vehicle operation as farm expense.

Table 4.5 FRC household expenses (in \$) compared to average North Dakota farm, 2005

Household expenses	FRC	Per person (n=97)	ND farm family*	Per person (n=3.2)
living expenses	61,235	631	6,924	2,164
groceries	62,708	646	6,597	2,062
dry goods + recreation	24,007	247	6,360	1,988
shoes, clothing	5,196	54	1,740	544
medical expenses	85,808	885	8,015**	2,505
medical insurance	98,484	1,015		
teacher + supplies	66,017	681	1,593	498
telephone	46,760	482		
utilities	-	-	2,239	700
contributions and gifts	-	-	2,566	802
other insurances	-	-	1,523	476
other	-	-	1,932	604
Total	450,215	4,641	39,489	12,343

* Source: NDSU, Extension Service, 2006.

** This number includes both medical expenses and medical insurance.

Along with the growth of the colony population, Hutterites work hard to make their finances grow as well, to provide for a future daughter colony. The fact that profits are not privately owned and largely used for maintenance and expansion of the colony may diminish the temp-

tation of wealth and personal property growth. Because of increasing costs, many colonies have to obtain additional bank loans to establish a new colony. In the 1960s 12% of the Alberta colonies had financial problems (Peter, 1987, 147). In some cases this caused social problems as well. In the 1980s some colonies even lost the full status of colony. Because women did not want to marry into these colonies, they stopped growing. In 1983, profitable *Lehrerleut* communities rescued 13 indebted colonies (Ibid.). The Hutterite colonies have a mutual aid system, providing interest-free loans to colonies struck by unforeseen disasters. In most states Hutterite colonies are treated as companies. The colonies pay all taxes. Because there are no salaries for colony members who work within their community, individual Hutterites are not subject to state or federal income taxes. The colonies receive no payments for welfare, old age, or unemployment.

4.4.4 Technology

During the 1930s, a rapidly growing population in a period of high production costs and land prices made the Hutterites decide to allow modern technology on their farms, in order to attain efficiency, needed to gain capital for expansion. In fact, reasoned technological innovation has been in their tradition since the 16th century when they managed Moravian estates (Hostetler, 1997, 296). Technological advances are accepted by Hutterites as long as they contribute to maintaining or improving the economic operation of their colonies without changing or threatening the basic Hutterite values, the coherence of the communal life style or in any other way contradict their religious principles. For this reason Hutterites have restrictions in the field of audio media: radio, television, film, computer games, and personal use of the Internet are prohibited. In more liberal colonies, as was the case in FRC, some use of the Internet and use of television for education are tolerated. Another restriction is the rejection of private transport, which will be elaborated in section 4.5.2. The use of technology within the economic sphere has limits as well. Any type of change must be formally proposed to and approved by the council.

Ryan (1977) describes three stages of mechanisation in the Hutterite community. The first stage took place in the 1930s when most horse-drawn equipment was replaced by tractors and trucks. The second stage was in the 1940s when most of the old implements were replaced by powered and mechanical devices. In the 1950s and 1960s, the third stage, many highly specialised labour-saving devices were established, including specific field equipment, automatic milkers, equipment for egg production, and feeding devices for the hog barns. Nowadays colonies are among the most advanced and highly mechanised agricultural enterprises in America, while still making use of a large labour force. Ryan (1977, 95) describes Hutterite agriculture as “characterised by both capital-intensive and labour-intensive features”. Hutterites

Box 4.6 From my diary: Leftovers for the poor

At harvest time many potatoes and carrots remain in the field and rot away. They have been thrown out by the machine, for they are too small or too large for selling. Nobody really seemed to bother about it. An outsider who considers becoming Hutterite, asked the council whether she could harvest this food and give it to the poor. She got permission and brought a load of potatoes, carrots and to a soup kitchen in Grand Forks.

use computerised systems for many farm jobs, from feeding livestock to sizing eggs and analysing soil types. They also use satellite-guided positioning systems to determine optimal seeding of fields.²⁵⁵

Hutterites are aware of new technological developments and most colonies have good contact with extension services of nearby universities. It depends on the level of progressiveness of the leadership to what extent a colony is engaged in specific experiments. Some Hutterites follow specific courses on agrarian enterprises. Most colonies subscribe to farm journals and magazines, technical manuals and guidebooks. Since much new technology needs comprehensive remodelling of buildings, new colonies are usually far more technologically advanced than the old ones. Often Hutterites manufacture machines themselves or adapt them. Plexiglas cabs for grain combines were constructed by Hutterite mechanics before farm implement companies sold them commercially. Specialised machines such as hydraulic rock pickers and tractor cabs are manufactured by colony shops. Potential patents and royalties from inventions have not been seriously pursued and neither individuals nor colonies have accumulated wealth from royalties.

Important sources of technical farm information for any colony are other Hutterite colonies. There is an extensive information network amongst the colonies that permits a rapid spread of new ideas and technological developments. Although the closest contacts are between parent and daughter colonies and between colonies with family ties, Hutterites make regular visits to other colonies. New inventions are therefore easily implemented by other colonies as well. The technological progress affects women as well. Innovations used to be only applied at the farm, but recently they are also used in the kitchen, laundry, and to a lesser extent the houses. But the majority of new devices are allowed for economic purposes and therefore Hutterite men are exposed to more modern technology than women. The challenges of new technology will be further elaborated in the next section.

4.4.5 Challenges of technology and modernity

Although the Hutterite community attempts to keep mainstream society at a distance, they do take part in and are influenced by modern society as well. The traditional system, based on the principles of providing labour for adult Hutterites and economic diversification, is threatened, both from the inside and from the outside. In the first place, technological change has led to a decrease in the need for general labour. To run a colony now requires a smaller number of more specialised employees. In the second place, the production and marketing of agricultural products is increasingly influenced by bureaucratic systems and outside companies. In many cases these systems and companies urge the colonies to restrict certain sectors and specialise in others. Specialisation often leads to new developments and technological change in a specific branch. A consequence might be that the collective knowledge of a diversified farm system gets lost. In the third place, land prices have gone up and expansion has become more costly.

Specialisation and increasing technology have resulted in an increasing use of English, since instructions are not available in Hutterite German. A growing number of Hutterites take specific vocational training courses (on electricity, plumbing, motor vehicle mechanics, swine management techniques), since for many colony jobs a licence has become compulsory. Another effect of more specialisation might be a change in status. In the past, wisdom and experience were needed for the diversified farms. The new Hutterite economy requires leaders who have a technical understanding that is usually more present among the younger generation (Peter, 1987, 194). A consequence can be that younger people, in contrast to the past, will more easily gain access to leadership positions.

Technology leads to a restructuring of labour, with many consequences for the social

structure. Hutterite colonies are gradually changing from a 'socially-oriented' to a 'technologically-oriented' structure. Hutterites have an important principle: "All men must be employed all the time", but owing to technology, tasks become more specialised and it becomes more difficult for someone else to take them over. Machines make it possible for one person to do a job that used to be done by 5 men. Boys between 15 and 20 years are especially affected by it. There is not enough work for them any more, especially unskilled labour. Eventually, technology might result in hidden unemployment in Hutterite colonies. Lack of significant labour makes the boys go out and work for outsiders, introducing habits and attitudes in the colony that disrupt the social cohesion.

Another gradually changing Hutterite characteristic, especially among the more liberal colonies, is an increase in private ownership. The community faces an expansion of 'grey areas' without sanctions, but in which an individual himself has to acknowledge that he is wrong and ask for forgiveness. The position of social control is changing slightly, cohering less with 'conscience as used to be the case', and leading to more tolerance (Peter, 1987, 177). Hutterites are now less likely to confront others with their choices and behaviour, as Riedemann prescribed in the 16th century. One of the gradual changes is a growing tendency among Hutterites to perceive their houses as private territory. This process of privatising is one of the keys to the development of private ownership. The difference between right and wrong becomes less clear.

One of these grey areas is the money for '*Eigennutz*'. Particularly the men have several possibilities to earn extra money, by doing occasional jobs outside the colony or selling things in their free time. Another way of gathering private possessions is by receiving gifts at weddings or births. Officially this should be reported to the steward, but many people refuse to do that. In FRC some of the young people had their own digital cameras and even mp3-players with gospel music, although it is exceptional for individuals to use the computer for non-economic purposes.

Whereas in the past religious and community values always triumphed over economic and even family values, now a continuous growth of economic and family values can be observed, and hardly a revival of religious and community values. "The struggle between these two sets of values need not necessarily spell the doom of this culture but it forecasts a period of intense social upheavals over the next four or five decades that require all the social and psychological skills that Hutterites can muster to avoid their cultural assimilation" (Peter, 1987, 166). Family contact has increased and has become more important, owing to easier access to means of communication and transport.²⁵⁶ In some colonies the distinction between religious values and modernity is growing, and youth have questions for which the old sermons cannot offer an answer.

In sum, although the number of manufacturing businesses in the colonies is increasing, Hutterites still mainly rely on agriculture for income. Hutterite society is modern in its farm technology and generally efficient in its agricultural enterprises. Sustainability and environmental issues hardly play a role in the farm policy, unless they add to the economic viability of the colony. Although technology and modernity have brought much prosperity and scope for investments into the agricultural enterprises, they may also threaten the culture and social structure of the religious community. In daily life, the adherence to religious authority and communal religious and social-cultural values prevent the maximising of individual needs. Modesty and moderation are usually consciously accepted by the individual as necessary to a religious way of life, although in more liberal colonies materialism is increasing. The next section will consider the sustainability aspects of both the domestic and economic community,

including energy-use, transport, and nutrition, as well as the Hutterite population growth, affluence and technology.

4.5 Sustainability and environmental impact

In this section we will discuss specific behaviour choices regarding energy use, transport, and nutrition. Furthermore, it will describe the environmental impact of Hutterite colonial life in general on the basis of the IPAT-formula, which deals with population, affluence and technology.

4.5.1 Energy use

In contrast to their energy-intensive farms, the Hutterite household is characterised by a relatively low use of energy per person, because of the communal choice for a simple lifestyle, the basic equipment that is provided by the community, the small amount of private property, and the fact that cooking and baking are centralised for all members. Hutterite members have little personal spending money. The houses are relatively small and simple with few electrical appliances. The colony has a central and communal kitchen, with devices for cooking and baking and a huge cooling and freezing area. All meals for the inhabitants are cooked in the central kitchen. Nevertheless, in my host colony, every individual dwelling has a microwave and a refrigerator as well, in case people have to eat later owing to work, and for cooling drinks. FRC uses gas for cooking. Most of the ingredients are home grown and most of the meat is home butchered. Dishes are washed by hand. Individual families do not own washing machines; laundry is done in a central area, with about five communal washing machines and two dryers. For moral reasons Hutterites do not possess televisions, radios and computers with a connection to the Internet. However, when computers are used for economic reasons, they are accepted in the office. In some schools televisions are used for educational purposes.

Hutterites embrace technology for economic activities and usually operate energy-intensive farms. They are open to new technologies and also develop their own. In some colonies this has led to promising energy-saving activities. A South Dakota Hutterite Colony manufactures a certified advanced-design heat pump that uses less energy to heat and cool residential and commercial buildings.²⁵⁷ The company projects energy savings of 50-70 percent in the heating mode and 20-30 percent when cooling compared with other heat pumps. This technology has been introduced in several colonies by now, as well as in my host colony. The reason for this is simply saving money, needed to sustain the community. In 2007, Turin Colony in Alberta was the first Hutterite colony that attached 50 solar panels to the wall of their hog barn, collecting solar energy to heat their 600-animal facility. Although the project has not quite measured up to their expectations, the colony would do it again and would have doubled the number of tubes, according to the colony manager Waldner. Other Hutterite colonies have come to this colony to learn about the effects of solar energy. Waldner expects that, with improving technology, it might well be only a matter of time before other colonies begin converting to solar power.²⁵⁸

Some Hutterites are personally motivated by environmental concerns, but generally speaking the main motive is an economic one. This also holds true for other examples, like the Iron Creek Hutterite Colony in Alberta, where pig manure is being used for biomass power generation, to solve power, heating and manure problems.²⁵⁹ The colony sells its excess electricity. Sun-

crest Hutterite Colony, Alberta, has applied several energy-efficient measures in the barn, which together have reduced its total energy use by almost two thirds (MacDonald, 2005). Martinsdale Hutterite Colony, Montana, has placed twelve wind turbines on its property (Wood, 2005). More Hutterite Colonies have shown interest in the use of wind energy, because of money saving reasons and the wish to be self-sufficient where possible. So, as long as it is profitable, Hutterites are motivated and open to developing and applying energy efficient technology.

Behaviour choices concerning energy-use depend very much on the persons who make decisions. In my host colony, one of the elders tried to get a windmill placed on the colony, to provide wind energy, but the local power station did not want to cooperate. Other colony members did not participate seriously in investigating

the possibilities. As far as daily behaviour is concerned, an American woman living at FRC noticed that many people did not turn off the lights when they left a room.²⁶⁰ She thought that, because everything is communal property, nobody really feels responsible. Many behaviour choices depend on personal attitudes and women who come from other colonies in particular might bring in new habits. When Hutterites make positive decisions regarding energy use, in most cases finances are the main reason. The above-mentioned heat pump has been installed in recently built houses, providing a hot water cycle, a cooling cycle and floor heating.

Table 4.6 shows the yearly average energy use of FRC and the average energy use of other US Hutterite colonies in dollars. Compared to the average Hutterite colony, FRC uses less propane and coal, but considerably more electricity, which is probably due to the modern pig barn. Another huge source of energy used by the colony is vehicle fuel. For both diesel and gasoline the colony spends a yearly \$ 450,000, because the colony runs a truck business with eight semis. This is very unusual for a Hutterite colony, since the truck drivers might be outside the colony for a week. Most Hutterites therefore strongly disapprove of this business. In an interview with one of the ministers, he also strongly disapproved of it. Still he allowed the business, since “it is economically necessary for the colony. We bought the trucks for the farm, and they are so expensive that we need to use them in other ways as well.” The next section will discuss the use of cars leaving the topic of trucking aside, since this is extraordinary in Hutterite culture.

4.5.2 Transport

Hutterites do not possess private cars. Like all colony possessions, cars are communal property. Since individuals hardly ever travel on their own, colonies usually possess a van for transport of larger groups. Usually, most work takes place at the colony itself. Colonies use pickups, vans, and tractors for work on the farm. For visiting and shopping, permission must

Table 4.6 Yearly average energy use (in \$)

	FRC Total use	FRC per person (n=95)	Other Hutterite colonies in US*	Per person (n=95,6)
Electricity:	123,700	1,302	84,507	884
Propane:	34,860	367	51,794	542
Coal:	12,000	126	14,361	150
Natural Gas:	-		77,084	806
Coal Freight:	-		13,670	143

* Numbers of all other US Hutterite colonies are provided for by the electrician of FRC

be asked from the elders. Often, when a car from another colony arrives, it does not leave without taking either people or packages along to persons in that colony. In some colonies, women and especially children rarely leave the colony. Usually, women are not allowed to drive. Hutterites seldom fly and very rarely use the plane for visiting Europe.²⁶¹

FRC possesses six cars for visiting and transport to jobs in the neighbourhood (among which is a potato warehouse in a nearby village): one station wagon, one 12-person van and four pickups. In addition, the colony has six pickups and two vans that are only used on the farm. Excluding the farm cars, the colony uses one

car per 16 persons; including the farm cars, the colony uses one car per seven persons. The colony has one car for every three families available for recreation.

The suburban and the van are only used for visits to family and the city. The pickups are mainly used for commuter traffic (80%) and for visits at short distance (20%). The colony estimates that a total of 188,000 miles (= 302,492 km) per year is driven for recreation and 192,000 miles (= 308,928 km) for commuter traffic. This means that on average 1,938 miles per year per person is driven for recreation and 1,979 miles per year for commuter traffic. But since vehicle occupancy for recreation purposes is usually very high, the total number of miles per person travelled for recreation purposes will be higher. My observation is that this colony has an estimated average of two persons per vehicle for commuter traffic and usually a filled car for recreation purposes, which means 3 - 4 persons in the suburban and 8 - 12 persons in the van. To compare with the United States in general, in 2001 the US averaged 1.57 persons per vehicle (Center for Sustainable Systems, 2005). The amount of both recreation and commuter traffic in this colony is higher than it is at a typical colony, owing to the isolated position in relation to other Hutterite colonies, the relative openness to modernity, and specific decisions made by the elders regarding work.

Table 4.7 FRC transport compared to transport in North Dakota

	FRC	North Dakota
Private cars (incl. minivan) per person	0.06	0.48*
Private cars available per household	0.32	1.46
Average passenger miles travelled	3,918	15,275 (US)**

* Facts for 2002. Source: US Census Bureau, 2006.

** US passenger miles travelled in 2003. Source: Center for Sustainable Systems University of Michigan, 2005.

4.5.3 Nutrition

Several people have an influence on the nutrition pattern of the colony. The gardener, usually the German teacher, is responsible for the potatoes, vegetables and fruit, the butcher provides the meat, the steward supplies additional purchases, and the head cook oversees the daily cooking, done by two women at a time, in weekly turns. The head cook is also responsible for the storage of supplies and the cooler. In FRC, usually the head cook decides what to eat for lunch and the cooks are free to choose the ingredients for the evening meal. According to the head cook, the diet at FRC is quite balanced. She knows other colonies where "incredibly much meat is eaten". A woman, who had grown up at FRC and married into another colony, was also positive about the FRC menu and thought it was healthier than at her present colony. It depends very much on the head cook, whether new things can be tried out and whether many vegetables and brown bread are served. Breakfast may include pancakes, scrambled

eggs, bacon, omelettes, muffins and oatmeal. The other two meals consist of soup, meat, vegetables, potatoes or pasta, and salad. Hutterite recipes still reflect their journey through the east of Europe, by typical dishes such as ‘*burscht*’ (*Russian Borsjt*), ‘dumplings’, and *sauerkraut* recipes. In addition, they have ‘snacks’ at their dwellings in the afternoon, usually consisting of nuts and fruit.

Vegetables and fruit

Vegetables and fruit are practically all grown at the colony, under the responsibility of the German teacher and his wife (see table 4.8). The garden is a so-called ‘truck garden,’ which means they also sell garden products at the local farmer’s market. About two-thirds are grown for their own use and one-third for sales. Most of the Hutterite colonies participate in truck gardening. The size of the garden depends on the composition of the colony. When a colony consists of many families with small children, the garden will only produce for their own use, for there are not many hands to do the job. FRC has relatively small families with older children and thus much help is on hand. FRC has a 20-acre garden, including a 7-acre apple orchard. In winter and the first part of spring some things need to be purchased: celery, lettuce, tomatoes, cucumbers, paprika and “if they can get them cheap, some broccoli and cauliflower”. Usually these two vegetables are reserved for real feasts.

Ninety percent of the vegetables and all fruits at FRC are organically grown. The gardener has not succeeded to grow the cabbage crops without chemicals yet. As reasons for organic gardening, he mentioned: “In the first place, God has created this world, which was in balance, and use of chemicals disrupts this balance. In the second place, it is not healthy for humans to take chemicals in”. The agriculture as carried out at the colony, using high amounts of chemicals, is explained by the fact that there is a difference between what humans eat and what animals eat. When I confronted him with the fact that we in our turn consume these animals and that the potatoes are for human consumption as well, he replied: “You know, all Americans think that when you use chemicals according the rules and instructions on the label, it is safe”. Organic gardening is mainly stimulated by the personal preference of the gardener, who has not much influence on the large scale agriculture of FRC. Organic farming and gardening are not common among the Hutterites. According to the gardener, herbicides are used by a minority of the Hutterites, but insecticides are used everywhere.

Not many machines are used in the garden. FRC has a small tractor for ploughing, which is driven by the German teacher. Women do most hand work, like the hoeing to get rid of weeds. During harvest time young boys between 5 and 15 years assist the women. The garden does

Table 4.8 The FRC garden

Vegetables, fruit and herbs that are grown in the FRC garden.

Vegetables:

asparagus, beans (yellow and green), bell peppers, broccoli, cabbages, carrots, cauliflower, celery, cucumber, horseradish, jalapeno peppers, onions, peas, parsnips, potatoes, pumpkins, radishes, rhubarb, spinach, squash (zucchini, buttercup, acorn, spaghetti), sweet corn, and tomatoes.

Fruit:

apples, chokeberries, grapes, june berries, muskmelon, plums, raspberries, strawberries, and watermelon.

Herbs: (for meals and tea)

chamomile, dill, fennel, and parsley.

not have an economic focus and thus little technological change takes place. One exception is the ‘pea sheller’, invented by Hutterites themselves.

Meat

The total yearly meat consumption at this colony is about 15,930 pounds of meat (7,240 kilogram), as outlined in table 4.9. The amount of deer meat varies and depends on the number of hunting permits. This makes a meat intake of about 168 pounds or 76.2 kilo per person per year. However, not all men attend the noon meal at the colony.²⁶² Because it is very hard to

Table 4.9 Yearly estimated meat consumption of FRC (in lb)

Broilers	3,600	→ 900 broilers	(on average 4 pounds meat apiece)
Blue hens	1,560	→ 780 blue hens	(2 pounds meat apiece)
Turkey	867	→ 867 pounds turkey	(50 pounds every 3 weeks)
Duck	3,150	→ 450 ducks	(on average 7 pounds meat apiece)
Beef	3,500	→ 5 cows	(on average 700 pounds meat apiece)
Pork	1,250	→ 1,250 pounds pork chops	
Deer	420	→ 7 deer in 2004	(on average 60 pounds of meat per deer)
Hogs	1,584	→ 12 hogs	(on average 132 pounds meat apiece)
Total:	15,931		

estimate the amount of meat consumed outside the colony, I have confined the meat consumption to what is consumed in the colony by those present. Including guests an estimated number of 75 persons attend a typical meal at the colony, making an estimated average of 212.4 pounds or 96.5 kilo of meat per adult per year.²⁶³ One of the young man remarked: “Hutterites eat very much meat, more than the average American”. In 2005, Americans consumed an average of 221 pounds of meat per year, measured on retail-weight basis (United States Department of Agriculture, 2006). Hutterite meat consumption in my host colony therefore comes very close to the average American meat consumption, although there are differences in the kind of meat that is consumed, as outlined in table 4.10. Hutterites in FRC eat comparatively much poultry and less beef and pork than the average American (see table 4.10). Poultry has got a lower environmental impact per pound of meat than beef, but still, the environmental impact owing to meat consumption is very high in this colony. Particularly the men prefer much meat at their meals. Some women started to decrease their meat consumption for health reasons. Environmental reasons did not play a role in the choices regarding meat consumption. Hutterites in FRC hardly ever consume fish.

The broilers come in as chicks and within 8 weeks they are fed till they are big enough to be slaughtered. I participated in one of these broiler slaughters (see box 4.3). Blue hens are the layers in the chicken barn. These hens are kept for a year to lay eggs. Usually a hen moults once a year. After the moulting the eggshells become too thin and thus the hens are slaughtered after a year. A few are for their own use and the rest go to the soup factory. They do a dollar per hen. The turkeys come from a South Dakota colony. Often they exchange turkeys for the soup hens, since that colony does not have hens. Cows are delivered at the colony and butchered by colony members. “We use everything of the cow, except the balls”, as the head cook remarked. Pork comes from their own farm. The second class meat, which cannot be

sold, is consumed in the colony. In total 100 hogs a year are slaughtered for sale. In addition, the colony uses 1,080 eggs (about 36 boxes of 30 eggs) a week, which makes 56,160 eggs a year. They are eaten for breakfast and used for baking bread and cookies.

Other purchased products are rarely organic and if they are, that is a coincidence. The fact that vegetables and fruits in their own garden are organically grown is mainly due to the convictions of the German teacher who is responsible for the garden, and the fact that people are more aware of the consequences of spraying chemicals in their own garden, particularly for their own health. In products that are purchased from outside, environmental aspects are not taken into account. The purchaser does not consider it as important, which might partly be the result of a lack of knowledge, but also a lack of feeling responsible for the production processes. For the colony it is important that products are cheap. They are usually obtained in bulk and transported in one of the trucks on their way home from a business. The country where the products originate does not play a role in the purchase. These products are specific spices, flour, cereal, sugar, molasses, rice, and pasta, usually bought in Minneapolis. Since the colony has no cows, milk is purchased as well and used for direct consumption, cooking, and baking. It is not uncommon that the colony receives loads of unmarketable food with damaged packaging or from a pallet that has fallen down. Officially, the whole pallet is turned down, and the colony is happy to use the products that are still consumable. At the colony many hands are available to sort out the products.

The Hutterite diet contains considerable amounts of sugar and fat. Since many people stay at the colony all day and use modern devices, much work has become less physical. Studies find higher levels of obesity among Hutterites than among randomly sampled males and females from the same area.²⁶⁴ In my host colony, the older females in particular were aware of obesity and tried to eat as healthily as possible. In many houses vitamin and mineral pills could be found. Even though people did not always know their exact purpose, they trusted the magazines, which recommended the pills for health reasons.²⁶⁵

4.5.4 Environmental impact

This section will describe the general Hutterite environmental impact on the basis of the components of the IPAT-formula, and deal with population growth, their level of affluence and environmentally sound forms of consumption, and the role of technology.

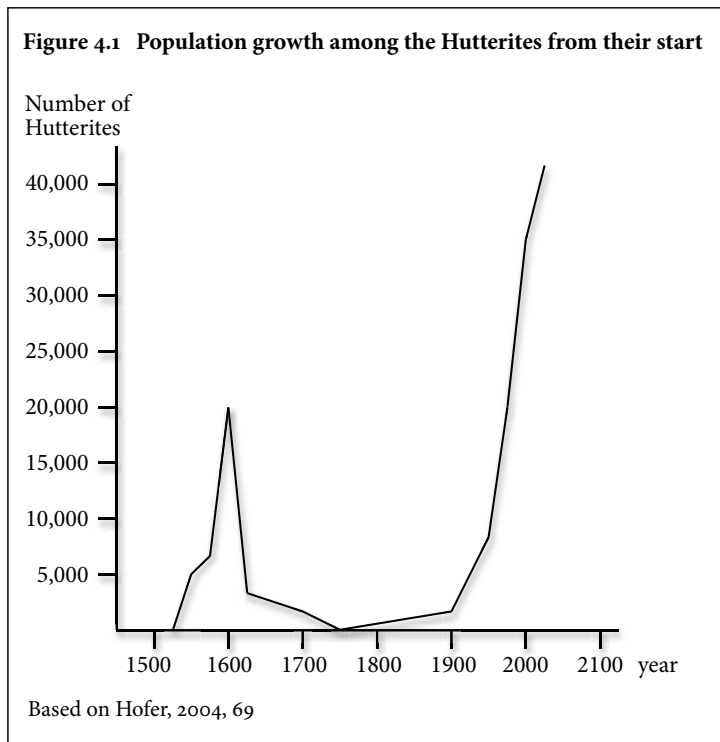
Table 4.10 Yearly estimated meat consumption per capita (in lb)

	Total FRC	Per capita (n = 75)	US per capita*
Broilers	3,600	48	86
Blue hens	1,560	20.8	1
Turkey	867	11.5	17
Duck	3,150	42	-
Beef	3,500	46.7	66
Pork	1,250	16.7	50
Hogs	1,584	21.1	
Lamb/mutton	-	-	1
Deer	420	5.6	-
Veal	-	-	0.5
Total:	15,931	212.4	221.5

* Source: United States Department of Agriculture, 2006, table 10.

Population

In 1880, there were 443 Hutterites in four colonies. Their number increased to 8,546 persons in 1950, to 21,521 in 1972, and to an estimated 44,000 in 2006 (Willms, 1958, 398; Kienzler, 2005, 196). This is illustrated in figure 4.1. Until the 1950s, the Hutterite population had multiplied by a factor of nearly 20 in seventy years, which was the highest rate of reproduction of any modern group of people at that time. Eaton and Mayer (1954) found an average number of slightly more than 10 children per completed Hutterite family in the 1940s and 1950s. In the 1960s, Hutterite growth gradually started to decrease. Until about 1965 they had a growth of 4.12%, while in 1980 the population growth was 2.91%, a decline of 1.2 %. Between 1964 and 1977 the *Dariusleut* grew fastest (3.22%) and the *Schmiedeleut* slowest (2.61%). In 1995 an average completed Hutterite family had 6.6 children among the *Dariusleut* and *Lehrerleut* (Perterer, 1998, 211), and a typical *Schmiedeleut* family had five to six children. Perterer found that the level of conservatism had much influence on the average number of children per completed family: conservative *Lehrerleut* 11.3, liberal *Lehrerleut* 4.0, conservative *Dariusleut* 8.0, liberal *Dariusleut* 4.45 children (Perterer, 1998, 212).



Another reason for the decline in family size, already mentioned in section 4.4.5, is the influence of modern technology, leading to a change in the social structure. The ‘in between years’²⁶⁶ last longer and the average age at which a Hutterite gets married is going up. In the 1960s Hutterites generally married between the age of 20 and 22. In the 1990s the average marriage age was 25 for women and 26 for men (Ingoldsby, 2001, 384). Marriage used to give prospect to a higher status, but since the structure of the colonies are getting less socially-oriented and more

technology-oriented, this has become less important.²⁶⁷ They appear to hold on to their individual freedom. A woman of FRC discussed these issues with her 11-year-old son. She married at the age of 26 and said: "This is early enough. You must enjoy your single years!" A later marriage age also translates into smaller families. The period in which women have babies has reduced considerably at both ends: the age at which women have their first baby has gone up and the age at which they have their last baby has gone down. Now most women have their children between 25 and 35 years. After the age of 35, many Hutterite women intervene in their fertility. Since the 1970s, the family doctor had more influence in the colony and women may apply birth control when their health is in danger. The same counts for the lady mentioned above. She has had four children and told me that on doctor's advice she will have no more.²⁶⁸ Ingoldsby concludes that Hutterite confidence in medical counsel seems to override their opposition to birth control. In this way, women gain more control of their own lives.

The Hutterites have been remarkably successful in maintaining their community. The loss of members through defection has been minimal, although this number is rising. Eaton and Weil (1955, cited in Peter, 1987, 226) found a total of only 123 permanent defections for the period 1918-1950. For the 1980s, Peter found a defection of 300 Hutterites over five years out of a total population of 21,800 persons. Half of this number left a *Schmiedeleut* colony.²⁶⁹ A number of usually non-baptised young men leave the colony temporarily, in search of adventure, but about 85-90% of them eventually return.²⁷⁰ A FRC elder told me he had left the colony for three years when he was young: "In the world I was only focused on work, making money, and spending money. I found nothing valuable outside the colony." The only thing he regrets is that he did not travel more in that period. Another elder remarked that people who "go to the world" always face trouble. "90% of the women are pregnant within a year. In the colony they are protected by the community, their parents, and the teacher. In the world these women don't know how to say 'no'."²⁷¹

One of the reasons that particularly in the more liberal colonies defection increases is a growing individualism, which also affects Hutterite faith. A personal relationship with Christ becomes more important, and many Hutterites leave the colony to join a more evangelical church. Another reason is that Hutterites cannot find answers to rational questions about how religion relates to present day issues, since Hutterites rely on old sermons and tradition and discourage personal bible study. Other reasons are boredom due to lack of work, too much personal money due to *Eigennutz* (Hofer, 1998), the appeal of high-paying jobs outside the colony, the wish to advance to higher education, a non-Hutterite partner, and the wish to make your own decisions. At the beginning of the 21st century, a significant 15 percent of residents of Hutterite colonies decide not to stay in the community (Janzen and Stanton, 2010, 234).

Affluence

The affluence in Hutterite colonies has got two faces. In their agricultural business, Hutterites usually have modern barns, equipment, and silos, making much profit, but in their domestic life, they can be characterised by an austere lifestyle, especially the more conservative colonies. The houses, furniture, kitchen, laundry, and clothes all belong to the colony and are used in common. Fashion is not important in colony life and furniture is only replaced when it has become too old. The same counts for clothes: since the style does not change, clothes are worn and repaired till they are worn-out. The houses usually have little abundance and luxury. Many things in the house and on the farm are repaired and reused, since Hutterites are skilful people. Cars and vans are used communally.

In my host colony, this communal use of things sometimes leads to irresponsible behaviour. When we went out for a day with the van, many people left the car filled with mess without cleaning it up, for it was the colony car. The American lady who stayed in the colony expressed this inconsistent attitude towards communal property: "Sometimes people say that everything belongs to everybody and therefore feel free to take snacks from the cupboards in other people's houses, and another time they say they do not own a thing and treat communal property in an irresponsible way."²⁷² This might be a consequence of the fact that all purchases are supervised by the colony manager and individual Hutterites are not always aware of the value of things. Besides, the fact that most investments are done for the modern businesses sometimes clashes with the austerity in daily life. Already in 1972, Barkin and Bennett (1972, 474) stated that powered machinery and economic gadgets to some extent function as a substitute for personal consumption.

Both communal as well as individual affluence are gradually increasing. Over the last few decades, children have had more toys to play with, kitchens more conveniences and personal property has been growing. The consumption of more consumer goods threatens the traditional value system of moderation and separation from worldly things, and might have a divisive effect.

Technology

As far as technology is concerned, a clear distinction can be made between the austere domestic area, in which technology is largely controlled, and the high tech economic area as described in section 4.4.4. The kitchen has to be placed somewhere in between. Although dishes are done by hand, the kitchen is well equipped with modern appliances for cooking and baking, like a 'commercial kitchen'. The colony has food processors, devices to peel potatoes, and a huge cool store. Nevertheless, preparation of meals

still calls for many hands, to wash and cut vegetables, make dumplings, roll the buns, etcetera. Technology is also used for energy-saving activities, as discussed in section 4.5.1. Although usually saving money is the main reason for applying these energy-efficient technologies, it still decreases the environmental impact of the colony. The scale of a colony might offer many opportunities to invest in and apply this energy efficient technology.

To recapitulate, a factor conflicting considerably with ecological sustainability in the long term is their high fertility rate. Although the number of children per completed family is going down, it still contributes considerably to the environmental impact. The family size is lowest among the more liberal colonies, but at the same time these colonies have more affluence and technology than the more austere conservative colonies. The more conservative Hutterites have bigger families, but a lower environmental impact per person. When the present developments are continued, it may be expected that the family size will continue to decrease in all Hutterite branches. Although materialism is growing as well, modesty is still an important value in daily life, deeply rooted in Hutterite culture, and is likely to keep material growth

Box 4.7 From my diary: In the kitchen

Much work in the kitchen is done by hand. Every Friday morning all women of FRC kneel down with bucket and floor doth to scrub the kitchen floor. Likewise, all dishes are done by hand. Women sometimes complained that this is due to the fact that they are not allowed to make official decisions: "If men had to do the dishes, they would have installed a dishwasher years ago". Other women, however, enjoyed chatting and singing while preparing the food or cleaning the kitchen.

under certain control. The communal use of the kitchen, laundry, and other devices lead to an efficient use of energy and materials. Nevertheless, energy use is very likely to rise because of the appliance of new technologies on the farm and in businesses at the colony. Because of the scale of the Hutterite businesses, the appliance of large-scale technologies for reducing the need for energy and producing green energy may become financially interesting.

4.6 Hutterite worldview and sustainability

The Hutterite way of life cannot be labelled environmentally sound in all aspects. Hutterites are characterised by a substantial population growth, a diet with lots of meat, and intensive modern livestock operations. Nevertheless, their communal way of living and their values of modesty and soberness are interesting for the discussion on sustainability. In this concluding section I will discuss the relation between Hutterite religious worldview and sustainability and deal with clashing values in section 4.6.1 and promising values for sustainability in section 4.6.2.

4.6.1 Clashing values

An important basis for clashing values regarding environmental impact in the Hutterite worldview is their dualistic thinking regarding the spiritual and the material. Since the earth belongs to the material world, most Hutterites are not focused on preservation of the earth, but use it to preserve their souls for heaven. The spiritual life in the colony, including religious upbringing, domestic life, and education, is focused on tradition, order, simplicity and austerity. Work in itself is also part of this spiritual life, since the Bible calls mankind to work, and idleness only leads to bad pastimes. The material side includes the economic activities, needed to maintain the spiritual side of the colony: colony life itself. Hutterite values as their high work ethic and obedience to the elders and managers, together with their communally shared finances, certainly add to the success of their economic enterprises.

The clash of values starts where the economic activities are getting determined by different values and morals than those that determine spiritual life. This is most visible in the application of technology. As long as it is economically efficient, technology is embraced on the farms. Computers and other media are allowed on the farm and other businesses, but prohibited in domestic colony life, for it may influence religious beliefs and cultural values. These traditional beliefs and values are based on the daily read old Hutterite sermons, and as long as Hutterites are not stimulated to find new religious answers on problems they are facing in their modern businesses, these worlds risk growing apart more and more. A problem is that many colony leaders fail to acknowledge this conflict between religious beliefs and technological improvements. This is an important difference with the Amish community, where questions regarding new technologies and its effects are considered in the light of their religious and cultural values. Where Hutterites embrace technology that lead to higher profits, Amish restrict the use of technology in both their homes and their businesses, which are more integrated in Amish society.

Another important clash has to do with leadership and the way authority has been organised in the colony. Hutterite colonies are organised in a hierarchical way and the main decisions are made by a small number of people. It depends much on the minister's and council's orientation on environmental issues, how much attention is paid to it. Personally held values

such as care for the environment might clash with the decision-making system of the colony and obedience to the council. When the council does not agree with a person's wish to buy organic products, cook less meat, or build a windmill, the individual has to give in.

Affluence

Many clashes with traditional Hutterite values are caused by money, affecting both Hutterite culture and the environment. In the end most decisions related to the farm, businesses, and energy-use are based on financial considerations. Therefore, my host colony allowed a truck business, leading to young men being outside the colony for many successive days. For financial reasons, the colony decided to demolish the biotech pig barns, about which the farm manager was very positive, and expand the modern barn for hybrid pigs. On the other hand, financial considerations also worked out in a positive way for the environment, by creating better water irrigation and an energy-efficient heating pump in the new dwellings. When decisions are only driven by financial motives, however, they are not sustainable in the long term, because prices may fluctuate. In Hutterite worldview, profits serve for maintaining the colony, which is among the highest values in their value-hierarchy.

In addition, at the individual level, the more liberal Hutterites are getting more personal spending money, leading to an increase in personal possessions and a possible increase of inequality. Nevertheless, the daily lifestyle of Hutterites is still characterised by modesty and soberness. The houses are furnished soberly, with vinyl on the floor and white walls decorated with at most a painting, a clock and a calendar. The colonies are located far from cities and shops and an individual Hutterite hardly ever goes out shopping on his own. For religious and moral reasons Hutterites do not possess televisions, radios and computers with a connection to the Internet in their dwellings, although this becomes harder to keep to with an increase of media-use in Hutterite businesses.

Technology

Technology directly influences the social structure and the value system in the colony. The more modernised a colony economy gets, the more separation between the spiritual and the economic side of the colony generates clashes of values. Most of Hutterite ideals and values are based on tradition, while their material concerns are more and more rationalised. The education Hutterites get in German School and the first eight or twelve grades in primary school may not be sufficient for the information they need to solve complicated, technological questions. Questions regarding Hutterite religion are getting more rationalised as well, clashing with the teachings in the old sermons, written in the 16th and 17th century. Jovetter, the minister of FRC, thinks it is important to give room to the Holy Spirit and therefore regularly adds personal notes to these sermons, but in doing so he is rather an exception in Hutterite society. Personal Bible study is prohibited, for it may evoke new ideas and create schisms. The rejection of personal study leads to Hutterites leaving the colony to join a more evangelical church.²⁷³

Furthermore, many technological innovations generate a certain amount of individualism, since Hutterite men now work alone on a machine. Individualism clashes with the communal values proclaimed by Hutterite faith, both regarding accepting authority and limited freedom, and social relations in general. Technology leads to specialisation, increase of knowledge, and specific power, which might lead to a change in authority patterns. Besides, technology leads to a restructuring of labour in the colony. When tasks become more specialised it will be

harder for other Hutterites to do the job, and when technology replaces manual work, it may result in a certain hidden unemployment in the colony, leading to either boredom or young men going out to work for outsiders.

Population growth

The factor most conflicting with ecological sustainability in the long term is their population growth. Having children is very important among the Hutterites. Still, the average family size has decreased considerably from an average of over 10 children per family in the 1950s to an average of 6.6 children per family among the *Dariusleut* and *Lehrerleut* in the 1990s, and a typical *Schmiedeleut* family of five to six children. As a result, it takes longer before a colony needs to branch out. Besides, it might get harder to find sufficient and fertile areas to establish new colonies and to maintain the basic values of the colony. When a colony cannot branch out, it must either grow in size and productivity, or population growth must be controlled. Because growing production leads to a higher pressure on resources, techniques to confer resource conservation must be subject to continuous revision and improvement as well (Ben-nett, 1993, 182,190).

4.6.2 Promising values

Giving up oneself to Christ and to communal life are the most important religious principles for a Hutterite, translated into the value of moderation, the practice of shared possessions, and a focus on the local colony, which are the most promising Hutterite values for sustainability. Choices based on these values have become part of their identity.

The communal way of living provides a huge social capital and security. At the same time, the social capital is a strong element in itself for maintaining this communal structure and religious way of living, as can be illustrated by the high number of young people who, having left the colony, eventually return, for they often miss social coherence and structure outside the colony. The community functions as an extended family and in fact it often consists of many relatives a person can count on. Social life is organised in such a way that social relationships are maximised, with a clear socialisation and supervision. Individual Hutterites have little spending money. The community provides for basic equipment and all members receive according to their material needs. Spiritual richness is valued higher than personal material wealth. However, as we have seen in section 4.4.5, for rich colonies it might be a challenge to cope with an increasing difference between personal consumption austerity and collective wealth.

The Hutterite household is characterised by a relatively low use of energy and materials per person and low throughput of materials because of their choice for a modest lifestyle. Practically all things in the colony are shared: tools, utensils, washing machines, cars, and to some extent the houses. All meals are prepared in one kitchen, leading to a more efficient use of energy per person than if all families cooked separate meals for their family. Many domestic activities in the community are done by hand, like gardening, food preparation, canning, making the weekly rolls and pies, cleaning, butchering, saving energy and contributing to social cohesion. Besides, the colonies try to be separated from the outside world as much as possible, resulting in a relatively low use of transport, especially a low amount of commuter-traffic.

Hutterite moderate domestic life is framed by rules and norms to maintain the community and the religious culture. Explicit choices are made to guarantee their culture and quality of life. Because these choices are connected with their quality of life and religion, we may presume that there is a good chance that these behaviour choices will be sustained in the long run.

A Hutterite sees the community and sharing of possessions as a means for salvation and from early on young Hutterites are taught to renounce individual material desires and to share with others. Thus, the religiously motivated values of preservation of communal life and simple living result, as far as domestic life is concerned, in a lower impact on the environment, except for specific consumption patterns.

As far as the economy of Hutterite communal living is concerned, many colonies appear to be cost-efficient and financially durable, as shown by the continuous branching out. Since colonies are established with a long-term perspective, they invest in sustainable housing and heating systems. They apply crop rotation to keep the soil fertile. For the use of chemicals, most Hutterite farm managers rely on the information of extension agents, university programs, and the requirements of purchasers. As long as it is not the most profitable choice, most colonies will not shift to organic farming. Sustainable choices regarding the economic system emanate in most cases from financial reasons (energy saving), practical considerations (fallow corners of land due to irrigation circles), or the wish to be independent of the outside world (wind energy and solar energy). Favourable aspects of colonial life are the availability of employees and the scale of the colony, which offers many possibilities to apply energy-efficient technology.

Although some Hutterite behaviour choices may be environmentally benign at present, they are also vulnerable, because they are not deeply anchored in Hutterite values and religious worldview yet. Furthermore, the appliance of new technologies in the colony might challenge the Hutterite culture and social system. The decreasing family size will have a positive effect on the contribution to the environmental impact of the Hutterites. As long as the values of austere domestic life and shared possessions remain the roots of the quality of Hutterite colony life, as part of their religion and tradition, moderation is expected to be continued in the longer term. Furthermore, the communal lifestyle can be promising base for choices that are both good for the economy and the environment. When the Hutterites will discover the relevance of their religious worldview for their daily practice, environmental behaviour choices may be expected to find fertile soil.

Chapter 5 Franciscan Order and the practice of poverty

5.1 Introduction

Having discussed the Anabaptist tradition, we now turn to the worldview and environmental impact of Roman Catholic communities, monasteries and convents. In this chapter the Franciscan worldview and values will be discussed in relation to sustainability. The Benedictine worldview is the subject of chapter 6.

In 1929, the International Congress for Animal Welfare in Vienna declared the 4th of October, the feast day of Saint Francis of Assisi, ‘World Animal Day’. Fifty years later, by referring to Francis’ “marvellous gift of fostering nature” and his ‘Canticle of the Creatures’, Pope John Paul II proclaimed Saint Francis the Patron Saint of Ecologists.²⁷⁴ As we have seen in chapter 1, Lynn White had already proposed this in 1967. White emphasised Francis’ virtue of humility as a way to “depose man from his monarchy over creation and set up a democracy of all God’s creatures” (White, 1967, 1206). He described Saint Francis’ worldview as an “alternative Christian view of nature and man’s relation to it: he tried to substitute the idea of the equality of all creatures, including man, for the idea of man’s limitless rule of creation” (idem, 1207). Although Saint Francis is now mainly known as a green saint who preached to birds, it was not until the 1970s that a serious reflection on Francis and his dealing with nature took place within the Franciscan Order. Before that, care for nature hardly appeared to be an issue. The order primarily focused on poverty and mission, which are at the heart of the Franciscan worldview.

In this chapter, I will discuss whether the Franciscan view on materialism, based on the belief that all possessions and goods of creation belong to God, and their daily practices can offer an alternative way of dealing with nature’s resources. Therefore, I studied the beliefs, values and daily practices regarding environmental issues of Franciscan communities in the literature, by interviews and during field researches. The field study represents the width of the broad Franciscan family and includes communities of Friars Minor, Poor Clares, and two lay communities that have been founded by Franciscan Friars and have incorporated certain Franciscan values.²⁷⁵ In this chapter I will mainly use the examples of four Dutch communities: the Friars Minor of the monastery ‘*Sint Antonius van Padua*’ in Megen, the Sisters Clare of the monastery ‘*Sint Josephsberg*’ in Megen, the Franciscan Ecological Project Stoutenburg and the ecumenical community *De Wonne*. The monastery of Friars Minor in Megen consists of 9 brothers. In this monastery, novices from the Dutch Province get their noviciate and the Franciscan Youth Work is situated here as well. The community of the Sisters Clare in Megen consists of 19 sisters. In contrast to the outgoing Friars Minor, the contemplative Sisters Clare mainly live and work in the monastery. One of their main sources of income is their host

bakery. The Franciscan Ecological Project *Stoutenburg* started in 1991 as a religious community, aiming to live and work in harmony with nature. Nowadays, only one of the seven residents is a professed Franciscan Friar, while the others are lay people. *De Wonne* was set up by a Franciscan Friar (Capuchin) and started in 1979, aiming “to live, pray, share and celebrate together, and open the house to people in need.” The three characteristics of this community are hospitality, recycling and contemplation. *De Wonne* consists of an ecumenical group of permanent residents²⁷⁶ and an average of 28 temporary guests. I am aware that these four research groups differ from each other in many ways and that the lay communities include both Franciscans and lay people. The Franciscan family however consists of a broad diversity of members and by choosing these diverse communities I hope to do justice to this width of the Order. The focus of this chapter will be on shared Franciscan values that have been adhered to from the past in monastic life and the way these values are now put into practice in the different communities.

This chapter describes and analyses the Franciscan worldview in relation to sustainability. Section 5.2 deals with the life of Saint Francis of Assisi, his writings, and the development of the Franciscan Order. Section 5.3 describes the Franciscan worldview and the main values. Section 5.4 discusses Franciscan visions and practices regarding labour, finances, and agriculture and will give examples from the case studies in several segments of the Franciscan family. Sustainability is the subject of section 5.5 and will be discussed on the basis of present-day practices and behaviour choices within Franciscan communities regarding energy-use, transport, and nutrition. The chapter concludes with a general discussion on the contribution of Franciscan religious worldview to the issue of sustainability.

5.2 The life and Order of Saint Francis

5.2.1 The *Poverello*²⁷⁷

Most of what we know about the life of Saint Francis originates from a limited number of sources. In addition to what Francis wrote himself (see section 5.2.2), some early biographers need to be mentioned. The oldest source is Thomas of Celano, who joined the brotherhood during Francis’ lifetime, around 1215. He wrote two biographies, the ‘*Vita Prima*’ (1229) and the more comprehensive ‘*Vita Secunda*’ (1247).²⁷⁸ Another source is a joint narrative written by three eyewitnesses of Saint Francis: Leo, Rufinus and Angelus (1246). Saint Bonaventure has written the most famous biography, the *Legenda Maior* (1260-1263).²⁷⁹ Although this biography is largely based on the *Vitae* of Celano, Bonaventure attributed apocalyptic features to the Saint. Both Celano and Bonaventura aimed to depict parallels with the life of Christ and therefore the historical truth of the content might be doubted.

Francis was born in the year 1181 or 1182 in Assisi, at a time when European society was shifting from a feudal system to an urban culture with a developing trade system. His father Pietro Bernardone was a cloth merchant and his mother Pica was probably a Frenchwoman.²⁸⁰ Predestined to succeed his father, the young Francis grew up as a cheerful boy who loved festivities. He received some elementary education from the priests of St. George’s at Assisi, though he was not very studious, and his education remained incomplete. During his youth many Umbrian cities were in combat. When Francis was about 20 years old, Perugia captured Assisi and Francis was held captive for over a year. He became sick and started to consider the emptiness of his existence. In 1205 Francis enlisted in a military expedition to Apulia,

but God spoke to him in a dream and he abandoned his plans to become a knight. He went instead on pilgrimage to Rome.

Two encounters brought about a decisive and fundamental change in Francis' life. The first was a confrontation with a leper, an outcast of society. In his Testament Francis describes this encounter as the start of his conversion.²⁸¹ The second occurrence took place while he was praying before a crucifix in an old chapel of San Damiano, near Assisi. He heard a voice saying: "Francis, go and repair my house, which as you see is falling into ruin." Francis understood the message literally and sold clothes and horse to buy stones for restoration, which caused a rift between him and his father. Literally following the Gospel (e.g. Mt.19:21 and Lk.18:22), Francis gave all his possessions to the poor.²⁸² Simply dressed in a coarse woollen tunic, he begged for stones, cared for lepers and preached penitence, conversion, and brotherly love. As soon as the order had grown to twelve persons, Francis wrote his first rule and Pope Innocent III approved the Order of the Friars Minor in 1209.²⁸³ The order expanded with men from all classes. It was based at Portiuncula, but often the brothers were on travelling to preach the gospel.

In 1219 Francis went on a crusade to the Saracens.²⁸⁴ Returning from the Holy Land, he brought back a painful eye disease that eventually caused blindness. In 1220 Francis passed the leadership of the Order on to Peter of Cattaneo and started to write down a more comprehensive Rule. Although this Rule was approved at the General Chapter of the Friars Minor in 1221, it was too lengthy to be a formal Rule and two years later Francis revised it with the help of Cardinal Ugolino, the later Pope Gregory IX. This Second Rule, or '*Regula Bullata* of the Friars Minor', was approved by Pope Honorius III in 1223, and became the official Rule of the First Order of Saint Francis. It describes the Franciscan way of life as maintaining the Gospel of Christ, living in obedience, chastity and poverty, with special emphasis on absolute poverty for both the individual and the community. This focus on poverty was also an indictment of the wealth of the churches and monasteries at that time.²⁸⁵ Francis was furthermore opposed to study, for he understood knowledge as a spiritual possession and feared pride among the educated brothers.²⁸⁶ Gradually, Francis became stricter on himself and others.

In 1224 Francis retreated with three friends for 40 days at the mountain of La Verna to fast.²⁸⁷ Back in Umbria, he suffered increasing pains throughout his body, which worsened during the last years of his life. His body was worn out after all these years of continuous toil and severe fasting. He could no longer bear daylight and was almost blind. It was during this illness that he wrote the Canticum of the Creatures (see section 5.2.2). Francis passed away on the evening of the 3rd of October 1226 at the age of about 44 years. In 1228 he was canonised by Pope Gregory IX.

Nature legends

The early biographers, and especially Celano and Bonaventura, narrate a large number of stories about Saint Francis in relation to plants, birds, and other animals. Many of them are legends, not written down for their historical truth, but to give a distinctly moral message and to add to the acclamation of Francis as Saint. Apart from the number and diversity of these stories, this is not unique for Saint Francis. Boersema (2002) shows that biographies of many desert fathers, Irish saints, and other medieval saints are interlarded with stories about the special relation between a saint and the natural world. Wonders were not performed for their own sake, or to exercise dominion over nature in a negative sense, but the saints "sought

to restore the original harmony of God's creation, thus showing how it had been intended" (Boersema, 2002, 68). Likewise, Saint Francis is often depicted with a certain authority over nature. Even wild animals, approached as subjects that bear individual responsibility, are described as obeying and changing their conduct, and ultimately venerating God.²⁸⁸

The two most narrated stories are the 'Sermon to the birds' and the 'Wolf of Gubbio'. The Sermon to the birds is probably described most veraciously by Celano (1 Cel 58).²⁸⁹ In brief, on his way to Bevagna, Francis saw a swarm of doves, crows and jackdaws. When Francis noticed they did not fly away, he gave them a sermon, inviting the birds to praise their creator for His care, alluding to Matthew 6:26 and Luke 12:24. The birds listened to Francis, and after blessing them, he wondered why he had not preached to birds before. The story of the Wolf of Gubbio (Fioretti 21) tells about the town Gubbio, which was being terrorised by a wild wolf. When Francis approached the wolf, the Saint halted his attack with the sign of the cross, commanded the wolf to change his evil ways and live at peace with the townspeople. In return they would feed him. For the next two years, until the wolf died, he and the people of Gubbio kept the agreement. This story is most likely not historical and can be seen as a legend to make clear and visible the power of good over evil and how relations can be restored. Loek Bosch OFM explained it in an allegorical way: "This story is not about a wolf at all, but it is about overcoming the wolf in all of us."²⁹⁰

Saint Francis did not write an autobiography. Nevertheless, his writings reveal to us what he perceived as the main elements of his worldview, conviction and mission. The next section will briefly describe the main writings that have been attributed to Saint Francis and will conclude with a characterisation of the person Francis.

5.2.2 Saint Francis' writings

Francis was neither a philosopher, nor a theologian, theoretician, nor a great writer. He showed his convictions and mode of life particularly by his deeds and spoken words. Still, he left us 31 different texts, mentioned in appendix 4, which are a witness to his faith and show both his mystical side and his involvement with society.²⁹¹ The main goal in Francis' life was to follow Christ, which is the core of his message in all his writings. The most relevant texts for the discussion on Franciscan worldview and sustainability will be elaborated in more detail in this section.

The Rule of 1221 starts with regulations for the welfare of the brothers. It describes a way of life with mutual obedience, chastity, and without possessions. Also, it gives regulations on how to participate in the brotherhood and describes the divine office and the practice of fasting together with regulations on labour and mission, admonishments, and thanksgiving to God. Characteristic are the many citations from the Gospel to underscore its significance. Comparison of the Rule of 1221, which was only approved by the Franciscan brotherhood, and the revised and papal approved Rule of 1223, reveals a changing brotherhood.²⁹² Where the Rule of 1221 had been written for an itinerant brotherhood, the Rule of 1223 provides opportunity for permanent residences and also for mental labour. More attention is paid to clergy, of whom there were very few in the early Order. At the end of Francis' life, the brotherhood had become a regulated and institutionalised Order.

The Testament, in which Saint Francis most openly describes his ideas about the brotherhood, starts with a personal story about his life and conversion. A considerable part of the testament exhibits Francis' love and reverence for God, the clergy, the Eucharist and the divine office. He exhorts his brothers to stay within the Catholic faith and under church authority.

Regarding lifestyle, he emphasises poverty, simplicity, and obedience to the minister general of the fraternity and the guardians. He also urges the brothers to work, for that would pertain to honesty and repel idleness. Only when the brothers did not receive any wage in kind were they allowed to ask for alms. The brothers should greet with the words: “The Lord grant you peace.” Saint Francis concludes his testament with a blessing for all who observe his words.

Like the Testament, the Second Letter to the Faithful and the Salutation to the Virtues demonstrate Francis’ religious vision and values. The Letter encourages the faithful to love Christ and their neighbour, to respect the clergy, and to live in poverty, purity, mercy, charity, humility, obedience, service, patience, and moderation. In the Salutation to the Virtues Saint Francis describes six virtues, all in female terms: ‘queen Wisdom’, ‘sister holy pure Simplicity’, ‘lady holy Poverty’, ‘sister holy Humility’, ‘lady holy Charity’ and ‘sister holy Obedience’. These virtues partly correspond with the values mentioned in the Second Letter to the Faithful and might be seen as most characteristic for the spirituality of Saint Francis. They will be further discussed in section 5.3.2 on values.

Writings on nature

Nature is rarely referred to in Saint Francis’ own writings and when he does mention natural elements, this is usually in a practical rule or a reference to specific Bible verses (Sorrell, 1988; Boersema, 2002). In the Rules of 1221 and 1223 Francis prohibits the keeping of animals and riding of horses (see sections 5.4.2 and 5.5.2), mentions thorns in the light of the Parable of the Sower (Mt.13), and encourages the brothers to be shrewd as snakes and innocent as doves (Mt.10:16). The Admonitions mention the ‘tree of knowledge of good and evil’ (Gen.2) and worms (Ps.22:7; Acts 12:23; also in EpFid 1)²⁹³, and ‘all the creatures’ for they serve God better than man. The Salutation to the Virtues states that who possesses the virtue of the ‘holy Obedience’, “is subject to all persons in the world and not to man only, but even to all beasts and wild animals, so that they do whatever they want with him, inasmuch as it has been given to them from above by the Lord (John 19:11).” These texts do not resemble a celebration of the equality of creatures, or even submission to animals, but use these examples as illustration of how far a Christian should go in pursuit of obedience to God.

In Psalm VI, Francis mentions dogs (Ps.21:17) and a roaring lion (Ps.21:14), and in Psalm XIV he follows Ps.69:35 by singing that God is to be praised by heaven, earth and the creatures of the sea. This can also be found in the Letter to all the Faithful II, which says: “[L]et every creature, which is in Heaven, on earth, in the seas, and in the abyss render praise, glory, honour, and blessing to God (cf. Apoc. 5:13).” The call to creation to praise God can also be found in what is probably the most famous of Saint Francis’ works, the ‘*Laudes Creaturarum*’, usually translated as the ‘Canticle of the Creatures’ (see box 5.1).

The Canticle of the Creatures is believed to be the first work of literature in the Umbrian language. Saint Francis composed most of the Canticle in the winter of 1224/5, while he was mentally and physically distressed.²⁹⁴ The song is composed along a line from the top downwards; it begins with the ‘Most high, all powerful, good Lord’ and ends with ‘great humility’. The central theme of the song is praise and glory to the Lord, given by all creatures, first by the sun, moon and the stars, followed by the four elements wind, water, fire, and earth, and finally by humans and even by death. Because the Umbrian word ‘*per*’ can mean both ‘by’ and ‘for’, the song could be sung as both an incentive to praise the Lord by all creatures, and as a song to thank God for all creatures. In view of Francis’ devotion to the Bible and the parallelisms with Ps.148 and the Song of the three young men (Dan.3:57-88) in the call to active

participation in a united praise, the use of 'by' is regarded as most plausible (Sorrell, 1988, 115; Nolthenius, 1992, 272).²⁹⁵

Box 5.1 Canticle of the Creatures

Most high, all powerful, good Lord, Yours are the praise, the glory and the honour and every blessing. To you alone, Most High, they belong and no man is worthy to pronounce your name.

Be praised, my Lord, with all your creatures, especially Sir Brother Sun, who is day and by him you shed light upon us. He is beautiful and radiant with great splendour, of you, Most High, he bears the likeness.

Be praised, my Lord, by Sister Moon and the Stars, in the heavens you formed them clear and precious and beautiful.

Be praised, my Lord, by Brother Wind and through Air and Cloud and fair and all Weather, by which you nourish all that you have made.

Be praised, my Lord, by Sister Water, who is very useful and humble and precious and pure.

Be praised, my Lord, by Brother Fire, by whom you light up the night; he is beautiful and merry and vigorous and strong.

Be praised, my Lord, by our Sister Mother Earth, who sustains and guides us, and produces diverse fruits with coloured flowers and herbs.

Be praised, my Lord, by those who pardon for love of you, and endure sickness and trials. Blessed are they who shall endure them in peace, for by you, Most High, they shall be crowned.

Be praised, my Lord, by our Sister Bodily Death, from whom no man living can escape. Woe to those who die in mortal sin. Blessed are those whom she will find in your most holy will, for the second death will do them no harm.

Praise and bless my Lord and give him thanks and serve him with great humility.

In the Canticle of the Creatures, Francis appoints the celestial bodies and the elements as his brothers and sisters. Although many authors claim that Francis refers to equality between humans and nature, this might be questioned from the other writings by and on Saint Francis, which emphasise certain differences between men and nature, especially between humans and animals. For Francis, all creatures are brothers and sisters for they are created by the same Creator, and therefore all are to participate in a communal worship. Remarkably, Francis mentions the elements solely in a positive way. Francis was familiar with the terror and destruction of the elements, and he was aware of suffering and mortality in daily life. This vulnerability is sung about in the last verses, which are often left out, making the song a naive glorification of nature. The Canticle of the Creatures has given cause for a large number of deep psychological and mystical analyses.²⁹⁶ However, unification with nature cannot be recognised in Francis' life and writings. The Canticle reminds us of two important elements of Francis' preaching: the call to praise God and the urge to repent.

Boersema (2002) concludes that Francis was not unique in his inclusion of nature in his praise, for the 13th century saw an abundant production of songs and poetry in which God's praise was sung. In the Middle Ages, both religion and nature were embedded in the way people perceived and thought about the world. Daily life was deeply rooted in the spiritual and supernatural, and a direct dependence on nature for food and shelter and the threat of beasts

and wildlife were often daily experience. For Francis, the engagement of creation in praising God is embedded in his perception of Christian faith, which is representative for his time.

Characterisation of Saint Francis

Having discussed the main elements of Saint Francis's life and writings, the question might remain in what way Saint Francis can be characterised best. The Dutch historian Nolthenius describes Francis as a typical man of the Middle Ages and rejects many modern characteristics given to the saint: "As class conscious, ecumenical, conscientious objector and ecological welfare worker, he is excellently marketable. The only objection is that he has nothing more in common with the medieval down-and-outer Francis than his name" (Nolthenius, 1992, 288). Through Saint Francis' biographies and writings, we meet a medieval mystic and *poverello*. Francis was a man who emphasised a faithful life with love for God and neighbour, care for the poor, and respect for church authority.

Francis' relation to nature, as described by his biographers, must be regarded in the light of the Middle Ages. As was common in the medieval context, Francis conceived nature as part of creation, which could teach humans more about their Creator. Nature was exemplary of the wisdom, power, and goodness of God.²⁹⁷ Francis approached nature often in a figurative or allegorical way, to set an example for human and animal behaviour.²⁹⁸ He not only praised animals for their merits, but also held them morally responsible for wrong behaviour. By doing this, Francis followed the general medieval Christian view on nature, in accepting the differences between man and nature, emphasising the human mastering of nature, and using natural elements as examples for Christian life.

The attitude of Saint Francis towards nature is worlds apart from the outlook of present ecologists. However, this does not mean that Saint Francis lacks all relevance for us today regarding environmental issues. Particularly Francis' plea for material poverty is an obvious way to lower the impact on the environment. Furthermore, he may serve as a source of inspiration, by finding enrichment and quality of life in restrictive consumption. "[I]t is this spiritual, dematerialised outlook on the quality of earthly life that Francis has passed on to us as a source of lasting inspiration" (Boersema, 2002, 77). Even during his life Francis' choice for material poverty, humility and contemplation inspired many people to become members of the Franciscan Order, which is the subject of the next section.

5.2.3 Franciscan Order

In contrast to the Benedictine tradition that started during the period of the feudal system, in which religious life mainly took place in the vicinity of the abbey in remote areas, the Friars Minor were part of a new religious movement that went out on mission to meet the people in the cities and towns. The brotherhood expanded rapidly and in 1274 it had grown to 35,000 brothers. Soon after Saint Francis' death questions arose on issues of permanent residency and the understanding of poverty. Some Franciscans were convinced they should dwell in hermitages, while others preferred to live like the earlier monastic orders and longed for more security and study, which did not fit in the Testament of Saint Francis. In 1230, Pope Gregory IX declared that the Testament was no longer binding, but should be seen as a spiritual document, and this gave the brothers more privileges regarding housing and study.²⁹⁹

The perception of poverty appeared to be a continuous point of discussion. The Franciscan brothers who accepted basic property and usually lived in urban convents were called Conventuals.³⁰⁰ The brothers who emphasised a strict obedience to the Testament and the Rule

became known as the Spirituals.³⁰¹ The latter prohibited personal possessions and believed that Friars Minor only had the right to use goods, not to own them. In the case of consumables, brothers should restrict themselves to the indispensable, the so-called '*usus pauper*'. In 1317 the Spirituals were condemned at the Council of Vienna, followed by a period of persecution. They had to submit to the orders of the minister general, who valued obedience over poverty. Spirituals who were not willing to convert were sentenced to death.³⁰²

However, the desire to live after Francis' radical poverty ideals was not swept away and within twenty years after the persecution of the Spirituals a new movement started in the hermitage Brogliano, which later formed the so-called Observants.³⁰³ In 1517 the Franciscan Order was officially separated into the Order of the Friars Minor (OFM), which consisted of the former Observants, and the Conventuals (OFM CONV). Soon after 1517 problems arose among the Observants, leading to a branching off by the Capuchins (OFM CAP) in 1528. The Capuchins wanted a radical return towards the original submission to the Rule and the Testament and a strong emphasis on poverty and prayer. In 1619 the Capuchins became completely independent and since then have formed the third branch of the Franciscan First Order.

During the Protestant Reformation in the 16th century a relatively large number of Franciscans were killed and many monasteries disappeared.³⁰⁴ The Friars Minor and particularly the Capuchins played an important role during the Counter Reformation and the mission to Central and South America in the 16th and 17th centuries. In the 18th century the Franciscan Order was thriving again, up to 77,000 Friars Minor. However, the huge number of vocations had a weakening effect on the Order and gradually the idealism disappeared. After the French Revolution, many European monasteries were closed. From 1814 on the monasteries were populated again and the returning brothers wished to revert to the former Franciscan way of life. Halfway through the 19th century Franciscan religious life was completely restored. The publication of Paul Sabatier's '*Vie de S. François*' in 1894 ushered in a movement of growing interest in the life and works of the Saint. As in all religious communities, the Second Vatican Council stimulated the Franciscan Order to a conscious investigation of the Franciscan spirit and the question of how to re-incorporate that into modern life.

Nowadays the dissimilarities among the three branches of the Franciscan First Order have become rather small. In 2010 worldwide the First Order consisted of 14,516 brothers OFM in about 100 countries, 10,865 brothers OFM CAP and 4,391 brothers OFM CONV.³⁰⁵ The Franciscan Order is divided into about 100 provinces, which are normally defined by geographic boundaries such as countries or parts of a country. A province includes a variety of fraternal communities and apostolic ministries. Important problems the present Friars Minor in Europe and North America have to deal with are a decline in new members and an ageing population, which has many consequences for maintaining the community.

Care for nature has never been a distinguishing aspect of the Franciscan Order and only became an issue at the time when the general awareness for justice and environment was growing worldwide. This awareness inside the Franciscan Order led to the organisation of the first Franciscan Justice and Peace Commission in 1979. The work on behalf of justice, peace and the environment became part of the Constitutions of the Order in 1985. Furthermore, in 1989, the 'Franciscans International' was established as a non-governmental organisation with General Consultative status at the United Nations, aiming to engage policy makers and world leaders for the work of justice, peace, the care of creation, and the promotion of human rights. Inside the order, however, environmentally minded Friars Minor are still rather an exception than a rule and environmental behaviour choices are

mainly motivated by the choice for poverty and moderation. This will be further discussed in section 5.5.

The Second Order

During his life, Francis not only established the First Order, the brotherhood, but also witnessed the establishment of the Second Order of Saint Francis, the Poor Clares.³⁰⁶ In 1212, Clara, the 18-year-old daughter of a rich Assisian knight, wanted to live a life of poverty and became founder of this community of women serving God in prayer, poverty and self-denial. During the first decades of their existence the sisters lived in San Damiano. Clara lived there for over forty years, during which she composed a Rule that was approved by Pope Innocent IV in 1253, just before her death. From the start the Poor Clares lived inside cloisters as a closed and contemplative order and did not travel around like the men. To provide for their needs, the Poor Clares have always possessed land and gardens, which is pertinent to the discussion on Franciscan worldview and sustainability. The agricultural practice of the Poor Clares is the subject of section 5.4.2.

Like the Friars Minor, the present European and North American Poor Clares are facing a declining and ageing population in their communities. The Order now numbers over 20,000 sisters throughout the world in 16 federations and in over 70 countries.³⁰⁷ Most monasteries consist of four to thirteen members. Although larger communities do exist, many Poor Clares have the opinion that small communities are better to keep a family spirit than larger ones. When a community gets to a certain number, they usually prefer to start a new one rather than continue to grow bigger. Although they belong to the international family of Poor Clares as well as to a federation, each community is independent, autonomous and self-governing. Therefore, many differences can exist within the Order. Not all nuns dress alike, work alike or keep the same daily schedule. The main characteristics of the Poor Clares are prayer, community and moderation.

The Third Order

The year 1221 is assigned as the date of foundation of the Brothers and Sisters of Penance, the Third Order of lay people.³⁰⁸ This secular order functioned as a kind of middle state between monastic life and the world. Saint Francis wrote his 'Letter to the Faithful' for these so-called 'Tertiaries'. The lay order is now recognised by the official name of *Ordo Franciscanus Saecularis* (OFS), the Secular Franciscan Order, and is spread around the world. This order consists of men and women, single or married, who are called to a dedicated life of service to God through prayer, study, and work, following the example of Saint Francis. Tertiaries make a lifetime commitment to live a Rule of Life in company with the sisters and brothers in their Order. Besides the Secular Franciscan Order, there is also a Franciscan Third Order Regular (TOR), consisting of Catholic priests and brothers who have made religious vows and live in community.

Although worldwide the Franciscan First and Second Orders are declining in numbers, interest in the life and work of Saint Francis has grown remarkably over the last decades. Various initiatives have developed which are related to and inspired by Franciscan spirituality. In the Netherlands, I studied two Franciscan initiatives, namely the religious community '*De Wonne*' and the Franciscan Ecological Project *Stoutenburg*. As mentioned in the introduction to this chapter, *De Wonne* is characterised by hospitality, recycling and contemplation. The community welcomes temporary guests who need a place to stay. Sharing is an important value of the residents and is translated into a communally owned house, shared income and shared goods. Recycling takes place through the two second-hand stores of *De Wonne* and

the processing of left over market foods the community receives every week. Contemplation is seen as the heart of the community and takes place four times per day in the chapel. The second initiative is the Dutch Franciscan Ecological Project *Stoutenburg*. When this project started, the Franciscan influence was particularly centred on the Cantic of the Creatures, which for the residents “expressed a solidarity with the Creator and creation” they wished to establish. *Stoutenburg* is now becoming spiritually more diverse.³⁰⁹

Other examples that link Franciscan values to care for the environment are the ‘Francis of Assisi Academy for the Protection of Earth’, a European scientific organisation dedicated to further promoting knowledge and implementation of sustainable development, and the ‘National Ecology Commission’ of the Secular Franciscan Order in the U.S.A. Saint Francis appears to have much attractive power. There is a risk that from a desire for new inspiration and ideas about human relationships with nature, he is *exclusively* positioned as nature lover, which would more or less be the opposite of the historical meaning as radical saint of poverty and mission he had till 40 years ago.

Recapitulation

In section 5.2 we discussed the life and Order of Saint Francis. Through his biographies and writings, we can characterise Saint Francis best as a medieval mystic and charismatic man who emphasised a faithful life and chose radically for a life of poverty. His relationship with nature is mainly narrated by his biographers and must be understood in the light of the Middle Ages. Francis followed the general medieval Christian view on nature, accepted differences between man and nature, and used natural elements mainly as examples for Christian life. An important and outstanding legacy is Francis’ Cantic of the Creatures, in which he includes all creatures in his praise to God. In this song, he appoints the celestial bodies and elements as brothers and sisters. When we take Francis’ other writings into account, we must conclude that he does not emphasise equality between humankind and nature, but tried to evoke a communal praise to the common Creator. It is not so much Saint Francis’ vision on nature, but his ideas on poverty, moderation, humility and contemplation that have inspired many people to become members of the Franciscan Order.

In contrast to the Benedictine Order, which usually settled in remote areas and used to maintain agrarian activities, the Franciscan Order reached out to people and was usually active in a more urban setting. The present Franciscan Order, which still consists of a First, Second and Third Order, gives room to a diversity of initiatives, which are tied together by a shared Franciscan values. From the beginning these initiatives focused on mission and care for the poor, and they extended to the issues of justice, peace and care for the environment at the time when worldwide awareness of these issues was growing as well. Care for nature has not been characteristic of the Franciscan Order. We can expect to find the Franciscan contribution to the present discussion on environment and sustainability in their values of poverty, moderation, humility and contemplation. These ideas are part of their worldview, which will be discussed in the next section.

5.3 Franciscan religious worldview

This section will give a brief description of the Franciscan religious worldview, values, social organisation and cultural symbols. My study of Franciscan worldview included individual and

communal experiences, rituals and symbols, content of their services, religious practices, and the effects of religion in people's personal and communal life. This was studied by analysing literature, interviews, and participant observation during the field research. The most relevant aspects of the Franciscan worldview for sustainability are discussed in this section, which deals with religion and rituals in section 5.3.1, Franciscan values and cultural symbols in section 5.3.2, and their social organisation in section 5.3.3.

5.3.1 Religion and rituals

As within the Benedictine Order most monastics study the Rule to find direction for their daily life, Franciscans usually refer to the life of their founder. Many people find inspiration in the life of Saint Francis, although it is quite impossible to copy his extreme way of life. Besides, as stated in section 5.2.1, it might be doubted whether all stories of Saint Francis are historically true. Freeman remarked about the Franciscan philosophy of life: "There is a gap between the life of Francis and that of Franciscan people. The latter follow him at a distance. I had to learn to live a Franciscan life in my own way."³¹⁰ The Franciscan Order and particularly the Third Order is a colourful movement, which feel connected through their shared Franciscan values and beliefs.

The spirituality of Saint Francis is similar to basic Christian spirituality and in many ways Franciscan religious worldview corresponds with that of other Religious Orders (Breton, OFM, 1959). Nevertheless we can distinguish some specific accents within the Franciscan religious worldview, like the attitude of gratitude, the accent on poverty and caring for the poor, and silence and prayer. When I asked Franciscans what constitutes quality of life, they also mentioned a life close to Christ, community, hospitality, humility, and the balance between work and prayer. Freeman summarised it as repentance and the correction of mistakes, community, a life of prayer, and a pleasant and pious life.³¹¹ The main distinctive features of the Franciscan religious worldview will be briefly discussed in this section and are summarised under three headings: praise and gratitude, imitation of Christ, and silence and prayer.

Praise and gratitude

One of the most characteristic and essential aspects of Saint Francis' spirituality is the praise of God, as a way of profound gratitude and love for God, his creator and redeemer (Groot Wassink, 1980). Francis' writings are punctuated with praise, worship and gratitude to God, for all His gifts. For Francis, real joy is based on submission, humbly accepting the gift of grace and enduring hardships with patience and without becoming upset, as described in the story

Box 5.2 From my interviews: What is quality of life?

"Quality of life means no hurry. That is why I became Franciscan, to escape busyness, and find a balance between work and prayer." (Loek Bosch OFM, San Damiano, May 7, 2006)

"What is important? Live simply and choose where you focus on. Prevent yourself being swept away by the abundance and pace of the world we live in. Ultimately, focus on Jesus Christ, He is our orientation." (Ria van Dinther OSC, Nijmegen, August 12, 2005)

"Franciscan quality of life can be found in hospitality, in the simple ordinary daily life, in our dealing with nature and the environment, in prayer, and in our concern with the things of the world." (Sister Francine, Enschede, June 18, 2003)

concerning ‘True Joy’, which Saint Francis dictated to brother Leo. Worship and gratitude can be found in his Psalms, his Letters and in the earlier mentioned Canticle of the Creatures, the song of praise in which all creatures are called to join in the worship of their Creator.

This attitude of worship, gratitude and joy can be recognised in present-day Franciscan life as well, in both the clerical part of Franciscan life and in the practice of many daily activities. It is revealed during the services and prayer times in the text of the songs and the flowers in the chapel as a fragrant part of the daily liturgy. Franciscans know how to celebrate in a moderate way and emphasise the importance of that in the community. Furthermore, gratitude is basic attitude towards material things, as explained by Arnulf Sibbing OFM cap, inhabitant of *De Wonne*: “We feel gratitude for people and fruits of the earth. The sacred and the daily life have become intermingled in our community. (...) Many people don’t know the meaning of gratitude, because one can buy what he needs, even love can be bought. People think they are independent. But we are always dependent on others. Gratitude connects people.”³¹² Gratitude is a way of honouring God. In the Franciscan worldview, the acknowledgement that humans only live thanks to God leads to the attitude of humility and the wish to render life back to God.

Imitation of Christ

Saint Francis had a strong desire to imitate Christ and live a life of poverty, moderation and frugality. As he writes: “Now however, after we have abandoned the world, we have nothing else to do, except to follow the will of the Lord and to please Him ourselves” (1 RegNB 22, 9). Francis experienced the incarnation of Christ as an extreme act of humility, which encouraged him to support the dregs of society.³¹³ He abandoned any possessions, lived a life in repentance and humility, and travelled around to preach and live the Gospel. The attitude of humility is an important aspect of Franciscan worldview. Saint Francis placed himself among the common people and in particular among the outcasts of society, in the awareness that he was just an ordinary human being himself.³¹⁴

At the present time, this site of the imitation of Christ is translated into the choice for a simple lifestyle and a high involvement in social work (see section 5.4.1). From the beginning Franciscans tended lepers, erected infirmaries and founded hospitals, and nowadays many brothers can still be found in jobs relating to medical care, nursing, education, and welfare work. Present-day Franciscans explain the attitude of humility as being available for people in need, living with open ears and a listening heart. Like Francis, they wish to practise humility in fragility and dependence on God. The Dutch Franciscan Movement explains: “We are supported by the Highest. We need not prove ourselves, or compare ourselves with others, or pretend to be better and smarter and stronger than we are. That makes us open to the surrounding world.”³¹⁵ Franciscans feel affinity for people who are deprived and misunderstood, based on acceptance of their own vulnerability. For them humility is closely linked to receptivity, which means that you are not only giving, but also able to receive what others give to you. The meaning of humility will be further discussed in section 5.3.2 on values. Zweerman OFM and Van den Goorbergh OSC (2007) summarised the Franciscan lifestyle with the words ‘thanking, serving, and bearing’.

Silence and prayer

Besides an active life caring for the outcasts of society and preaching the Gospel, Saint Francis also had periods of retreat to be in silence with God. Daily prayer and meditation were indispensable for Francis, and became even more essential at the end of his life.³¹⁶ These daily

prayers, meditation, and devotion have always been an essential part of the Franciscan spirituality and monastic practice.

The Franciscan brothers of Megen celebrate four communal prayer times during the day. Franciscans pray considerably fewer psalms than Benedictines.³¹⁷ The Franciscan services are plain, containing Bible readings, songs and long periods of silence. Breakfast is also consumed in silence in order to be able to remain in an attitude of prayer. The Franciscan communities *De Wonne* and *Stoutenburg* have daily communal prayer times as well. *De Wonne* has four times of communal prayer: the Morning Prayer consists of half an hour of silence, the afternoon prayer focuses on the Psalms, the evening prayer is a *lectio divina*³¹⁸, and the night prayer contains hymns and open, audible prayer. For members of *De Wonne* silence and prayer times form the heart of the community and are perceived as necessary for maintaining this way of life. *Stoutenburg* has two moments of communal meditation and one daily period of personal silent time. Silence is seen as essential to let the spoken or sung words land in the heart.

The Poor Clares belong to the contemplative orders. During the day silence prevails in the monastery, in the chapel, as well as in the dining room and the kitchen. Sister Paula, one of the sisters in Megen, told me: "Our life differs much from the Franciscan brothers. We practise more prayer and silence. We do not appreciate much talking, many words." The sisters explain that working in silence stimulates them to pay attention to their work. Sister Chiara adds: "We wish to remain in the atmosphere of prayer and the presence of God, and everyday chatter would be a nuisance." Twice a day the Poor Clares in Megen have a communal break in which conversations are allowed. The sisters appreciate the silence, for it helps them to contemplate and to create room to seek God and the essence of things. The rhythm of prayer and work is the same every day. The Poor Clares in Megen have five times of communal prayer in the chapel. Guests are welcome to join in the silence. Guest sister Imma explained: "Everybody is welcome. We have one condition: the aim must be deepening, silence and prayer. We hope that our guests experience that God accepts and loves them." When this sister knocked on my door while I was working on my laptop she remarked: "Do you have any room for silence left with all your activities?"

To recapitulate, the Franciscan religious worldview has much in common with general Christian spirituality and piety. Nevertheless, it can be distinguished by a basic attitude of praise and gratitude towards God and humility towards other people, its dependence on God, its accent on poverty as a way to imitate Christ, care for the poor and social outcasts, and room for contemplation, silence and prayer. Most Franciscans find quality of life in limitation, community and a life close to Christ. Here we find ourselves in the sphere of values. The next section tries to elaborate the main Franciscan values and cultural symbols and their meaning in present-day life.

5.3.2 Values and cultural symbols

In 'A Salutation to the Virtues' Saint Francis recommends to the reader the virtues of wisdom, simplicity, poverty, humility, charity, and obedience. These virtues are also mentioned in his 'Letter to the Faithful, later recension' and can be seen as characteristic goals and values in Saint Francis' religious worldview. During the field study, Franciscan brothers and Poor Sisters mainly mentioned the values of obedience, poverty, moderation or simplicity, and humility, which will be examined in this section. The virtue of wisdom was not referred to very often. Charity, together with the value of respect, was mainly mentioned in relation to humility.

Obedience

Saint Francis had a profound obedience towards God and the church. Obedience is one of the three vows the Friars Minor take when they enter Franciscan monastic life, together with poverty and chastity or celibacy. Obedience means an attentive listening to the voice of God and a desire to follow the will of God in concrete and practical ways. The foundation of Franciscan obedience goes beyond adherence to the Rule and the constitutions of the Order and must be understood in the light of obedience to and guidance from God. The fraternity is one of the primary places to live out this obedience. Both for individual Franciscans and for the fraternity as a whole, it requires a constant search for the will of God and a willingness to follow it, even when it is difficult and requires sacrifice. For Francis, the life of Jesus formed a fundamental example of obedience to God.

A consequence of the vow of obedience is abandoning your own wishes and desires, requiring an attitude of humility. In his writings, Saint Francis reflects on the experience of God as an active guide leading him beyond his own narrow view of the world and making him receptive to other people's needs. Loek Bosch OFM explained: "Obedience means that I am not in the centre of the world, but God or the other. It is all about the encounter with the other person. In the eyes of the other you meet your own questions. You can see God in the eyes of the other. Then you become human."³¹⁹ In the Franciscan view, obedience may help to broaden one's focus to the needs and desires of others. Recently, some extend obedience to a form of receptivity towards the needs of creation. Francis preaching to the birds inspires people to be open to the "language of plants and animals" in order to discover their beauty and peculiarity (Sjoerd Hertog OFM, 2007, 26).

Poverty

Saint Francis understood poverty as a direct consequence of the word of Christ. Francis wished to live without possessions, for Christ himself had become poor on earth. However, the gospel never proclaims extreme poverty as a goal. Saint Francis' ideal of poverty resembles more the view of 'poverty preachers' that preceded him than Christ himself. His biographers depicted Francis as extremely fanatic, finally dying with a decrepit body.³²⁰ For Francis, worldly wealth was not the real wealth. Instead, he stated that "Holy Poverty confounds cupidity and avarice and the cares of this age" (SalVirt). Francis was convinced that the "loftiness of the highest poverty, which has established you, my most dear friars, as heirs and kings of the Kingdom of Heaven, has made you poor in things, (and) has raised you high in virtues (cf. Jm.2,5)" (RegB 6). For Francis, living in poverty meant a life of confidence. He trusted that God would care for him, as He did for the birds in the air and the lilies of the fields (Mt.6).

Loek Bosch OFM described poverty as "the recognition that everything you are and have, does not belong to you. You have received it to give it back. (...) You may use your gifts, but realise that nothing belongs to you. It is free, it is grace. That affects your way of life. One feels more responsible."³²¹ Sister Imme said: "Poverty is that you receive anything from God."³²² In practice, all money belongs to the community and the minister and the guardian have to approve any spending of money. Franciscan communities are not allowed to hoard up money, for wealth needs to be shared with the poor. This is also practised by the inhabitants of *De Wonne*, who give away the total surplus of the balance at the end of every year. The Franciscan vision on money will be dealt with in section 5.4.1. Nowadays, monastics generally do not live in poverty in the sense that they have no possessions, but translate it into a lifestyle characterised by moderation.

Simplicity and moderation

The attitude of simplicity can be recognised in the way Saint Francis approached the Bible, often mentioning verses allegorically, and in the innocent and open way he approached other people and the surrounding world. His biggest worry in the preservation of simplicity was the continuous desire of his brothers for study. For Francis, simplicity was connected to real wisdom: "Pure holy Simplicity confounds all the wisdom of this world (cf. 1 Cor.2,6) and the wisdom of the body (cf. Rm.8,7)" (SalVirt).

In present-day Franciscan communities, simplicity is not so much connected with knowledge, but more with the way Franciscans deal with materialism, time, and work. The values of moderation and simplicity are visible in the plain and modest interior of the community buildings. The rooms are furnished with modest colours and few ornaments. The furniture is solid, durable, and will only be replaced when it is falling apart. The gardens, on the other hand, were usually overabundant with flowers. Often flowers could be found in the guestrooms and the chapel as well. Furthermore, simplicity can be recognised in the plain clothes, the choice for simple handiwork in the house and the garden, and a renunciation of too much luxury. During my visit to the Poor Clares, I noticed that some habits had been patched up. The meals are usually simple as well, with pure and plain ingredients. As sister Chiara Bots, cook of the Poor Clares in Megen explained: "Simple cooking means cooking with respect for the earth, humans and animals. Furthermore, I like to cook with attention: that I know what I'm cooking and treat it with care." (Chiara Bots osc, 2008, 13). In general the Poor Clares live more frugally than the Friars Minor.

The residents of *Stoutenburg* translate simplicity into a relatively low income as consequence of the choice to work part-time, and little private property. One of them explains: "Simplicity means taking just what you need. It has to do with going back to what is essential, just removing all rubbish and keeping what is really important. I need to moderate, for otherwise I'll get lost, being too busy with other things."³²³ The Dutch Franciscan Movement links moderation with self-esteem: "We focus ourselves on moderation and do not wish to derive our self-esteem from power, possessions or success."³²⁴

Humility and respect

Humility is both an inner state and an outer attitude towards other people. The inner state means knowing your place, especially in relation to God. Humility as outer attitude has to do with acceptance, patience and the willingness to be the least. In the Letter to the whole Order Francis passionately calls on his brothers to humble themselves.³²⁵ For Sjoerd Hertog OFM, both poverty and humility help him to become free from the desire to possess and to have power. "It opens the way to focus on more essential things, both human and religious matters. You renounce possible competition, so nothing might interfere with your being unprejudiced in relation to someone else."³²⁶ Likewise, humility may help us to find the right attitude towards creation, accepting that both humankind and nature are created by the same God, as sister Imme emphasised: "Humility means to treat another person with respect, for he is also a gift of God. This can be expanded towards creation. We feel connected, because we receive nature from the hand of God as well. For that reason you deal with the earth and animals respectfully and with attention."³²⁷

The value of respect was mentioned often in the interviews during the field study as an inspiring Franciscan value. This value is related to the value of humility for both are grounded in the awareness that everything springs from the hand of God. This awareness spurs people

to an attitude of respect and gratitude towards other people, and towards flora and fauna. The nature stories of Saint Francis inspire people to treat the creation with respect, joy and a sense of wonder, and to make well-considered choices in their consumption patterns. Likewise, the use of the words 'brother' and 'sister' for natural elements, contribute to experiencing a certain relationship with nature. This relatively new, or rediscovered, aspect of Franciscan spirituality has been included in the latest version of the OFM General Constitutions, which says in article 71: "Following closely in St. Francis' footsteps, the brothers should show a sense of reverence towards nature, which is today threatened on all sides. They thus restore nature in its entirety to its status of brother and sister, useful to all people for the glory of God the Creator." An interesting question is whether this new accent will become as deeply rooted as the values of poverty and moderation have been over the last centuries.

In the Franciscan Ecological Project *Stoutenburg* the Franciscan values are described as the sense of being related to nature, the values of moderation and frugality, an attitude of hospitality and attention, a serving benevolence, earthly bound life and respect for animals and nature, covered by the idea of cohesiveness.³²⁸ Their spirituality focuses on a connection with the Source of life, a respectful attitude towards people and care for the environment. In both the motivation for and the practice of their environmental behaviour Stoutenburg is quite exceptional and not representative of the broader Franciscan Order. The inhabitants of *De Wonne* emphasise an awareness of a covenant between God and humankind, God and creation, and between people, which leads to gratitude and joy, and the wish to treat other people and materials in a respectful way.

Cultural symbols

The Franciscan values as mentioned above are visible in the modest interior of the communities and the abundant gardens, which are the subject of section 5.4.2. Two typical Franciscan cultural symbols will be further discussed in this section, namely the brown habit and the Tau cross.

A clearly visible cultural symbol of the Franciscan Order is the brown habit, with the cord with three knots.³²⁹ Like the Amish and the Hutterites, Franciscans choose to dress in a uniform way as well, which emphasises group identity and cohesion. The function and the price of the habit have changed drastically since the 12th century. Where Saint Francis wore the daily clothes of a *poverello*, the present Franciscan habits are quite exclusive and expensive. The Dutch Franciscans usually wear the habit only during communal activities, like the Office and celebrations, and for presentations. For daily use they prefer simple present-day clothes. In Italy, as in most countries, it is more common to wear the habit all day. The Dutch Poor Clares wear their brown habit most of the day and have a special habit for work. Dutch Friar Wim Pot OFM emphasised the importance of distinguishing clothes, for the recognisability of the brotherhood and a visible separation: "To the outside world, habits might evoke different reactions, such as approachability, distance, nostalgia, or even ridicule. To the inside the habit symbolises a sense of identity, group awareness, and the wish to live a poor life."³³⁰ Recognisability and sense of identity are important for the Order. Nevertheless, some Dutch friars would prefer plain and timeless clothes for daily use, with only a Franciscan symbol for the recognisability.

Another often used symbol in the Franciscan family is the Tau cross, the sign Saint Francis used as signature on his writings. The Tau is the last letter of the Hebrew alphabet. At the Fourth Lateran Council, on November 11, 1215, Pope Innocent made reference to this symbol and quoted Ezekiel 9:4, "Go through the city of Jerusalem and put a Tau on the foreheads of

those who grieve and lament over all the detestable things that are done in it.” It is assumed that Saint Francis was present at this council and afterwards started to use it as blessing and sign of salvation. Thomas of Celano writes: “Francis preferred the Tau above all other symbols: he utilised it as his only signature for his letters, and he painted the image of it on the walls of all the places in which he stayed.” In the blessing of Brother Leo, Francis wrote the Priestly Blessing which can be found in Numbers 6:23-27, sketched a portrait and drew the Tau over it.³³¹ It has become a symbol for penitence as well as a symbol for blessing. Nowadays, the Tau cross is also used to express the Franciscan spirit of love and peace for all of creation.

Values and modernity

Franciscans strive for poverty and moderation, but do not reject all modern conveniences as such. Like the Amish, they adopt new technologies as long as they contribute to the quality of life in the monasteries. An example is the beeper the guest sister of the Poor Clares is carrying in her habit, to be better able to answer the phone and the doorbell. Likewise, the chapel of the Friars Minor has been provided with a public address system with microphones and sound equipment for people hard of hearing. Furthermore, the kitchen is nowadays provided with modern appliances like a microwave. An important consideration is whether a new technology is really needed in the community and has a positive effect on realising the aim of the community. The discussion on what is needed can be intense and reflects the value-hierarchy that exists among the inhabitants of the community. Franciscans in all the communities I studied described a field of tension between modernisation and the limits of simple living. Besides, money that is spent on appliances or the interior of the monastery cannot be given to the poor. These clashing values will be further discussed in section 5.6.1.

Particularly after World War II the monasteries faced many rapid changes and modernisations. In the 1950s the monastery ‘*Sint Josephsberg*’ of the Poor Clares in Megen literally opened up by tearing down the separation between the choir and the chapel and removing the barred windows. Radio, television, newspapers and magazines made their entry and the monastery welcomed visitors for retreats and discussion groups. In 1956 the Poor Clares installed central heating. For 235 years the monastery had only been heated by two stoves while the sisters had a copper foot stove to warm their feet. The monastic communities are part of society and develop along modern lines, although the speed of modernisation is relatively low. Arnulf Sibbing OFM cap of *The Wonne* explained that when a product was sold in their second-hand shop, it could be purchased by the community.

The way appliances are used is as important as the decisions concerning their purchase. The fact that the Poor Clares possess a car does not mean that all sisters can drive as far as they wish. Guest sister Imme explained that the use of many appliances is limited by community norms and rules, which are sometimes not explicitly mentioned. Whereas at the monastery of the Friars Minor the TV room is open for guests, the Poor Clares restrict it to their own community. Like practically all possessions, new appliances are not private property, but owned by the community and meant for communal use. Although many things seem to have changed in the monasteries, the most essential of monastic life has not changed. The monastics still comply with their vocation, but the way it is realised is affected by modern developments.

Recapitulation

The Franciscan religious worldview accentuates the values of obedience, poverty, simplicity or moderation, and humility and respect. Obedience involves the wish to discover and follow the

will of God in concrete and practical ways. The primary place to live out this obedience is the community, after which it is expanded to the needy outside the community. Poverty means recognising that everything is given by God and may be used in moderation, but does not belong to individuals. All money belongs to the community and surpluses are shared with the poor. Poverty is mainly translated into a lifestyle characterised by moderation. Simplicity, or moderation, involves the wish to limit possessions, power and self-esteem, leading to humility and solidarity with the poor. Recently new emphasis has been laid on such issues as justice, peace, and care for creation. Two characteristic cultural symbols are the brown habit and the Tau cross.

Franciscans do not reject all modern conveniences at such, but only use them when they contribute to their quality of life. The monasteries develop according to modern standards, although this modernisation takes place at a slower pace than outside. Many Franciscans experience a tension between the increase of modern conveniences in the community and the values of poverty and moderation. Important for maintaining the religious worldview, as well as considering changes in communal life, is the social organisation of the Franciscan Order, which will be discussed in the next section.

5.3.3 Social organisation and social capital

This section describes the community order within the Franciscan communities, as well as their daily time schedule and the role of social capital in maintaining the Franciscan values and monastic life.

Community Order

The Franciscans are characterised as a brotherhood. Therefore, the Franciscan First Order has no abbot, but a guardian, who is ordained for six years. The idea is that no man is prior to the other men, but all brothers are equal and the leader is serving the others. Franciscans have an egalitarian way of organisation and have much communal consultation, as Sjoerd Hertog OFM explained: “In fact, the house chapter functions as guardian.”³³² This non-hierarchical community order can also be recognised in the way *De Wonne* and *Stoutenburg* are organised. The Poor Clares have always lived in a closed monastic setting and have an abbess who also regularly consults her sisters.

The Franciscan First Order started as an itinerant brotherhood. Although the Friars Minor nowadays live in monasteries, the itinerant character is still recognisable in the fact that the brothers regularly move to other Franciscan monasteries, in contrast to the Benedictine *stabilitas loci*³³³, the life-long commitment to the community, the buildings, and the natural surroundings of the monastery. Franciscans commit themselves to the worldwide brotherhood and as a result the population of their communities changes regularly. At the time of the field study, the brother who had stayed longest at Megen had been there for 8 years, while the most recent brother had arrived three months ago. Despite the change of inhabitants of the communities, the brothers emphasise that a communal inspiration binds the Friars Minor together, as well as good communication between the communities. On the one hand the itinerant character stimulates involvement in personal relationships, but on the other hand it has been an important reason why the development of long lasting agricultural systems has not taken place among Franciscans. The present diminishing number of monasteries makes the itinerant character harder to realise.

The Franciscan Order is very open to guests. In the Dutch monastery of the Friars Minor in Megen, guests do not stay in a separate guesthouse, but are accommodated in rooms on

the same corridor as the brothers and share the refectory and living room. This model of 'sharing' has become characteristic for this monastery, as brother Sjoerd Hertog OFM explains: "It is a way to present spirituality, in a place where believing becomes visible, sensible and tangible."³³⁴ The Poor Clares on the other hand, have less contact with their guests in order to prevent distraction. Guests do participate in the services and meals, but further contact is mainly restricted to the guest sister. In *De Wonne* a large number of guests live in the community for a certain period. The community experience the hospitality towards outcasts of society, together with the choice for moderation, as important elements of a practical interpretation of their faith. Dick, one of the permanent residents, underscores the importance of the community in order to maintain these choices: "I need other people to make these choices, because without this social structure I would not do it."³³⁵ The residents of *Stoutenburg* organise specific weeks for interested people to share their way of life.

Time schedule

Alternation of work and prayer has become a fundamental characteristic of monastic life and also of the Franciscan Order. Franciscans and Poor Clares remark that periods of prayer and meditation help them to keep focused on God and prevent them from being overworked. In comparison to the Benedictine Order, the Franciscan brothers, as an active order, spend less time in communal prayer and spend more time on work outside the community. Franciscan brothers try to contribute to society through jobs with a social character, like pastoral care, education, social work, nursing and care. Accepting such jobs as social worker in a prison and nurse in a rest house led to the consequence that not all brothers in Megen could participate in the daily services. Franciscan labour will further discussed in section 5.4.1.

As a contemplative order, the Poor Clares have more prayer times than the Franciscan brothers. Silence, prayer and meditation are experienced as essential for life. Sister Agatha of Megen explained that she needs set times of prayer in order to keeping balance in life. "I need it to keep room to receive the gifts from God for free, to retain a receptive mind. To discover the inspiration that is hidden in all valuable things: the little flower, the herb, the expression in the eye, music, a text."³³⁶ The sister's agenda is not dictated by work, meetings or holidays, but by the Christian calendar and festivals. Furthermore, they underscore the importance of the natural rhythm of life, as sister Paula adds: "By adjusting myself to the natural rhythm, which means a balance between being active and recreation, work and prayer, I feel connected to creation and the Creator. This rhythm is benevolent for me, for my body and soul."³³⁷ This rhythm functions as the backbone of their daily life.

Not only the Franciscan brothers and Poor Clares appreciate the alternation of work and prayer. The daily rhythm is also partly adopted by the two religious communities based on Franciscan spirituality, for this regularity is experienced to give rest to the communal life and work. Like many religious, the residents of these communities emphasise that a fixed time schedule and a clear assignment of tasks enable them to give full attention to both sacred and secular aspects of life. One resident of *Stoutenburg* remarked: "It helps us to focus on what needs to be done, whether that is work, or prayer or meditation. We try to eat when we eat and work when we work, instead of being occupied with what is next." When it is time for dinner or meditation, the daily duties are generally laid down, whether the job is finished or not. The daily time schedules of all four Franciscan communities can be found in Appendix 5.

In both *De Wonne* and in *Stoutenburg* the daily rhythm appeared to be less practical for families with children. A mother living in *Stoutenburg* explained their dilemma: "As a family

you have an extra level. I have to deal with housemates, my partner, my own wishes and the needs of my children. In this community the single people form the basis and the families are an exception. I sometimes long for a life with just our family and the possibility to cook what the children like.”³³⁸ School times do not always fit in with the work schedule and besides, to live in a community is the choice of the parents and not all children wished to participate in community activities. Although this family had tried to fit in an adjusted time schedule, they have now left the community.

Social capital

A community of people who share their ideals, basis and aims appears to be an important condition for maintaining the preferred way of life in all studied communities. Sharing faith, joy and sorrows leads to deeper relationships. As mentioned before, the Franciscan First Order has an itinerant character, which means that the Friars Minor commit themselves to the brotherhood and not to a specific monastery. Although the brothers only live in a specific community for a limited period, they appreciate the local community as a place to grow spiritually and personally, as a framework in which they can practise their vows of obedience, poverty and chastity, and as a place to share faith and support each other. As a contemplative order, the Poor Clares usually stay in the community they entered.

In order to live in community for a long period, one needs to find a balance between respecting and accepting the other on the one hand and personal freedom on the other hand. A well-functioning community can help individuals to develop their personality and skills and gives the opportunity to realise communally shared ideals. Open communication and clear appointments are mentioned as necessary in all Franciscan communities. Besides, in all communities individuals have a private room. In contrast to the monasteries, where all the Friars Minor and Poor Clares have a comparable lifestyle, the needs and expectations of the inhabitants of the lay communities differ, for they consist of single people, some of whom had lived in a monastery before, and families.³³⁹ Differences of opinion also existed between former monastics and lay people on the frequency of prayer times and the need for privacy.

Besides the framework in which ideals can be shared and practised, communal life also offers many practical possibilities that have a positive effect on the environmental impact of the inhabitants. The communities share appliances, like washing machines, and prepare communal meals in the central kitchen. This will be further discussed in section 5.5.

Recapitulation

This section on Franciscan religious worldview and values emphasises the specific nature of the Franciscan tradition, which can be characterised by a basic attitude of praise and gratitude towards God and care for the poor and social outcasts, an accent on poverty as a way to imitate Christ, and room for contemplation, silence and prayer. Quality of life is found in an orientation towards Christ, community life and limitation of possessions and incentives. Community life is felt to be important to share faith, sorrows and joy, to give the opportunity to practise ideals, and to support each other in maintaining the preferred way of life.

The main Franciscan values are obedience, poverty, moderation, humility, and respect. Franciscans wish to obey the will of God in concrete and practical ways. The values of poverty and moderation mean a limitation of possessions, power and self-esteem, which go together with solidarity with the poor. Humility and poverty start with the recognition that everything

is given by God and may be used in moderation and shared with the poor. Some Franciscans experience a clash between the value of poverty and the increase of modern conveniences in the community. The communities try to find a balance between their religious values and practical way of life. Franciscan values can also be recognised in the egalitarian social organisation of the brotherhood, the daily rhythm, the communally shared possessions and typical kinds of vocations. Recently new emphasis has been laid on issues like respect, justice, peace and care for creation.

The next section deals with Franciscan economy, where we will find other examples of the way Franciscans put their values into practice.

5.4 Franciscan economy

5.4.1 Vision on labour and finances

Saint Francis emphasised the stimulating effect of manual labour on discipline for body and spirit. In RegB 5 he instructs his brothers that who can work, should “work faithfully and devoutly, in such a way that, having excluded idleness, the enemy of the soul, they do not extinguish the spirit of holy prayer and devotion, which all other temporal things must serve zealously.” According to old comments on the Rule, this chapter is particularly concerned with manual labour and not spiritual labour like preaching or teaching (Freeman, 2004, 81). The Rule is still relevant for the present brothers of Megen, although preaching and teaching are now perceived as work as well. Wim Pot OFM emphasised that “[W]orking hard is good, if it does not become an idol and you do not forget that you are dependent on God”. Fer van der Rijcken OFM emphasised the need to find a balance between work and prayer: “If you work so hard that you no longer have time to pray, you work harder than God desires from you”³⁴⁰

Since the start of the brotherhood, most Franciscans have worked in mission, care, social work, education, and ministry. These activities are still encouraged in the latest version of the General Constitutions of the Order.³⁴¹ Franciscan communities are often located in cities, in order to support the poor and needy. Many Franciscan hospitals, charity centres and schools have been founded all over the world. The Dutch Franciscans nowadays are occupied with youth work, organising activities focused on encounter and reflection on questions about life and faith. Besides pastoral work in parishes, Dutch Friars Minor work in hospitals, rest houses, prisons, among students and even as pastoral worker in the army. Furthermore, they devote themselves to migrants and homeless people. Special attention is paid to older Franciscans who have become infirm and are cared for in a special Franciscan Old Peoples home.

Wim Pot OFM expressed his vision on labour in a new rule for modern Friars Minor as follows: “The brothers labour preferably in the fields of justice, peace and respect for creation, in simple (hand)work, in jobs where they can meet all kinds of people, or they earn a living while travelling around. Whatever work they do, proclamation must be prominent: a real evangelical testimony of a saved mankind” (Pot, 2005). Because the Rule of Saint Francis prohibited the possession of land or animals, in particular the possession of horses, agriculture hardly existed among the brotherhood at the beginning. Later some Franciscan communities rented land, but the Franciscans have never become known for their agriculture. The issues of agriculture and gardening will be further elaborated in section 5.4.2.

Sources of income

During the 1960s much changed in the financial situation of the Dutch monasteries, for the schools and hospitals belonging to the monasteries started to be subsidised by the government and retired people started to receive AOW³⁴², resulting in a better financial situation. Nowadays, most monasteries need to economise to manage the finances of the community. The Friars Minor of Megen receive guests, participate in youth work, and train new brothers, for which they receive additional money from the Franciscan Province. Some friars do have a job outside the community. The main sources of income of the Poor Clares in Megen are the host bakery, the AOW and the guesthouse. Where the sisters used to teach and to work in the nearby home for the elderly, now most work inside the monastery. The sisters get help from many volunteers who help as hostess, porter and gardener. The Poor Clares in Nijmegen complement the income from the AOW and housing of guests with a bookbindery.

Both the Franciscan Ecological Project *Stoutenburg* and *De Wonne* adhere to the principle that everybody who can will work either inside or outside the community. Domestic tasks like cooking are shared out among the members. At *Stoutenburg*, most people work outside the community in a paid or volunteer job and two persons work fulltime at the community. The main sources of income of *Stoutenburg* are the part-time jobs, letting a conference centre, social security benefits, and donations. *De Wonne* makes its living out of the financial contributions of the permanent residents and temporary guests and the income from the second hand shops. The permanent residents bring in all their income and receive back a certain amount as 'pocket money'. At the time of the field study two of the residents had a job outside the community. The other residents share their old age pensions. The temporary guests contribute according to their financial means. The sales in the second hand shops provide for about 20% of the income of *De Wonne*.

Both the members of *Stoutenburg* and the permanent residents of *De Wonne* share their income and their goods with each other. An important, and also Franciscan, principle is that everybody contributes to the community, whether this is in salary or in kind. Members working outside the community however sometimes experience a tension between their participation in the community and the challenges of outside work. One of them explained: "I work outside for two days and I wonder whether I experience enough of our communal life. Besides, there is so much work here. Is it really appropriate to work outside? It feels uncomfortable to see that things are not getting done or that the same persons are stuck with all the work again and again. At the same time I would miss my job if I gave it up."³⁴³ Income from other sources, like interest from savings or yields of a sold house, remains private property in both communities.

Dealing with money

Although the Franciscan Order is often characterised as a mendicant order, going out begging was only permitted in extreme situations.³⁴⁴ A modern form of begging is practised by the residents of *De Wonne*, as is outlined box 5.3.

Box 5.3 A modern way of begging

Every week, when the market is finished, the residents of De Wonne collect many unsold leftovers. This modern way of begging has developed gradually. Capuchin Arnulf told me about it: “Years ago, at the closing of the market, I saw a box of apples lying in the municipal refuse container. With some plastic bags I started to collect all leftover fruit and fish that were still covered with ice. The plastic bags became boxes and now we collect the food with a delivery bicycle.”³⁴⁵ The market vendors know that unmarketable products are collected and consumed in De Wonne, where needy people are sheltered.

At first, Arnulf felt ashamed when he collected the fruit. Particularly because he is an ordained priest, people thought it was inappropriate. Initially, some people destroyed the fruit in front of their eyes or started to throw tomatoes. Later it became a certain habit to receive leftover fruit, vegetables, flowers and fish from the market. Nowadays, De Wonne also receives bread from the bakery and leftovers from receptions. The bread is also distributed among homeless people.

For Arnulf, this modern way of begging, together with the second hand shops of the community, has become an essential part of his Franciscan way of life: “Something is happening, when you’re confronted with ‘useless’ things day after day. You become a re-creator, you move up to a new covenant. (...) While collecting these things through the years, you better sense that actually this should not be happening: importing fruits by plane from Africa to let them disappear in a refuse container. It is not for that purpose that the sun has shone and hands have picked. By collecting these fruits and taking them home, their being is bended again to its destination, they are revalued, recreated.”³⁴⁶

At the beginning of the brotherhood, the Friars Minor were prohibited from accepting money for their labour. RegB 4 says: “I firmly precept all the friars that in no manner are they to receive coins or money through themselves or through an interposed person. Nevertheless on behalf of the necessities of the infirm and the clothing of the other friars, let only the ministers and the custodies conduct a solicitous care, by means of spiritual friends, according to places and seasons and cold regions, as they have seen expedites necessity; with this always preserved, that, as has been said, they do not receive coins nor money.” Interestingly, Francis already provided for ‘spiritual friends’, people who helped the brothers to purchase specific necessities. In present society it is hardly practicable to receive goods instead of money for work, for wages are usually determined. Wim Pot OFM translated this Rule into the principle that Friars Minor should not strive for the maximum wage.³⁴⁷ He based this on the statement that brothers may receive “the things necessary for the body.”³⁴⁸ This shows on the one hand that a small wage should be sufficient and on the other hand that the Rule acknowledges the needs of the body. Going short is not an aim in itself.

Saint Francis did not reject receiving a wage in kind, but he seemed to oppose the excluding effects of money in a developing urban society with growing trade, in which money started to play a more prominent role. Francis noticed the effects of this societal change, and money the brotherhood received was shared with needy people. Nowadays, the Friars Minor may accept money as long as they immediately pass it on to the custodian. The custodian and minister are responsible for the way this communal money is spent. An important principle is that every Franciscan receives according to his needs. No individual Franciscan may freely decide on the expenditure of money, but needs to budget and make an estimate of his or her yearly expenses. What is left over at the end of the year must be given back to the community.

As mentioned above, the residents of *De Wonne* and *Stoutenburg* also hand in their salary

or payment, and share this communal money. For many people sharing income appears to be an impediment to participation in these communities. A member of *Stoutenburg* explained: “Renouncing the power of disposal of your private income may be a huge barrier, particularly in a society in which income is seen as very important.”³⁴⁹ For the residents of the communities however sharing money is seen as an essential aspect of solidarity. Most residents emphasise the advantage that, because of the communal housekeeping money, they can afford to purchase organic food and ecological products, which would not have been possible with their single income. Like the Friars Minor, both communities have an account at a bank that aims to promote sustainability. *De Wonne* closes the annual accounts at zero, and surplus money is given away to a social project, which is based on the Franciscan principle of living without possessions.

Now we have discussed the Franciscan view on labour and finances, we will continue with a specific aspect of labour: the Franciscan way of dealing with agriculture and gardening in the next section.

5.4.2 Agriculture and gardening

The Benedictine worldview emphasises a different relationship between man and nature from that of the Franciscan worldview.³⁵⁰ This is partly due to the situation in which both orders came to existence: the 5th century Benedictines and 11th century Cistercians were formed in an agricultural setting, while the Friars Minor developed their religious life in the developing urban society of the early 13th century and focused on mission and care for the poor. Saint Francis was the son of a merchant and was not familiar with agriculture. For poverty reasons Saint Francis even prohibited the possession of land and animals (RegB 6), another reason why the brotherhood never practised agriculture on a large scale nor played an important role in agricultural developments.

Following Dubos, Van Asseldonk distinguishes a Franciscan partnership from a Benedictine stewardship.³⁵¹ As argued in section 5.2.3, this partnership does not mean that Francis saw men and animals as equals, but he felt related and connected to all of creation because all are created by the same God. This is a basic attitude that can be found among Benedictines and Cistercians as well. The main difference between the Benedictine and the Franciscan worldview regarding nature is that the Benedictines, and particularly the Cistercians, have a practical vision for working with nature and maintaining a fertile soil for generations to come, while Saint Francis’ dealing with animals remained abstract and allegorical, because he never cultivated land or raised cattle. Still, since care for nature has gained more attention inside the Franciscan Brotherhood, the issue is often approached in a spiritual or mystical way, emphasising cohesiveness with nature or respect for creation, and to a lesser extent in a practical way by lowering environmental impact or preserving specific flora and fauna.

It would have been interesting to see what choices Saint Francis would have made as a farmer and what consequences his approach to the earth as “Sister Mother Earth” would have had. Francis did not have a negative attitude towards breeding cattle or working the land. As will be discussed in section 5.5.4, he permitted all kinds of food and was not a vegetarian. In the past, some Franciscan communities rented land, without being the formal owner. In the literature I found no evidence that these brothers practised a remarkably different way of agriculture, which is confirmed in the interviews with Franciscan brothers. Looking back, Arnulf Sibbing OFM cap of *De Wonne* remarked that in his former Franciscan community there was little relationship with nature. This underlines the idea that practising agriculture in the mo-

nastic setting, as was the case among the Poor Clares and the Trappist Order for a long time, this will probably affect the way nature is approached and dealt with.

The effect of Franciscan ideas on nature can best be observed in the way the Poor Clares deal with agriculture, because as a contemplative order they have always possessed some land to be able to support their community. Besides, many Franciscan brothers used to maintain a vegetable garden. This gardening in the monasteries and at *Stoutenburg* will be elaborated in the next sections.

Gardening at the Poor Clares

Because the Poor Clares had to remain within the monastery walls, they have cultivated gardens from the beginning. In the sheltered environment of the monastery of the Poor Clares in Megen, the sisters maintain a monastic garden with a vegetable garden, herb garden, currant bushes and an orchard. For a long time the sisters lived from the yields of the gardens and the livestock. However, owing to a decreasing number of sisters, the last cows were sold in 1960 and the last pigs and chickens have left the community as well. Now, the only livestock in the monastic grounds are some sheep. Whereas in the past the garden yielded food for the community year-round, it now provides vegetables for about half of the year. It also contains about fifty-five kinds of herbs. Furthermore, the sisters maintain two flower gardens: one for the guests and one for the sisters, meant for rest and meditation. Although these gardens do not consist entirely of indigenous plants, the garden sister increasingly collects seeds of wild flowers in the environment of the monastery.

Sister Ancilla, the head of the garden, opted for organic gardening in the 1980s. The main reason was that she did not want to pollute or poison the earth, for the sisters perceive the earth as a gift from God and therefore it needs to be treated with care. "A healthy earth is a precondition. The fact that these potatoes and vegetables are also healthy for the sisters is a bonus."³⁵² Guest sister Imme also subscribed to this vision on gardening: "Because we are both a gift from the hand of God, we feel connected, related to nature. That is why we want to care for the earth and treat animals with respect. In fact, we have been gardening in an organic way for years. Not in the first place because of the environment, but from a respect towards God. Nature is His gift, His property."³⁵³

The Poor Clares see the garden as necessary, not only to feed their community, but also as a means to develop oneself. Physical work and exertion do matter, but even more important is the development of the mind. "When you stay in your cell, you run the risk of becoming limited in your thinking and experiencing. Outside you pass certain limits and you are free to develop your senses: smelling, listening, looking and touching. That is why we always offer outside jobs to new sisters, for it gives them an opportunity to practise connecting to nature and to learn to wonder about the growth of a plant, the wonders of life. (...) Such amazement and connection lead to spiritual growth."³⁵⁴ Many sisters in Megen connect working in the garden with their Franciscan roots. Sister Johanna explains: "Francis of Assisi inspired me with his deep conviction that anything we have and anything we are able to do, we receive from our Creator, and therefore we can consider nothing as our property or just take it for granted. I am particularly aware of that when I work in the garden."³⁵⁵

The Franciscan monastery in Megen has a monastery garden as well, but since the brothers have given up cooking they have only grown fruit and rhubarb. When the apple trees need to be sprayed with pesticides, they restrict these to the absolutely essential. Nowadays, the monastery garden has been transformed to a '*Hof van Lof*' (Garden of Glory) by volunteer Tini

Brugge. She aims to grow liturgical plants and flowers and cultivate a colourful and scented garden that “witnesses to the glory of the Father of Creation.”³⁵⁶ After I had worked in this garden with Wim Pot OFM, he drew my attention to a sign about taking care of the garden tools, and said: “Good care for the tools is also a good care for nature.”³⁵⁷

Gardening at Stoutenburg

The Franciscan Ecological Project *Stoutenburg* cultivates an organic garden of 0.5 hectares. The garden consists of five basic sectors: legumes, pumpkins/corn/zucchini, potatoes, cabbage, and carrots/beets, to which they apply a five-year crop rotation. In addition to this, they grow a huge diversity of vegetables, flowers, herbs and fruit. Many volunteers help the community to maintain the garden, for much manual labour is needed. It is fertilised with compost, nettle manure and manure from an organic farm. Chemical pesticides and herbicides are not used. The garden contains a spring, which has already been constructed by the Friars Minor who used to live in the house. In 1996 the community dug a pool for toads and frogs.

The garden provides 90% of the vegetables and potatoes they need. The production and final results of the garden are not seen as the most important aspect for the community, but the way the garden is cultivated. This attitude embodies both spirituality and care for the environment and can be described as “listening, observing, and sensing, both what is going on in nature and in yourself. It is an attitude of non-control and respect” (Elzinga, 2002, 11). The *Stoutenburg* residents are convinced of a direct relation between their worldview and care for nature. Their website states: “The Project maintains that the relationship between humans and the environment can be truly changed and renewed radically, provided the effort is based on a spirituality, a religious perspective which is nourished by the essential relationship of all creatures with one another and with the Creator.”³⁵⁸

Although the ideas and practice of organic gardening at *Stoutenburg* are very interesting in the discussion on the relation between worldviews and sustainability, this way of farming is rather exceptional within the Franciscan Order and not representative for it. The *Stoutenburg* way of organic gardening is based on a much broader spiritual perspective and is moving away from basic Franciscan ideas, as discussed in section 5.2.3. For that reason I will confine myself to this brief description.

Recapitulation

Within the Franciscan family, work is seen as important for it disciplines body and spirit. Franciscans mainly work in mission, care, social work, education, and ministry. An important Franciscan principle is that every person contributes to the community, whether it is in kind or in salary. Whereas in the past Friars Minor were prohibited from accepting money for their labour, now the Brothers translate this to the principle that they should not strive for maximal wage. All money received is passed on to the custodian and every Franciscan receives according to his needs. The value of poverty is also practised in giving away surplus money to the poor. For some potential residents of *De Wonne* and *Stoutenburg* sharing income appeared to be a major obstacle, while the residents themselves experience it as an act of solidarity and emphasise the possibilities which communal money provides.

Agriculture has never been a distinguishing aspect of Franciscan life. Saint Francis was not familiar with agriculture and because he rejected the possession of land and animals for poverty reasons, the brotherhood never practised agriculture on a large scale. This might be an important reason why care for nature has never been a distinguishing issue in the Franciscan

Brotherhood and even now, when the awareness of pollution is growing, nature is still approached more from a spiritual than from a practical conservationist point of view.

Franciscans and Poor Clares emphasise that plants and animals are seen as a gift from the hand of God. Nature is God's property and should therefore be treated with respect. For the last thirty years the Poor Clares of Megen have translated this belief into the practice of organic gardening. Although the Friars Minor have become convinced of the importance of organic gardening, they had to give up vegetable gardening because of the lack of hands. The Franciscan Ecological Project *Stoutenburg* cultivates an organic garden which provides 90% of the vegetables and potatoes they need. They emphasise a direct relation between their philosophy of life and care for nature.

5.5 Sustainability and environmental impact

This section on sustainability and environmental impact focuses on specific behaviour choices regarding energy use, transport, and nutrition. It also describes the environmental impact of the Franciscan monasteries and lay communities in general on the basis of the IPAT-formula³⁵⁹, dealing with population, affluence and technology, in relation to Franciscan values.

In the 1980s, Tini Brugge studied the relation between the Dutch Franciscan movement and sustainability and initiated the project '*De aarde eren*' ('Honouring the earth'). This project was not launched out of a need, but because Franciscans observed a flaw regarding the issue of sustainability. The project focused on environmental behaviour and particularly on the way monasteries grew their food and what was cooked. Brugge found that generally the daily monastic economy was a copy of what had been done a generation before. People copied the behaviour of their parents, out of familiarity and habits.³⁶⁰ She observed the same regarding agriculture. People used pesticides because they were used to doing so. The project 'Honouring the earth' aimed to connect spirituality and working the land. The Franciscan movement received the project positively, although the effects differed greatly between the different monasteries and individuals. Environmental choices appeared to be very dependent on the attitude of the responsible person. Most lasting changes in the monasteries were choices regarding use of paper and cleaning products, as well as separating the rubbish, which is comparable with the general practice outside the monasteries. Environmental issues are usually not at the top of the priority list in communal meetings. We will now turn to specific choices regarding energy use, transport and nutrition in the Franciscan communities studied.

5.5.1 Energy use

Because many monasteries are situated in huge old buildings that are not insulated very well, the total energy use per person is quite high among Franciscans in the colder regions of Europe and North America. The brothers in Megen live in an old building, including a high old monastery church which has a public and open character. In 2004, the community used 47,556 m³ of gas, mainly for heating the buildings, including the central church. During winter, the community services are not held in the huge chapel, but in a smaller room to save on heating costs. Even though the average temperature in the rooms is relatively low, the amount of gas needed for heating is huge. The Poor Clares in Megen have lived in their monastery since 1721. In 1956 the community got central heating. Until then the monastery had only had two stoves: one for cooking in the kitchen and one in the room where the sick were nursed. Now guests

are free to regulate the temperature of the radiator in their rooms.

Despite the high costs for heating and maintenance, moving to a modern and energy efficient monastery is not an option for most monastics. As sister Imme said: "As long as we can live here with a sufficient number of sisters, we will not leave our monastery. Sisters have been praying here for ages and that is very important to us."³⁶¹ The church of the monastery is open to the public. The buildings of the brotherhood in Megen have a new function as well. The entire monastery welcomes an average of 4,500 visitors per year, of whom 1,500 also stay overnight. Brother Sjoerd Hertog OFM noticed that not only Catholics, but also an increasing number of Protestants find their way to the monastery. This way of presenting spirituality to a broader public is appreciated very much by the brotherhood of Megen and outweighs the high energy requirement.

At the time of the field study, the brotherhood in Megen was considering the use of 'green energy', following advice of the Committee on Justice, Peace, and Honour of the Order. Before they would switch to green energy, the brothers wanted to investigate how they could reduce the use of energy and what they wanted to do regarding the heating of the church.³⁶² However, because of the huge number of issues they postponed the discussion again and again. Two years after my first visit the Friars Minor had still not decided, but Wim Pot OFM replied: "Where other issues disappear in the long run, we think that environmental issues are so important that they will stay on the list." At the three-yearly Provincial Chapter of the Dutch Franciscans in May 2010, the Chapter explicitly declared to investigate how to make their houses more sustainable. The Franciscan community in Amsterdam attached 28 solar panels in 2009, yielding an expected 4000 kWh per year. They wished to decrease their carbon dioxide emission and a subsidy from the Dutch government made it possible to switch to solar energy.

Regarding the use of energy, the Franciscan brothers in Megen have contracted out several activities, owing to lack of hands. They switched to using a catering service four times a week. The washing of the bedding is contracted out as well to a laundry service; the remaining laundry is done by the brothers themselves. In the monastery of the Poor Clares, seldom is a room lighted unnecessarily, not so much for environmental reasons, but out of thrift. Some lamps contain low-energy light bulbs. The community has common appliances like a freezer and a microwave, although the latter is not used every day. For cooking desert, the cook uses every day a so-called 'hay box', a wooden isolated box in which briefly cooked food can slowly finish cooking without the use of fuel. The dishes are washed by hand. This conscious use of energy has developed mainly out of the values of moderation and frugality.

De Wonne

De Wonne has a high use of gas per square meter (39.3 m³) as well, although the use of gas per person (1,024 m³) is lower than among the Franciscans in Megen (2,161 m³), because of the many guests.³⁶³ The community is situated in an old monastery, built in 1868, which is not insulated very well. On the other hand, meals are cooked and eaten communally six days a week and the evenings are often spent in the communal living room. When new appliances are bought, the residents usually choose efficient and sustainable ones. Many appliances are shared. The community has two washing machines for all 35 residents. The dishes are washed by hand. *De Wonne* has three square meters of solar cells, which are used to heat the showers, and makes use of 'green currency' for environmental reasons.

A huge dilemma occurs regarding the use of energy. Although the seven permanent resi-

dents are quite energy-conscious, many temporary guests appear to have different norms and priorities. The residents mention examples of long showers, hot washes in practically empty washing machines, high room temperatures, and other things. Sometimes the guests are confronted with their energy use, but the permanent residents do not want to formulate agreements or rules for it. The main purpose of *De Wonne* is to offer a temporary home for people in difficult situations. The social aspect and free choices in their rooms are thought to be more important than rules that might lead to a lower environmental impact.

Stoutenburg

The main building of *Stoutenburg* is old, badly insulated and energy inefficient. The rooms have high ceilings and big windows with single glass. The problem is that the residents are not the owners of the buildings. The community made plans for renovating the heating system and installing solar cells, but the owner is not willing to invest in these systems, for it works on temporary contracts with the community. This uncertainty about how long the community can stay and the fact that they rent the buildings, prevent them from making big investments in insulation and double-glazing. The relatively low volume of gas per living space (11.3 m³) partly results from the fact that many rooms in the building, especially the old chapel, are little used and therefore not heated.³⁶⁴

The main electrical appliances are used by all residents. Because *Stoutenburg* runs a conference facility with meals, they had to adapt the kitchen to the latest hygiene requirements, including an extra refrigerator. The community has a freezer for vegetables and herbs from the garden and the bread. The dishes are washed by hand. The washing machine is used for personal laundry. The washing of the bedding from the conference centre is contracted out to a laundry service. The residents are not very happy with this, because it is expensive and the laundry service does not use organic soap, but the washing and ironing took up too much time. To reduce the amount of laundry, *Stoutenburg* encourages guests to bring their own sheets. The community makes use of 'green currency' for environmental reasons.

Recapitulating this section on energy use, we can conclude that for many Franciscans their old buildings inevitably lead to a high use of energy. However, moving to a more energy efficient building is a huge step, because of the historical value of the place. Besides, these heritages are open to the public and serve a spiritual purpose for a growing number of people. Recently, one of the two Dutch Franciscan monasteries has attached solar energy. The two lay communities make use of 'green currency'. The use of electricity by the residents of the communities is relatively low, not always because of environmental reasons, but because of a striving for thrift, moderation and frugality. All the communities studied welcome guests, who are free to use energy in the way they wish, which sometimes causes tension with the values of the residents.

5.5.2 Transport

In contrast to the Benedictine Order, the Franciscan First Order is very open to travelling and working outside the monastery. In the Rule, Saint Francis urges the brothers to travel simply, in a way that fits a Friar Minor: "And that they ought not ride (horseback), unless they are driven (to do so) by manifest necessity or infirmity" (RegB 3:12). The Friars Minor were not allowed to travel by any animal, whether it was a horse, a mule or a donkey. One of the reasons was that using a horse for travelling was a sign of wealth and status. Another reason might have been that Christ and the Apostles had travelled throughout Judea on foot as well (Lk.9:3-5).

Although the Friars Minor do not exclusively travel on foot anymore, they try to travel with simple means of transport, as illustrated by Loek Bosch OFM: “We don’t drive a Mercedes, but a small Fiat.”³⁶⁵ His community in San Damiano owns three cars for 24 brothers. Many Friars work in the monastery itself, welcoming guests, or in Assisi and do not need transport for that. The brothers in Megen on the other hand have three cars for ten persons. In this Dutch community, more brothers work outside the monastery and use either a car or public transport to travel to work. A problem is that the village of Megen is not very accessible by public transport. Table 5.1 gives an overview of the amount of transport as used by the residents of the three Dutch communities. For recreation, often bicycles are used.

In contrast to the active Order of Friars Minor, the Poor Clares form a contemplative order. This means that they are less focused on outside society and spend more time inside the monastery. At the time when the Poor Clares still lived in an enclosed convent, they hardly ever came outside the monastery. When the community made it possible to get out in the 1950s, some sisters had not been outside the monastery walls for forty years. Now the sisters have much more freedom, but still they rarely travel long distances. The two weeks of holiday every year are usually used to visit relatives.

Table 5.1 Transport by residents of the Dutch communities (excluding guests) per year				
	OFM Megen 2004 N=10	De Wonne 2002 N=8	Stoutenburg 2002 N=9	Dutch population 2002*
Car miles per person	3,728	1,332	1,553	5,784
Car kilometres p. p.	6,000	2,143	2,500	9,308
Total number of cars	3	2	0	6,710,000
Average number of cars per person	0.33	0.25	0	0.41
* Source: CBS, 2002, 2004				

De Wonne

De Wonne owns two cars, which are mainly used by the residents for recreation, to transport the weekly bread supply and pick up goods for the second hand shops. In fact, two-thirds of all car miles are travelled by one married couple who travel to friends and family by car. Two residents have a part time job outside the community, for which they use public transport or bicycle. All others work either in the community or in the second hand shops. *De Wonne* is situated in the city centre, at five minutes walking distance from the train station. Therefore, shopping is usually done by bicycle, carrier cycle (with engine), or on foot. For communal trips, the community travels by train. In the last ten years two trips have been made by plane, by two different persons.

Stoutenburg

The residents of *Stoutenburg* mainly use public transport or travel by bicycle. Most car miles are made by one single resident, who often travels long distances to give lectures. For these trips she usually drives a friend’s car. For other car trips the residents either rent or borrow a car, or use a taxi.³⁶⁶ At the time of the field study the community did not have a car. This has not always been the case. *Stoutenburg* used to have a car and they might buy one again, if it is needed. Four persons work outside the community and usually travel by public transport. The other

residents mainly stay in the community. Most groceries are purchased in bulk once a month and delivered by the retailers. For the transport of big objects, the community uses a bicycle trailer. For holidays the residents travel by train or car, and sometimes by plane. In fact, nearly all recent plane trips have been made by one person. Although some people would never fly, for environmental reasons, they do not judge the woman who likes to fly, as one resident tells: “She loves to fly. She can really enjoy it. I don’t like it; I prefer to have my feet on the earth.”³⁶⁷ This illustrates that in *Stoutenburg* spiritual values may surpass environmental values.

Most residents of *Stoutenburg* mention environmental considerations as playing an important role in the choice of mode of transport. For some it is even a moral choice. However, it also causes dilemmas. The house is located in the countryside and the distance from the house to town is quite long. Especially for the families this was not always easy, as a mother explains: “I have grumbled now and then, about the miles I had to cycle. It was troublesome that you had to organise a lot when kids wanted to play with friends after school and so on.”³⁶⁸ It also hinders residents from participating in activities in the evening, because they do not want to cycle in the dark.

Recapitulating this section on transport, we can conclude that living and working in a Franciscan community involves a relatively small amount of transport by car, partly because many people work where they live and partly because it is a conscious choice to travel with simple means. The Friars Minor are more outwardly oriented than the Poor Clares and therefore travel more. A decisive factor for car use is the accessibility of the communities by public transport.

5.5.3 Nutrition

Saint Francis allowed the brothers to eat anything that people gave them, as stated in RegB 3,14: “And according to the Holy Gospel let it be licit to eat of all the foods, which are placed before them (cf. Lk.10:8).” This was made clear three times in the *Regula non-Bullata*: 3,13; 9,13 and 14,3. In RegNB 9,14 Francis adds a warning against gluttony and drunkenness.

Francis encouraged the brothers to fast during the periods of Advent, the forty days before Lent, and Lent itself. In addition, he advised fasting every Friday. Although he was very strict on fasting for himself, he was more flexible towards his brothers. In the Rule he writes: “Let those who voluntarily fast be blessed by the Lord and let those who do not want (to do so) not be constrained” (RegB 3). Celano adduces two stories regarding fasting in his biographies. One tells about Francis having eaten some chicken when he was sick. When he felt better again, he asked a brother to haul him through the streets of Assisi with a rope around his neck, while shouting: “Look at this glutton, who fattened up himself with chicken” (1 Cel. 52). The second story shows another side of Saint Francis, describing a brother who one night cried that he was dying from hunger. Francis immediately prepared a meal for him and invited all others to join the meal, so the hungry brother might not feel ashamed (2 Cel. 22).

The Friars Minor of Megen only cook at the weekends, for during the week they make use of a catering service, that serves simple, but good, Dutch meals. This catering service does not work with organic products, but it was the only available service in the area. For breakfast and lunch the Friars Minor have bread with butter, cheese, home-made jam and several other spreads, with milk, coffee and tea. Breakfast is consumed in silence.

The meals prepared by the Poor Clares are simple, plain, and nutritious. Breakfast consists of wheat bread, rye bread, butter, cheese and either (home-made) jam, apple spread, or peanut

butter. During the week, the sisters no longer have home-made bread anymore, but buy their bread in the shop. Beverages are herbal tea (from their own garden), black tea or coffee. They always have fruit at breakfast. At noon the sisters consume a three-course dinner, consisting of soup, main dish, and desert, often porridge. The evening meal is similar to breakfast. The sober lifestyle can be recognised in the way the Poor Clares deal with leftovers. Nothing is wasted and as one of the sisters said about the cook: “She can make anything from nothing”. Even the scraps from the host bakery are used in the soup or the porridge. Guests can buy these scraps to use at home.

All meals are consumed in silence, together with the guests. The sisters explain that eating in silence encourages them to eat with attention, enjoy the food and deal with impressions and thoughts gained earlier. Because all meals are preceded by a church service, the silence during the meals is also a way to remain in prayer. The cook explained that Franciscan spirituality inspires her to cook with respect for the earth, for humans and for animals. The community has clearly chosen to reduce the consumption of meat, as will be discussed in the next section on meat consumption at the communities studied. The consumption patterns of *De Wonne* and *Stoutenburg* will be explained further in this section.

Meat consumption

Although Saint Francis presumably did not eat much meat, for going without meat was part of the regimen of fasting at that time, he was not a vegetarian. Celano narrates a remarkable story regarding meat in 2 Cel. 199: “When the question arose about eating meat that day, since that Christmas day was a Friday, he [Francis] replied, saying to Brother Morico: “You sin, Brother, calling the day on which the Child was born to us a day of fast. It is my wish, he said, that even the walls should eat meat on such a day, and if they cannot, they should be smeared with meat on the outside.” For Francis, honouring baby Jesus was of much more importance than renouncing the consumption of meat on a fasting day.³⁶⁹

In Megen, five out of ten brothers have a vegetarian diet, mainly because of the impact of meat production on developing countries and for environmental reasons. The other five brothers consume meat at dinner three times a week. This meat is not organically produced. Since the brothers stopped cooking for themselves and chose the local meal service, they have lost direct influence on the ingredients of the meals. Wim Pot OFM estimates the average yearly meat consumption per person to be 15.6 kg. Table 5.2 gives an overview of the estimated yearly meat consumption in the three Dutch communities.

Table 5.2 Estimated yearly meat consumption in the Dutch communities				
	OFM Megen 2004	De Wonne 2002	Stoutenburg 2002	Average Dutch 2002*
	N=10	N=35	N=9	
Meat consumption per person (kg)	15.6	47.5	2.5**	50.1
Fish consumption per person (kg)	7.8	18***	0,5**	14
* Source: Produktschappen Vee, Vlees en Eieren (2002) ** This meat is consumed outside the community, for inside the community all meals are vegetarian. *** The community gets this fish free from the market. If they did not receive it, they would not buy it.				

The sisters are not vegetarians either. In the past, the Poor Clares hardly consumed any meat, for that was an expensive luxury. When in the early 1900s a number of sisters got tuberculosis, they decided to eat more meat following the doctor's advice. In the 1980s the head of the kitchen became aware of the large amount of feed imported from developing countries to produce meat in rich countries and the felling of huge areas of forest to create pastures for cows in order to be able to meet the demand for meat.³⁷⁰ The sisters discussed the issue in the community and decided to eat meat twice or three times per week and add fish, eggs and vegetarian products to the other meals. Because the amount of meat had been reduced, the sisters agreed to buy organic meat. The cook buys a complete pig from an organic pig farm. This means that the cook can use all of the pig: the trotters for making bouillon, bacon, and chops, but also the more luxury tenderloins which are used at Christmas and Easter. The cook would never have bought the latter at the butcher's, but now it is part of the entire purchase. Beef is bought in packages of 60 to 80 kilos at another organic farm. The cook tries to prepare fish once a week, although she finds it hard to find fish from sustainable fishing.

In *De Wonne* meat is consumed at every meal. Except for Sundays, guests prepare all communal dinners and they are free to choose the ingredients they wish. Most of the guests prefer a large portion of meat. *De Wonne* had a vegetarian meal on Wednesdays, but after many protests by guests this has been abolished. Every week 4 kg of free-range mincemeat is bought at an organic butcher; all other meat is not organically produced. One of the residents is vegetarian.

At *Stoutenburg* all meals are vegetarian, for reasons of animal welfare and care for the environment. Not all residents are vegetarian and they sometimes consume meat when they have dinner in a restaurant. In the guestbook of the conference centre many guests explicitly compliment the cook for the tasteful vegetarian meals.

Organic food

The brothers in Megen estimate the percentage of organic food in general to be 4%, which is mainly fruit from their own garden and some incidental products. As mentioned before, dinner is prepared by a catering service that does not work with organic ingredients. Products like coffee, tea, wine and chocolate are bought at the Fair Trade shop. The brothers in San Damiano do not eat organic food. Loek Bosch OFM tells about the dinners: "I think the Italian brothers, and especially the younger brothers, are too easy-going. They turn up their nose at leftovers for the afternoon dinner. They don't want to eat the same twice. Well, I was raised by the generation that went through the war, and my mother always said: 'You must eat everything, because times can come you'll have to.'"³⁷¹ Brother Loek found the dinners in San Damiano too lavish, which might also reflect a general cultural difference in eating habits in Italy and the Netherlands.

As mentioned above, practically all meat purchased in the community of the Poor Clares in Megen is organic. Likewise, vegetables, herbs and fruit that are grown in the convent gardens are organic as well. Additional fruit and vegetables are bought in the neighbourhood, but are not necessarily organic. The Poor Clares always chose seasonal vegetables from open ground for two reasons: for the taste and from an environmental point of view. The sisters explain that they do not want to buy vegetables that are cultivated in heated greenhouses or have been flown from all over the world. As far as I could observe, most other products are bought at the common supermarket, like dairy products, bread, peanut butter, apple spread, and biscuits.

The residents of *De Wonne* rarely eat organic food. The main reasons are the fact that a huge amount of the food is a gift from the market, and that guests are free to buy the ingredients for their meals. For most of them organic food is not an issue. Sometimes they receive bread from the organic bakery. Coffee and tea are purchased from the Fair Trade shop. Although the food from the market is usually not organic, for some residents processing this food has become a religious experience. Arnulf Sibbing OFM cap explains: "Cleaning fruit has become very intense, a kind of 'praying with the potatoes'. Like the fruit from Chilli we're squeezing here. What we do is restoring the honour of that fruit that would otherwise have been thrown away. (...) It is a process, to experience the fruits of the earth as consecrated fruit. That has to do with reverence and deep gratitude."³⁷²

The aim of *Stoutenburg* is to grow and buy all their food organically. The only non-organic products consumed at the community are milk, eggs, additional fruit, and feed for the cat. The residents buy their milk and eggs from the farmer next door, with whom they wish to maintain good contact. The non-perishables are purchased from a wholesale supplier and delivered once a month. Fresh fruit cannot be bought here and therefore, when their own fruit supply is finished, they buy non-organic fruit in a nearby supermarket. The feed for the cat is also bought in the supermarket, for the cat does not like the organic feed. The percentage of organic food is estimated to be 96%.

The policy of *Stoutenburg* is to eat seasonal food. Leftovers are used in the soup for the next day, or given to the neighbours' chicken. Often this contrasts sharply with the behaviour of the self-supporting renters of their conference centre: "It is painful to see that rubbish dump, with complete loaves of bread still in plastic."³⁷³ Usually the residents pay attention to the country of origin when they buy products, and they prefer local products for environmental reasons. However, products that cannot be cultivated in Europe, like coffee, cocoa and peanuts, are not refused. One of the reasons for that is the presence of guests: "You need to have a recognisable meal for the guests of the conference centre. You cannot only offer products like *tahini*. It would be much easier if we only had the community; then it would be easier to make decisions."³⁷⁴

Recapitulating this section on nutrition, we can conclude that the monastics choose for simple, plain and nutritious meals. Regarding meat consumption and the choice of organic food, many differences between the communities can be recognised. *Stoutenburg* only serves vegetarian meals, for environmental reasons and animal welfare. For the same reasons the sisters Clare have chosen to decrease the consumption of meat to two or three times per week. At the Friars Minor, five out of ten brothers were vegetarian. In *De Wonne* meat is consumed at every meal, mainly due to the choice of menu of the temporary guests who prepare the meals. Regarding the choice for organic food, the Friars Minor in Megen only consume organic fruit. They no longer maintain their own vegetable garden because of lack of hands and make use of a non-organic catering service. The residents of *De Wonne* also hardly eat any organic food, because many products are leftovers of the market and additional ingredients are bought by the guests, who usually do not buy organic products. The Poor Clares in Megen cultivate their own organic vegetables, fruit and potatoes, and buy organic meat. The percentage of organic food consumed at *Stoutenburg* is estimated at 96%, for environmental and justice reasons.

5.5.4 Environmental impact

This description of the environmental impact of the Franciscan community will be discussed on the basis of the components of the IPAT-formula, namely population growth, their level of affluence and environmentally sound forms of consumption, and the role of technology.

Population

Since the monks and nuns commit themselves to celibacy, the population growth within monasteries is nil. Furthermore, practically all monasteries of Franciscans and Poor Clares in Europe and the United States are facing an increasing proportion of ageing members and a decline of new members. Although the Orders in Pakistan, India and South America are growing, some brothers expect that this will not continue in the long run.

Affluence

The Rule of Saint Francis is clear about private property, as has been described in sections 5.3.2 and 5.4.1. RegB 6 says: "Let the friars appropriate nothing for themselves, neither house nor place nor any thing (...) as ones serving the Lord in poverty and humility, (...) because the Lord made Himself poor in this world on our behalf (cf. 2 Cor 8:9)." The Rule of Saint Francis goes further than the Rule of Saint Benedict, for in the latter the individual did not have private property, but the community as a whole could be rich and was allowed to possess many communal goods. It was Saint Francis' wish that Franciscan monasteries did not have any communal property either, for he wanted to show solidarity with the poor. In practice, however, most Franciscan monasteries have had communal possessions. The Franciscan vision on money and the present practice of dealing with finances have been discussed in section 5.4.1.

Poverty and simplicity were very important values for Saint Francis, as elaborated in section 5.3.2. He emphasised that the brothers should be content with simple clothes, food, and shelter and share with others. An important principle was that everybody in the brotherhood received according to his needs, a principle which can also be found among the Benedictines and the Hutterites. Generally, Franciscans perceive their simple lifestyle not as limiting, but emphasise that moderation brings along freedom and quality of life. One of the residents of *De Wonne* explains: "My life has become more carefree. I lost much lumber and that gives me a feeling of freedom. I could have been completely financially secure, but I really question whether I would have been happier then."³⁷⁵

In practice, a simple or moderate Franciscan life means that the monastics use goods until they are worn out and repair or recycle products when possible. They strive for limiting their purchases to what they basically need. Loek Bosch OFM gave some examples: "I wear sandals and will wear them until they are threadbare. In 1992 I bought my last shirt. Fashion is not important to me. Clothes must neither be too expensive, nor too cheap, for often that is not the best quality. But I also think about factory farming. It is not the farmers who are to be blamed, but the consumers, who ask for cheap meat."³⁷⁶ The residents of both *De Wonne* and *Stoutenburg* also stress that they use many second-hand goods and use materials until they are worn out. Because many goods and appliances are used in common, the individual residents do not have many personal possessions. In general, the present Franciscan communities are characterised by moderation, soberness, shared property and durable goods.

Technology

The Franciscan Order has not really contributed to the development of new technologies. Science and study were usually practised most by the Conventuals, but they focused mainly on historical publications, particularly during the 16th and 17th century. In later times the Franciscans concentrated on social work, education and care.

The attitude towards technology can be compared to the attitude towards property. Precaution and care are important in achieving and using new techniques. When technology

helps the community to better carry out their jobs and thus be able to focus more on what is important, it will be quite easily accepted, as explained in section 5.3.2. *De Wonne* applies the principle that as soon as a new technology appears in their second hand shop, they are allowed to purchase it as community. In the Third Order relatively many people have chosen on principle to renounce the possession of a car for environmental reasons.³⁷⁷ Recently, the communities started to discuss ethical questions about limits of intervening in nature and the issue of genetic modification.³⁷⁸

In the monastic communities the brothers and sisters are becoming more open to technologies that contribute to a lower impact on the environment, although this relates to individual opinions more than to communal ones, not because the community thinks it is not important, but technology just has less priority than many other issues in the community. An illustration is the discussion on green energy in the Franciscan community in Megen as mentioned in section 5.5.1. The Friars Minor wished to discuss the issue, but two years later the brotherhood had not decided yet, for other issues got more priority at their chapters.

Recapitulation

The environmental impact as described by the IPAT-formula is affected most by the choice of celibacy and the values of poverty and moderation. All four communities I studied face a high use of energy, mainly due to the heating of the old monumental buildings they live and work in. The economical use of electricity is sometimes supported by environmental considerations, but mainly done out of thrift, moderation and frugality. Guests welcomed by all four communities are free to use energy in the way they wish. Regarding transport, the choice to live and work in the same place leads to a relatively small amount of car transport. The Friars Minor appear to be the most mobile of all four communities. An important reason for choosing the car is a lack of public transport. Nutrition differs among the four communities. The residents of *Stoutenburg* mainly serve organic and vegetarian meals, while the residents of *De Wonne* let their guests decide about the menu. Consequently, the residents of *De Wonne* consume non-organic meat at nearly every meal. Besides, they make use of the leftovers from the market. The Friars Minor mainly consume non-organic products and half of the residents are vegetarian. For environmental and justice reasons, the Poor Clares decided to decrease their consumption of meat. They buy organic meat and furthermore grow their own organic vegetables, fruit and potatoes.

5.6 Franciscan worldview and sustainability

This final section will discuss the relationship between the Franciscan worldview and sustainability and answer the question whether the Franciscan view on materialism and their daily practices can offer an alternative way of dealing with nature's resources, as posed in the introduction. The chapter will deal with the main clashing values in section 5.6.1 and conclude with promising values for sustainability in section 5.6.2.

5.6.1 Clashing values

When studying the life of Saint Francis, many Franciscans experience a struggle with the feeling that they are not radical enough. However, Franciscans are not a copy of Francis and will never be. Soon after Francis' death the order became a clerical order and the brothers had to

deal with a tension between saying Mass and caring for lepers and other people at the fringe of society. In Megen the brothers share their daily life with guests, participate in youth work and train new brothers. Some brothers remarked that they missed a certain radicalism and wished to work with the outcasts of society more often.

An important Franciscan issue is dealing with money and possessions. All four communities I studied live in beautiful, monumental buildings. The Friars Minor feel a tension with the original ideas of poverty, but also observe that the building has an important function. The brothers welcome 4,500 guests per year, of whom 1,500 also stay overnight. Another tension is felt regarding accepting money. In the 21st century it is quite impossible to live without money. The brotherhood lives in community of property, but the monks are also part of Western culture, and have another opinion of what is necessary than Francis had in his time.

The Franciscan Order has to deal with a shrinking brotherhood and rising age in many European and North-American monasteries. Because they chose to focus on youth work and receiving guests, the brothers in Megen lack hands to grow organic vegetables, which would fit in with their ideas about care for nature. The pastoral tasks get a higher priority than cultivating the garden, which has now been changed into a liturgical garden. The brothers obtain their meals from a local catering service and have limited influence on the content of the meals. The Poor Clares in Megen still have a sufficient number of sisters, although the average age is rising as well. Fewer hands are available for the work that needs to be done.

In *Stoutenburg*, two residents maintain the vegetable garden with the help of volunteers. Because the community also attribute a spiritual and healing function to cultivating the garden, it has a lower yield than would otherwise be possible. *De Wonne* focuses on preventing food from being thrown away. This is felt to be more important for the community than the way in which the food is produced. The cleaning and processing of the received products needs so much time, that it is not possible for the residents to cultivate their own vegetables in the garden.

Regarding environmental choices, in the Dutch monasteries the issues of poverty, justice, and mission appeared to be more important than the issue of environment, although recently the issue of sustainability gets more attention. Interestingly, a study in the 1980s found that most Franciscans preferred cheaper food over more expensive organic products in order to spend money for the poor.³⁷⁹ Among the Poor Clares this opinion has gradually changed and now they consume organic meat, even though that is more expensive. One of the reasons is a growing awareness that buying cheap products may affect the lives of the poor in a negative way as well.

The discussion on green energy has been postponed in the Franciscan community for some years. In May 2010 the Provincial Chapter of the Dutch Franciscans explicitly chose for making the community houses more sustainable, although the costs appear to be a problem. A dilemma for the community of *Stoutenburg* is that they are not the owner of the buildings. Because of the

Box 5.4 Hospitality

Sister Theresia tells about the implications of receiving guests: "We used to have more apple trees and tried to make it through the winter. It was no problem when they were not entirely sound, for the taste was good. Nowadays we welcome more visitors at our table than we used to do. That entails that we no longer wish to place less sound apples on the table. Using pesticides is no option for us, for we stick to unsprayed fruit. The consequence is that our fruit is finished earlier and therefore we buy fruit from a farmer in the area." (Chiara Bots OSC, 2008, 125-126)

high costs coming along with energy saving arrangements and the limited period for which the contract has been signed, these arrangements have not been applied yet. The residents would like to carry out an energy saving plan made with the former owner, but depend on the present owner for permission and realisation.

Care for the poor consequently led to hospitality and all four communities are involved in receiving guests. Although hospitality is felt to be important, it also disturbs the monastic way of life and causes clashes with certain values, like silence and moderation. Besides, it affects the environmental impact of the communities in a negative way. In the different communities the choice to receive guests leads to a higher use of energy, a higher consumption of meat per person, less moderate or environmentally sound nutrition and increasing transport. Particularly in *De Wonne*, the self-respect and free choice of the guests regarding the ingredients of the meal are thought to be more important than the choice for an organic meal and a smaller amount of meat. Nevertheless, all communities continue their hospitality, because they appreciate being able to offer the opportunity for contemplation and shelter (which is particularly true for *De Wonne*).

The residents of Stoutenburg struggle with the concessions they have to make owing to the choice to rent out their conference centre. Because the buildings are in the countryside, most of the guests come by car, which clashes with the choice of the *Stoutenburg* residents to travel by public transport and bicycle as much as possible. Managing a conference centre also leads to an increasing use of energy. Because of the hygiene rules the community had to purchase a second refrigerator. The conference centre is let on the basis of self-service and the kind of consumption of the renters sometimes clashes with the ideas of soberness of the *Stoutenburg* residents. Still, the residents accept this excess and rubbish, for they need the income to run their community.

Some Franciscans experience a tension between the choice for poverty and the gradual increase of modern conveniences in the community. Like the Amish, Franciscans do not reject modern conveniences, but only acquire them when they add to their vocation and quality of life. Often these choices need to be discussed, because personal opinions may differ on these issues. However, because choices on poverty and moderation are at the heart of Franciscan philosophy of life, they need a thorough reflection and translation to the present time. It will be a challenge for the Franciscan Order itself, but it may also function as a mirror for the broader Western society. This brings us to the last section of this chapter on promising values for sustainability and a lower impact on the environment that can be found in the Franciscan religious worldview.

5.6.2 Promising values

In the introduction I cited Lynn White who emphasised Saint Francis' virtue of humility as a way to depose man from his monarchy over creation and set up a democracy of all God's creatures (White, 1967, 1206). Since the 1970s, the image of the Saint has rapidly become greener. This attention for ideas about respect for animals is relatively new in the Franciscan Order and it will take time to find out whether these renewed values become part of the broader Franciscan religious worldview. As this chapter has shown, it is not so much the often mentioned brotherhood, partnership, or cohesiveness with nature that is the main contribution of Franciscan worldview to environmental care, but the deeply rooted values of poverty and moderation that have led to a relatively low impact on the environment. In this concluding section I will consider the most promising values in relation to sustainability and environmental care.

The main promising values may be summarised as gratitude, leading to an attitude of respect and humility, and the choice for poverty as a way to imitate Christ, leading to moderation.

Gratitude

The lives of Saint Francis and his followers are characterised by an attitude of gratitude to God. All things are perceived as gifts from God: life itself, the members in the community, food and shelter, and even the poor knocking at the door. This deeply rooted view has consequently led to an inner attitude of humility and an outer attitude of respect. White is right when he emphasises the virtue of humility as a promising way to realise sustainability, although Saint Francis' goal was not so much setting up a democracy of all God's creatures, but rendering praise to the Creator and owner of the earth. The idea that Saint Francis strived for an equality of nature is a persistent misconception that does no justice to his convictions and message. By calling the natural elements brothers and sisters, he recognised a common Creator and resembled the wish for a communal worship as expressed in the *Canticle of the Creatures*. The attitude of respect for nature as having value in itself, as created entity, can be traced back to the life of Saint Francis and may offer an interesting starting point in the discussion about sustainability.

Interestingly, in the First Order environmental care and nature conservation had not been an issue until a general awareness grew among the broader society. The main focus has always been on mission and care for the poor, and the brotherhood never practised agriculture or cultivation on a large scale. The recently grown awareness of environmental care is quite new and not yet rooted deeply in the Franciscan Order. The Poor Clares, on the other hand, belong to a contemplative order and have always practiced agriculture in the monasteries. Motivated by their attitude of gratitude, the Dutch sisters switched to organic gardening thirty years ago and chose to consume less and only organic meat, based on the convictions that plants and animals are a gift from the hand of God and should therefore be treated with respect. The spiritually diverse community of *Stoutenburg* motivate their organic gardening mainly by the idea of equality of nature, and with that leave the original worldview as can be found by Saint Francis and the Order as it developed till recently.

To conclude the relation between Franciscan worldview and care for nature, the values of gratitude, humility and respect are deeply rooted in Franciscan tradition and are the most obvious motivations to connect to environmental care. Ideas of equality of nature are rather new in the Franciscan tradition and can therefore not be seen as a typical Franciscan contribution to the discussion on environmental care. The most significant Franciscan contribution is to be found in their ideas about poverty and moderation.

Poverty and moderation

Francis was the *Poverello*, the saint who chose radical poverty. This choice was not based on environmental reasons, but derived from his choice to follow Christ, his solidarity with the poor, and his belief that wealth is an obstacle for a spiritually rich life. In the Franciscan worldview, goods may be used in moderation and should be shared with others. Individual Franciscans and Poor Clares hardly have any personal money or possessions, but receive according to their needs and surpluses are given to social projects, which principles can be recognised in the communities of *Stoutenburg* and *De Wonne* as well. The interior of the communities is sober, and furniture, clothes and appliances are used until they cannot be repaired anymore. Most monasteries gradually develop according to modern standards, although this modernisation takes place at a low pace and in a reflective way.

The values of poverty and moderation might be very relevant for the contemporary discussion on sustainability, since there is a substantial correlation between our Western consumption pattern and its environmental impact. The Franciscan values of poverty and moderation reveal an extreme contrast with the modern Western attitude and behaviour. A simplification and diminishing of our needs will ultimately lead to a lower pressure on the environment and might subsequently involve a different way of dealing with nature. Although poverty as practised by Saint Francis is far beyond feasibility, it might inspire to a more frugal way of life and another view on property. Acknowledging that everything belongs to God, Francis only used what he thought was necessary and sought not to forget the needs of others. These ideas will presumably lead to a careful and wise use of both material and nature.

Recapitulation

For Saint Francis, enrichment and quality of life were mainly found in spiritual and non-materialistic aspects of life: a life close to Christ and limitation of possessions. His worldview and values have inspired Franciscans for ages, maintaining their quality of life by contemplation, alternation of work and prayer, and a supporting community. Particularly the values of gratitude, humility and moderation are relevant for Western Society in the discussion on sustainability. Limitation in and moderation of consumption patterns will be a huge challenge for Western Society, but are necessary in order to reduce our impact on the environment. Saint Francis has inspired many people to follow his ideals of poverty and moderation, based on a deeply rooted gratitude to God, in the search for a greater quality of life.

Chapter 6 **Benedictine Order and the vow of stability**

6.1 Introduction

Whereas Lynn White suggested studying the life of Saint Francis in order to find values that might add to sustainability, we can also put forward the life of Saint Benedict and his Rule, for the latter contains ecological concepts that have been applied in agriculture and daily life for centuries.³⁸⁰ While Franciscan values have rarely been translated into agriculture because ownership of land and animals was prohibited in the First Franciscan Order, the stability of the Benedictine Order has contributed to a deep-rooted community life and sustainable care for their property. This chapter studies the relation between the Benedictine worldview and sustainability to find values that are relevant for the broader Western society.

For many centuries Benedictine monasticism has been one of the most formative elements of European culture. Benedictine monks were at the forefront in developing Medieval Europe and cultivated many marshes and wasteland into meadows and farmland. In addition, they practised physics, maths and medicine, developed architecture, and produced priceless manuscripts and beautiful art. Despite harsh periods of oppression, the order has survived the ravages of time. Many Benedictine monasteries still inhabit the old abbeys or cloisters and some continue to work the land. Because the Order of Cistercians follows the Rule of Saint Benedict as well, the Cistercians and the Trappists ('Cistercians of the Strict Observance') are also included in this chapter on the relation between the Benedictine worldview and sustainability.³⁸¹

In this chapter I will discuss the main aspects of the Benedictine worldview, the vows and relevant values for the discussion on sustainability. Much attention will be paid to the Rule of Saint Benedict, for at present this Rule is still the main guideline for Benedictine life. The Rule is an important legacy of Saint Benedict, and it describes his view of monastic life in an organised community. Although it was written over 1450 years ago, many principles are still applicable today and offer relevant points of view concerning sustainability. When Brother Paolo of Vallombrosa found out I was studying the Rule of Saint Benedict, he delightedly exclaimed: "Ah, the Rule! Wonderful, it gives freedom!"³⁸²

My field research has been spread over different monasteries in different periods.³⁸³ In 2005 I stayed in 'Lioba', a Dutch Benedictine monastery with 22 nuns and one brother, which I had visited several times before. The Lioba monastery was founded in 1935 by the artist Hildegard Michaelis and arts have always been an important form of labour and income for the community. In 1952 Lioba became part of the Benedictine Order. Unfortunately, this monastery did not allow me to publish quantitative data about the monastery, for they have had negative experiences with that. I also visited the Benedictine Abbey of Saint Adelbert in Egmond several

times.³⁸⁴ A year later I spent a period in two Italian monasteries, namely the old Benedictine Abbey of Vallombrosa ('Shady Valley') and the Benedictine Monastery of Citerna. The Abbey of Vallombrosa was founded in 1015. After alternating periods of flourishing, decline, and even abandonment, the Benedictines returned to Vallombrosa in 1949. The present community consists of eight brothers. The monastery of Citerna was built in the 13th century and used to belong to the Franciscan Sisters, but since 1951 contemplative Benedictine Sisters have resided in the monastery.³⁸⁵ The community consists of 20 sisters. In 2007 I spent some time in two Dutch Trappist monasteries: the Abbey Lilbosch in Echt and the Abbey *Maria Toevlucht* (Maria Refuge, MV) in Zundert. Both communities practise agriculture and nature conservation, which was an important reason for visiting these monasteries.³⁸⁶ The monastery of Echt numbers 16 brothers and the monastery of Zundert 26 brothers.

To study the relation between the Benedictine worldview and sustainability of the present Order, I will first briefly describe the life of the founder, Benedict of Nursia, and the development of the Order in section 6.2. Section 6.3 continues with a study on the main aspects of the religious worldview and social-cultural values. Section 6.3.1 focuses on religion, quality of life, and the content and meaning of the divine office and *lectio divina*, and describes the Benedictine view on nature. Section 6.3.2 gives a description of the three Benedictine vows and important values, both in relation to sustainability and environmental care. The main subjects of section 6.3.3 are the monastic time schedule, the social organisation, significant cultural symbols, and the way Benedictines deal with modernisation. Section 6.4 gives an account of the Benedictine view on labour, agriculture and nature, illustrated by the specific cases of the Dutch Trappists of Echt and Zundert in section 6.4.2. The central theme of section 6.5 is the environmental impact of Benedictine communities, which is discussed on the basis of the IPAT-formula and specific behaviour choices on energy-use, transport and nutrition. Section 6.6 recapitulates this chapter with an overview of clashing values and a discussion on the contribution of Benedictine worldview and values to sustainability in the Western world.

Box 6.1 From my diary: Observations in Vallombrosa

Since I'm here for a longer period, typical things start to catch my attention. Brother Witolde had forgotten the aspergillum. The second psalm was out of tune. The abbot slapped the brother before him on his head with his liturgy book. Brother Sergio had combined his neat habit and white acolyte dress with his bright blue slippers. Someone was yawning. It is their normal daily life. "We are no saints", Brother Paolo assured me, which is true, they are people who are searching for God's guidance and choose this way of life to find it.

6.2 Benedictine history and culture

6.2.1 Benedict of Nursia

Although Benedict of Nursia is declared the founder of Western monasticism, little is known about his life. The main source is '*The Second Book of The Dialogues*', written by Pope Saint Gregory the Great around the year 590, completely dedicated to the life of Benedict. This book is not so much a biography, but rather a moralistic collection of miraculous incidents, accentuating the holy and frugal life of the saint.

Saint Benedict was born circa 480 in Nursia, Italy, son of a Roman nobleman, and he died at Monte Cassino around 547. He went to Rome to attend university, but since the Roman Empire was coming to its end, the intellectual environment was morally shattered. Benedict gave up his literary studies, escaped the social chaos and moral decay of the city and “sought for a place where he might attain to the desire of his holy purpose.”³⁸⁷ He joined an association of virtuous men in Enfide and later went to the more isolated district of Subiaco.³⁸⁸

Benedict became a hermit and lived in a cave for three years, served and supervised by the monk Romanus. He was asked to become the new abbot of a nearby monastery, but the beliefs and manners differed greatly from his, and after the monks tried to poison him, Benedict returned to his cave.³⁸⁹ However, his sanctity, character and miracles continued to attract many people and Benedict built twelve monasteries in the valley of Subiaco to provide shelter. When nearby monks started to slander and persecute Benedict’s followers, he left the valley of Subiaco and went to Monte Cassino.

The new monastery at Monte Cassino soon became a centre of influence. It is likely that Benedict wrote his Rule in this place, although the exact time and place are not known, nor can it be determined whether it was written as a whole or gradually took shape in response to the needs and experiences of the monks.³⁹⁰ The Rule has helped many Benedictines to seek God and to be aware of his presence, by prayer as well as by manual labour and study. An important precept was that members should work for their living. The monastery of Monte Cassino presumably displayed this way of life, and it remained a characteristic feature of Benedictine houses.

The Rule of Saint Benedict has served as guidance for many monasteries and orders founded since. It describes the ‘Old Trias’ of *obedientia* (obedience to the Rule and the abbot), *conversio morum* (fidelity to monastic life) and *stabilitas loci* (stability), which will be the subject of section 6.3.2. Other elements are the communal prayers during the divine office and the personal study and prayer during *lectio divina* (‘divine reading’), as will be elaborated in section 6.3.1. This use of the Rule of Saint Benedict is an important difference with the Franciscan Order, in which such a directing and authoritative document is absent. In the following section I will describe the most relevant developments in the Benedictine Order from Benedict’s death to the present.

6.2.2 Benedictine Order

The roots of Benedictine monasticism trace back to the 4th and 5th century Christian monasticism in Egypt and the Mediterranean.³⁹¹ Earlier regulations had been given by the Saints Pachomius, Basil and Augustine, but it was Benedict’s Rule that brought unity in European monastic life and established common regulations for cenobitic (communal) life. It is likely that Benedict never intended to establish an order, but designed the Rule as a practical norm for his monasteries. In 581, Lombards destroyed the monastery of Monte Cassino and the Rule was brought to Rome. Under the influence of Pope Gregory the Great, the Rule was introduced to monasteries in Italy, Britain and France.

In the 8th century Saint Boniface and Saint Willibrord brought the Rule to German regions. Under the reign of Charlemagne, the synods of Aachen forced all monasteries in the Carolingian Empire to adopt uniform practice and follow the Rule of Saint Benedict, mainly for political reasons: to create peace and unity.³⁹² As a result of donations, monasteries had become large landowners, with tenants working the land. Monks were active in missionary work, converting pagan people (and potential political enemies) who lived at the borders, and

subsequently spread the Rule. Gradually it became the standard of cenobitic life in most European monasteries. For centuries Benedictine monks were held in high esteem and produced priceless manuscripts, innovated architecture, and developed new agricultural techniques. Abbeys were founded in remote areas and monks cultivated many marshes and wastelands into meadows and gardens. They practised physics, maths, medicine and pharmacy, and produced beautiful art. Benedictine monasticism became one of the most constructive elements of mediaeval European culture.³⁹³

Throughout monastic history, many reform movements took place within the Benedictine tradition. An important charismatic and reforming 9th century leader was Benedict of Aniane, who urged rich abbeys to return to a more frugal Benedictine way of life, advocating a radical return to the Rule and contemplative values of the Desert Fathers. Another reform movement started in the French Abbey of Cluny (910), stressing pious obedience of the Rule and rejecting the authority of non-clerical rulers in the abbeys. Growth in the power and affluence of Benedictine monasteries led to the reform movement of the Cistercians in the 12th century, who again preached a return to a stricter interpretation of the Rule and a more frugal way of life.³⁹⁴ The Cistercians often moved out into wilder country, emphasising the beauty of labour in preparing these fields to become fertile and purposeful.

In the 13th century the Benedictine Order began to decline, both in influence and numbers. This was partly due to the rise of the mendicant orders, like the Franciscans and Dominicans, and the canons regular in the city cathedrals. Furthermore, the Black Death in the 1300s decimated the numbers in many monastic houses. Gradually European culture changed from a land-based, rural economy, to a more urban oriented economy, and the largely rural Benedictine monasteries started to lose influence.

The 16th to the 18th century

The Protestant Reformation and subsequent religious wars led to the suppression and dissolution of many Benedictine monasteries in North-western Europe. In England, Wales and Ireland, Henry VIII disbanded hundreds of monasteries and convents between 1536 and 1541. After the Reformation the Benedictine Order lost 800 of its monasteries (Hilpisch, 1960, 201). The Council of Trent (1545-1563) encouraged the remaining Benedictine monasteries to unite, leading to congregations in which prayer, *lectio divina*, and the practice of science and arts gradually started to bloom again.

As a reaction to both the decline and intellectualisation of Benedictine life, new reforms occurred in the early 17th century in France, leading to a revival of monastic life all over Europe. This became known as 'The Strict Observance', as the monks emphasised a literal interpretation of the Rule, devotion, and severe penance. Because Jean le Bouthillier de Rancé, abbot of La Trappe in France, was one of the reform leaders, the movement also became known as the Order of Trappists. They are characterised by an austere life, silence and solitude, and a total abstinence from meat.

The French Revolution led to severe oppression of religious life again and the identification of monasticism with religious 'superstition' and useless productivity. After the Napoleonic wars, monasteries in Germany, Poland, and parts of Spain, Portugal and Italy were forced to close. Only the monasteries in the Austro-Hungarian Empire and Switzerland remained largely untouched by the divisions and persecutions that decimated European monastic life (Rippinger, 2004). By 1810, very few monasteries were still in existence in Europe.

The 19th and 20th century

Although monastic life was in severe decline at the beginning of the 19th century, the neo-Gothic return to mediaeval music, architecture, and the charismas of early monastic figures led to a revival movement in Western Europe.³⁹⁵ In 1846, monastic life was introduced in America by the founding of the Abbey of Saint Vincent in Latrobe, Pennsylvania. With this a new way of Benedictine living commenced: still deeply rooted in ancient styles, but at the same time open to new kinds of Apostolate, and more inter-continental in character. In 1893, the Benedictine congregations federalised as the 'Order of Saint Benedict' under Pope Leo XIII, while retaining separate autonomy.

Before World War II many new congregations were established. After the war, the Order witnessed a strong contemplative movement, reflected in new communities focusing on prayer and liturgical life. Benedictines in Spain, China and Eastern Europe faced political persecution. Missionary activities extended to Latin America, Asia and Africa, and by the 1950s, Benedictine communities thrived in Argentina, Mexico, India, Vietnam, Madagascar, and Morocco (Rippinger, 2004). Vatican Council II (1962-65) brought many changes to monastic life. Monasteries started to organise conferences to study their origins and to revise the rules, leading to both a renewal and relaxation of monastic life. However, it left many monks and nuns with feelings of uncertainty and doubts, and numerous European Benedictines left monastic life. Pope Paul VI proclaimed Saint Benedict Patron of Europe when he visited Monte Cassino in 1964.³⁹⁶

Present and future

At the beginning of the 21st century, the Benedictine Order has an international and pluralistic character. Technology eases communication and personal encounters with far-flung monasteries. The Order consists of a federation of autonomous monasteries, grouped into congregations. Most Benedictines are Roman Catholics, but some belong to the Anglican or Lutheran Church. Its wide variety of styles and initiatives can be found throughout the long history of the Benedictine Order, as a result of the flexibility of the Rule that gives much freedom to the abbot to make decisions "according to local circumstances".³⁹⁷

The variety within the Benedictine Order is translated into differences in size, occupation, and place (Milroy, 2004). There are large monasteries with over a hundred monastics, and small ones with less than five people. Some do extensive pastoral or educational work, while others have no tasks outside the monastery. Monasteries can be found in urban areas, such as Rio de Janeiro and Sao Paulo, but also in remote rural areas. Most have developed their own specialisation in agriculture, academic study, education, art, or missionary work, depending on local needs and traditions. Common practice in all Benedictine monasteries is a blend of prayer, study and work.

As in most monastic orders, Benedictine houses in Europe and North America show a pattern of decreasing numbers, while the communities are growing in Africa, Asia and South America. However, the total number of Benedictines is declining. In 2000, the Benedictine Order numbered over 8,400 monks and over 17,000 nuns throughout the world (Rippinger OSB, 2004, 20). About 30% of the Benedictine men and about 10% of the Benedictine women belong to the Order of Cistercians of the Strict Observance (Trappists). Since the 1960s the number of new members has declined in the Western world, which inevitably has led to a rising average age in European and North American communities. The number of Benedictines in East African and Asian regions however has increased.

A notable feature is the recent growth in numbers of guests and lay associate or oblate programmes, in which Catholic and non-Catholic lay people affiliate themselves with monastic life. In January 2008 the Vatican counted 25,481 oblates in 50 countries.³⁹⁸ This means that nowadays the order contains more oblates than ordained monks and nuns.³⁹⁹ Benedictine scholars have started to translate the Benedictine tradition to make it useful for a wider audience. Benedictine practices, such as *lectio divina* (see section 6.3.1), have now become more accessible to and popular among a wider public. In addition, there is widespread interest in what is called ‘Benedictine management’, based on issues like leadership style, teamwork, organisational discipline, and managerial ethics as can be found in the Rule.⁴⁰⁰ According to Grün OSB (2006), Benedictine management is not focused on maximisation of profits, but above all on the development and wellbeing of people.⁴⁰¹

Although the numbers show a decline in monastic life, many Benedictines appear to be positive about the future. In the past, the Order faced many periods of distress that often led to renewal. And still, many Benedictine communities are facing discouragement, challenge and hope, as a monk wrote: “There is nothing new in the challenge, and the Benedictine response to it is, broadly speaking, the same as it has always been – puzzlingly contradictory, open to both past and future, and quietly trusting in a mission planned by God” (Milroy OSB, 2004, 328). Others also point to the increasing numbers of oblates and visitors, showing the significance of monastic life. A Lioba nun remarked: “I think we are past rock bottom. Everywhere, including here, we welcome more guests who are interested in this way of life. People who think that monastic life will expire have never studied church history. We have faced more miserable times, and churches and monastic life have survived. Seeking God is deeply rooted in humanity. You can search for different modes, but the phenomenon will stay, it is ineradicable.”⁴⁰²

This section has given a brief overview of the life of Saint Benedict and the development of the Benedictine Order. Although this order is nowadays characterised by a huge diversity among the autonomous monasteries worldwide, the religious foundation, the daily rhythm of prayer and work, the organisation of the monastery, the content of the vows, and basic values connect the monasteries that follow the Rule of Saint Benedict. The next section gives a closer look at this Benedictine worldview and social-cultural values of monastic life.

6.3 Benedictine religious worldview

6.3.1 Religion and rituals

The main goal of monastic life is to search for God and follow Christ. In a conversation about the purpose of life, abbot Louis of Vallombrosa answered: “*Solo Dios*” (Only God).⁴⁰³ Father Malachias of Lilbosch replied: “As a monk I devote my life to God. To maintain a relation with the Almighty is my first aim in life.”⁴⁰⁴ Quality of life is found in imitating Christ and growing in monastic life. Father Malachias mentioned as the main aspects of quality of life “inner balance and transparency towards the secret of God, to refer to our Creator”. An important condition for quality of life is silence. The abbot of the Benedictine Monastery of Egmond described monastic life as a lifelong listening: “You can only listen when it is silent in yourself, in your heart. (...) Through silence I hope to hold on to the atmosphere where I can live faithfully with the Lord and where I feel spoken to in the most profound way.”⁴⁰⁵

The Rule of Saint Benedict is an important guide for monastic life, dividing the day into

hours for prayer, study, and manual labour. The public prayers are organised in the 'divine office', and determine the rhythm of the day. Besides the public prayers, monks and nuns are encouraged to practise personal meditation during *lectio divina*. In addition to this spiritual work, Benedictines must be occupied with manual labour at regular times, as outlined in the Rule of Benedict (RB) 48: "Idleness is the enemy of the soul. Therefore all the community must be occupied at definite times in manual labour and at other times in *lectio divina*."⁴⁰⁶ Still, "the essential point is that nothing should be accounted more important than the work of God" (RB 43), alluding to public prayer. The alternation of prayer, study and labour provides regularity and rest, which will be further elaborated in section 6.3.3. First I will discuss the content and meaning of the divine office, *lectio divina* and the Benedictine view on nature.

Divine office

The main ingredients of the divine office are the Psalms. The Lioba sisters explain: "Psalms voice the ancient conversation of Israel and God. Therefore we regularly gather and pray the psalms: to seek God and to get to know Him. We try to grow in the mystery of God's love."⁴⁰⁷ Benedictine brother Frans said: "You don't pray these texts with your head, but from your heart. Everything is said, from love to hate."⁴⁰⁸ Expressions of awe, admiration, gratitude, repentance, and accusation also lead to an intense involvement with needs outside the monastery. Psalms about justice are prayed as a cry for people who face injustice. The psalms keep monasteries connected with the outside world.

In addition, the psalms and canticles as chanted in the divine office contain many images of nature expressing and proclaiming the majesty of God in creation. By praying these words over and over, the idea that nature is owned by and referring to its Creator is personally embedded. Brother Frans of Egmond expressed this idea: "As you sing God's praise in your monastic life, you can also express this praise by marvelling at nature. 'Getting to the invisible through the visible' is what the Christmas preface is saying. Nature is beautiful, fascinating, often beyond my comprehension and proclaiming something of God. People should be more occupied with nature. Then you would have your feet more firmly on the ground."⁴⁰⁹

Originally the Benedictine liturgy of hours consisted of one period of public prayer at night and seven during the day: Vigils (night office), Lauds, Prime, Terce, Sext, None, Vespers and Compline.⁴¹⁰ Nowadays, the number of offices prayed vary among Benedictine monasteries, depending on local situations.⁴¹¹ Sometimes two prayer hours are combined into one. Many monasteries gave up Prime, Terce and None, for they interrupted the periods of labour too much.

The divine office moulds the rhythm of day and night, light and dark, rest and exertion. These regular and unvarying periods of praying psalms are intended to bring about an individual and communal spiritual conversion. Commitment to these offices helps to liberate the monastic from self-centred pre-occupation. "The inner peace and calm realized through prayer will then permit greater awareness of the needs of others and the freedom to respond to those needs" (Dumm OSB, 2004, 104). Besides communal prayer, Saint Benedict emphasised personal study and prayer, the *lectio divina*, which is the subject of the following section.

Lectio divina: standing in silence for God

Benedict promoted the *lectio divina*, an activity of careful, attentive, and contemplative reading of and reflecting on the Bible or other Christian writings. *Lectio divina* is to be practised with a conscious openness of heart, for God is perceived to be speaking through the text.

Originally *lectio divina* referred to the communal reading of the scriptures during the liturgy. As literacy and the availability of books increased, it gradually changed from an oral-aural and communal experience to a more personal meditation on the text (Casey OCSO, 2004, 106). This personal reading has become a characteristic feature of Benedictine spirituality. Sister Mathilde of Citerna describes it as the central point of her monastic life: “*Lectio divina* helps me to listen to God, to search His will.” It took her three years to get used to monastic life and to find the inner peace needed for a fruitful *lectio*.

Some monastics describe *lectio divina* in more agricultural terms and talk about enriching their spiritual soil. A Trappist from Zundert connects the *lectio* with care for the environment: “This meditation grants us day after day a way to cultivate our soul and to live from this core. You will grow into wholeness as person as you get deeper rooted in your own depth, in your most inner core. To grow, a plant needs to be sown and to get rooted, but it also needs to be cultivated. I call this ‘agriculture of the heart’, that will mirror itself in the environment” (Peers, 2004). This is an interesting example of the interweaving of Benedictine spirituality and nature. I will briefly highlight the main aspects of the Benedictine view on nature in the next section.

Benedictine view on nature

Ideas about nature and agriculture within the Benedictine tradition reflect the basic Christian view of creation, emphasising the existence of both a natural and supernatural order.⁴¹² The natural order is created by and dependent on God. Creation belongs to God and humans are seen as stewards, who are commanded to cultivate it with care. The universe is understood as dependent on God and as constantly being created by God in conjunction with those creatures that cooperate.⁴¹³ Sister Zoë of Lioba described it as follows: “In nature we recognise the signature of God. It is our task to fulfil it.”⁴¹⁴

Benedictines and Cistercians have always searched for desolate areas and waste land in which to live and work. On the one hand wilderness offered solitude and separation from the world. The emptiness of the ‘desert’ functioned as a mirror and a school for learning spiritual lessons. The monk had to learn to become free from desires to stand free for God, in order to be open for God’s will. On the other hand, most of these wildernesses have been cultivated by these Benedictine and Cistercian monks. In the Benedictine and Cistercian tradition, cultivation is understood according to the Biblical teaching that humankind represents God in maintaining and working the land. Father Malachias OCSO explained that humankind as image of God is called to care for the earth in a way that all dimensions and capacities of creation are developed and that the Creator can be recognised in his creation. That does not mean that nature must be left alone, because they see humankind as part of creation. “Man must not retreat from nature, but should retreat from the alienating idea that nature can only be understood and cultivated in an economic and exploitative way.”⁴¹⁵

In an effort to understand present Cistercian thinking about nature, a survey was held among 52 Cistercian and Trappist monasteries in 14 countries (Splain, 2005). Nearly 99% of the respondents admitted that their sense of the sanctity of creation had grown during their years in the monastery. To the question: “What do you see in the Benedictine and Cistercian tradition that contributes to an ecological perspective?”, the strongest response was the Rule of Saint Benedict and particularly RB 31, that says that all monastic goods should be cared for as though they are ‘sacred vessels of the altar’, aware that nothing is to be neglected. Many Benedictines connect this rule to the idea of stewardship, emphasising that not only

materialistic, but also natural elements should explicitly be cared for.

Explained in this way, RB 31 also affects ethical ideas about keeping animals, which, according to Father Malachias of Lilbosch, may never happen to the detriment of the nature of animals: “The present intensive cattle farming has expanded much too much. The system is not doing justice to animals and creation. And, even more important, the human measure has been overstepped. When a farmer works beyond his measures, it is impossible to be able to respect the animal’s needs. Small surveyable farms are better for both animal and farmer. Only then can you do justice to creation in its fullest glory.”⁴¹⁶ The way this view on nature and agriculture is practised will be discussed in section 6.4.2.

Other answers to the question as to what part of tradition contributed to an ecological perspective were: living in a natural setting, working the land, experiencing the seasons, and loving the place. Additionally, respondents mentioned their lifestyle and daily order that stress simplicity, silence, solitude, prayer, the rhythm of the liturgical year and the liturgy itself. Over 90% of the respondents were convinced that the Bible calls us to a reverence and respect for the earth.

We can conclude that the Benedictine worldview offers a comprehensive and integral perspective on nature. Ecological values are clearly embedded in the Benedictine’s religious value system. Besides the earlier mentioned RB 31, the vow of *stabilitas* (commitment to a specific place) and the values of moderation and humility are interesting as determining factors for nature conservation. Both will be discussed in the next section, which describes the three Benedictine vows and the main values in relation to sustainability.

6.3.2 Vows and values

In this section I will elaborate the meaning and content of the Benedictine vows of *stabilitas loci*, *conversio morum*, and *obedientia*, as described in RB 58, in relation to sustainability. These vows, the ‘Old Trias’, are interwoven. Obedience creates stability and acknowledges the need for guidance. Stability helps the monastic to stay focused and rooted. Both obedience and stability contribute to bringing about a conversion of life.⁴¹⁷ In addition to the Benedictine vows, this section will elaborate the values of humility, moderation and hospitality, as described in RB 7, 31 and RB 53, for these values appear to be relevant for sustainable behaviour choices.

Stabilitas loci

RB 1 describes four different kinds of monks: cenobites, hermits, sarabaites, and gyrovagues. Cenobites are monks who live communally, fulfilling monastic life under a rule and an abbot. Hermits live on their own in seclusion. Sarabaites are monks who “go around in twos or threes, or even singly, resting in sheepfolds which are not those of the Lord” and are only focused on “the satisfaction of their own desires” (RB 1). Gyrovagues “are always on the move; they never settle to put down the roots of stability; it is their own wills that they serve as they seek the satisfaction of their own gross appetites. They are in every way worse than the sarabaites” (RB 1). Saint Benedict was very critical of the vagrant way of life of the sarabaites and gyrovagues. Their tendency to permanent wandering demonstrates an unsettled spirit, which in the eyes of Benedict cannot be brought into harmony with cenobitic monastic life. Stability implies perseverance and fidelity.

Benedictine stability includes a commitment to both a specific group of people and a specific place, a particular monastery. The fact that connectedness to a material place is essential in Benedictine spirituality, is interesting in the light of sustainability. Rootedness in a certain

area has for many Benedictines led to a deepened love for and knowledge of the surrounding nature, animal species, trees and flowers, often encouraging the preservation of these natural elements. In addition, the practice of stability has a transforming effect on the monks and nuns, as described by Brother Andrew in Zundert: “In a beautiful natural environment I become more natural myself. In nature I can forget my ego for a while. Nature speaks directly to my soul. Back in the community this intimate experience can become a source of motivation and a driving force.”⁴¹⁸ He terms it a ‘grounded spirituality’, emanating from stability.

The Benedictine rootedness in a particular place also leads to a careful way of working the land in order to maintain fertile soil for generations of monks to come. Abbot Klassen described it like this: “By coming to know a place deeply, the set of overlapping ecosystems, the delicate balance which exists between the number of creatures and available nourishment, the patterns that play themselves out year after year, monastic communities will make decisions with an understanding of their consequences. In the event of a serious mistake the community will be around long enough to recognise it as such” (Klassen OSB, 2006). The relationship between stability and the practice of a sustainable way of farming will be further elaborated in section 6.4.2.

Besides physical stability, the vow also refers to stability of the heart. Rootedness in a specific place might generate conditions for human and spiritual growth. Stability is an antidote to the gyrovaguan tendency to be always on the go, whether it is physically outside the monastery, or spiritually within oneself. The Rule prescribes that a monastery should include all the facilities, for then “there will be no need for monks and nuns to wander outside which is far from good for their monastic development” (RB 66). Stability should bring the monastic to inner peace and rest. In the Benedictine view, connectedness to both a community of people and a physical place, combined with the inner stability, will lead to religious maturity. Brother Cornelis OCSO of Zundert explained: “The meaning of stability is that you do not run away from problems, but try to persevere in them – in the faith and hope that through these problems life can become roomier and richer, that these experiences will help you grow.” Stability is a fundamental basis for building a strong social capital in the community.

Conversio morum

The Latin words *conversio morum* are usually translated as ‘fidelity to monastic life’. This vow concerns a daily change of improper behaviour and conversion to the Rule and monastic way of life. In the Rule Saint Benedict gave many guidelines for monastic life, including humility, moderation, solitude, silence, discipline and endurance of the hard sides of life.⁴¹⁹ In the 12th and 13th centuries this vow was particularised as the evangelical counsels of poverty and chastity. In this study on sustainability, the Benedictine ideas on poverty and moderation are particularly interesting.

Saint Benedict clearly emphasised seeking the common good and renouncing private property: “Those in monastic vows should not claim any property as their own exclusive possession – absolutely nothing at all, not even books and writing materials. After all they cannot count even their bodies and their wills as their own, consecrated, as they are, to the Lord” (RB 33). Monastic life ultimately means giving up oneself. Following the practice of the early Christian church, everything in the monastery should be held in common – a conviction and practice also found among the Hutterites, substantiated by the same arguments.⁴²⁰ Leaning on personal finances might inhibit a total commitment to and dependence on the community.

However, in his Rule Benedict integrates these ideas about common good with respect for

the individual and he stresses the importance of the development and spiritual growth of each person. RB 34 particularly deals with the distribution of the common goods, which should be done according to every person's need. "This, however, should not be taken to mean that favouritism of individuals can be tolerated; far from it. It should simply be a way of showing proper consideration for needs arising from individual weakness. Those who do not need as much as some others should thank God for the strength they have been given and not be sorry for themselves. Those who need more should be humble about their weakness and not become self-important in enjoying the indulgence granted them." (RB 34) With this rule, Saint Benedict aimed to prevent murmuring and to promote peace among the monastics.

The sense of common good does not stop with the monastic community, but extends to the local community and those in need. Benedict taught in his Rule: "Give help and support to the poor; clothe the naked, visit the sick and bury the dead. Console and counsel those who suffer in time of grief and bring comfort to those in sorrow" (RB 4). "The greatest care should be taken to give a warm reception to the poor and to pilgrims; because it is in them above all others that Christ is welcomed" (RB 53). Sister Zoë of Lioba explained that the striving for poverty felt somewhat ambivalent to her: "Here we have no poverty. Whenever I need something, I can get it. I wished I could experience real poverty, in Africa or India, at the Sisters of mother Theresa."⁴²¹ Furthermore, the monasteries give money to the poor, as illustrated by Brother Johan of Zundert: "I loved to work on the farm. Working is praying and you work for the poor. Much of our income is given to the poor, for example to the projects of Brother Pieter in Uganda. This motivated me strongly".⁴²² The issues of communal property and moderation are significant in relation to sustainability. The value of moderation will be elaborated further in this section.

Obedientia

The first sentence of the Rule is: "Listen, child of God, to the guidance of your teacher. Attend to the message and make sure that it pierces to your heart." The vow of obedience starts with listening and a turning away from the pursuit of your self-will. Abandoning one's own desires and pleasures, in order to submit oneself to the decisions and instructions of superiors, is emphasised again and again. Obedience to the abbot or abbess ultimately resembles obedience to God. Obedience is an inner attitude, implying openness of heart and willingness to listen to advice and needs from other people and even the natural and material surroundings. RB 5 and 7 describe obedience as an important step on the way of humility and Benedict encourages the monastics to be mindful of God's presence in their life. This listening occurs in daily monastic life particularly in the *lectio divina* and community prayer.

Brother Cornelis OCSO of Zundert described obedience, in the sense of putting aside your own plans, as a good spiritual exercise. "Owing to this exercise we stay flexible and alert." He is a Trappist farmer and described the meaning of obedience in the light of farming: "One cannot plan the harvest, for it depends on how fast the grain grows and on weather circumstances. As a farmer I must wait attentively and act accurately at the right moment." This obedience is a lifelong exercise. Once Brother Cornelis was too late when a cow needed to give birth and the calf died. A neighbouring farmer comforted him: "It happens. There comes a time that your attention weakens and you're too late. You wake up and become extremely alert again. It will go well for a while until it weakens again and something goes wrong." A good monk, according to Brother Cornelis, is not a person who never falls, but a person who stands up again and again.

Good listening also involves perseverance in things that are difficult or hard to take. In relation to sustainability, Klassen OSB, Renner OSB and Reuter OSB (2001) write: “The environmental destructiveness on a global scale presents enormous challenges. Careful listening can enable us to examine these issues in an integrated multi-strategy approach rather than searching for single-strategy solutions.” In this way, listening with the heart may encourage us to make ethical decisions and urge us to action.

Now we have discussed the three Benedictine vows, we turn to three values that are important in the Benedictine worldview and pivotal in relation to sustainability: humility, moderation and hospitality.

Humility

Humility can be seen as a central value or virtue promoted by Saint Benedict. RB 7, which is completely dedicated to humility, concludes Benedict’s spiritual teaching, before he starts describing the order of psalms of the *Opus Dei*. It describes achieving profound humility as the ‘peak of our endeavour’ and pictures a ladder, with each step marking a decision to be made in the exercise of humility and self-discipline. The first step of humility is to cherish a sense of awe towards God and to know your place: God is God and a human being is not. For Benedict, humility is grounded in the fear of the Lord. The following three steps focus on obedience and restraining one’s own desires.⁴²³

The word humility shares roots with the word *humus*, meaning soil or earth, and the value of humility makes Benedictines recognise that all life, human, botanical and zoological, is rooted in the earth. Humans are creatures *ha adamah* (out of the ground), and not the creators of the universe. As abbot Klassen states: “We are one with the soil, with the plants and animals, all of whom ‘fear God’ by their very existence. The human choice is to live within the constraints of creaturehood. It is precisely humility which is a necessary corrective to the arrogance and acquisitiveness that has led to our increasing alienation from nature” (Klassen OSB, 2007, 2). As equivalent to humility he mentions the word ‘truth’ and refers to the truth of our human situation, the truth of our strengths and weaknesses and the truth of our relationships to other people and the earth.

Moderation

Since we live in a consumer society, the Benedictine value of moderation may offer an alternative view of sustainable consumption that is based not on wants but on essential needs. The Rule of Saint Benedict is permeated with references to moderation. In the section on the vow of *conversio morum* we have already discussed the renouncing of personal property and the practice of common good. Regarding the distribution of food and drink, Benedict writes that moderation should be the rule on all occasions. Although Benedict favoured abstinence from wine, he suggested one half bottle of wine per day to be sufficient: “(...) since in our day monks and nuns cannot all be brought to accept this (*abstinence*, MV), let us at least agree that we should drink in moderation and not till we are full. The words of scripture should warn us: wine makes even the wise turn away from the truth.” (RB 40)

The reason Saint Benedict put so much emphasis on moderation is in the first place to combat avarice, the desire which is never satisfied with goods. Abbot Klassen (2006) suggests that when avarice is operating, it is very difficult to distinguish ‘needs’ and ‘wants’, ultimately leading to greed. Another reason Saint Benedict emphasises moderation and a focus on needs is that it promotes peace among the community members. When each person can receive

according to his or her legitimate needs, it will create an atmosphere of satisfaction and safety. But almost any monk and nun will confirm that the practice of moderation is part of the *conversio morum*.

Saint Benedict devotes a complete chapter to the specific task of the cellarer (RB 31). The cellarer is responsible for all the goods of a monastery and functions as its manager.⁴²⁴ In his management, the cellarer must be careful, attentive, harmonious, and never disdainful, for disdain isolates a person from the group. The cellarer should care for monastic goods as if they were ‘sacred vessels of the altar’, and treat ordinary things of the monastery with the same reverence as extraordinary things. Nothing must be neglected and property must be respected. According to RB 31, “there must be no negligence on the part of the cellarer, nor any tendency to avarice, nor to prodigality, nor extravagance with the goods of the monastery.” Sister Zoë of Lioba explained it with a practical example: “You can think about going to the shop to buy milk. You see two cartons of milk with different dates: one is best before next week and one should be used today. You know that you are going to use it today. Which one will you buy?”⁴²⁵ In this way, moderation adds to the reduction of waste.

Hospitality

Benedictine monasteries have always received guests. The value of hospitality is described relatively late in the Rule, after establishing the sort of place a monastery is to be. This is not illogical, for only those who are truly at home in themselves can offer genuine hospitality, which is not controlling or manipulative (Norris, 2004, 126). The Rule prescribes that guests should be treated with deference. “Any guest who happens to arrive at the monastery should be received just as we would receive Christ himself” (RB 53).⁴²⁶ As mentioned above, specific care must be given to the poor and pilgrims. As is the case in Franciscan communities, the value of hospitality sometimes has a negative effect on the environmental impact, for guests might have other values and make different behaviour choices regarding energy use, nutrition and transport. This will be further discussed in section 6.6.1.

To recapitulate this section on Benedictine vows and values, we can conclude that the vow of stability deepens the affinity to a certain place and involves a careful dealing with the land and buildings to maintain these for the coming generations. The vow encourages the monastic not only to remain grounded in a specific community, but also to create an interior, spiritual solidity. Stability does not imply immutability, for the vow of *conversio morum* focuses on a continual and ongoing conversion towards monastic life. Obedience is seen as essential for renouncing self-satisfaction and conceit. In addition to these vows, the values of humility and moderation are meaningful in relation to sustainability. Benedictines associate humility with the idea that both human life and nature are creation, which prevents them from being arrogant exploiters of nature. Nature is seen as a ‘sacred vessel’, asking for respect and good care. The value of moderation, promoting moderation, simplicity and reduction of waste, may offer an alternative vision on consumption based on essential needs and not on desires.

In the next section I will describe the main aspects of the general social organisation and cultural symbols of Benedictine monastic life.

6.3.3 Social organisation and cultural symbols

Saint Benedict wrote his Rule for cenobitic monastic life, in which the interplay of the individual and the community is fundamental. Community is more than a functional matter of providing necessary material or even spiritual resources to sustain each individual’s monastic

journey. It is through communal life that a person grows in monastic life. This section describes the daily time schedule, authority, the community order, cultural symbols and the way monasteries deal with modernity.

Monastic time schedule

Saint Benedict gives a quite detailed description of specific periods for manual labour, the divine office and *lectio divina*. As mentioned in section 6.3.1, RB 48 describes work as an essential element of monastic life, for idleness is seen as enemy of the soul. Work is perceived as a 'labour of obedience', bringing the monk back to God, just as much as the daily prayers and *lectio*.⁴²⁷ The Rule leaves much room for adaptation according to local circumstances and customs and therefore the daily schedule might vary among different monasteries.⁴²⁸ An overview of the schedule of a normal weekday of five monasteries that I visited can be found in appendix 6.

The monastic time schedule is focused on *vacare deo*, which means 'being free for God'. As soon as the bells ring, the monastics leave their work behind and prepare for prayer in church. It might sound to be a contradiction, being free by committing oneself to a strict schedule of prayer and work, but most Benedictines emphasise that giving up everything to seek God, even their own will, has given them more freedom.⁴²⁹ Father Malachias explains: "By imposing restrictions on ourselves, we learn to live in the present."⁴³⁰ The Rule provides structure and the continuous interruption of the work rhythm prevents the monk from being submersed in it. The *Opus Dei* and *lectio* put all aspects of monastic life, including manual labour, in a broader perspective.

In addition to the strict time schedule that contributes to freedom, there is another interesting aspect of time in Benedictine religious worldview. The monks and nuns are daily reminded of the linear timeline from the beginning to eternity. Every psalm in the *Opus Dei* ends with: "Glory to the Father and to the Son and to the Holy Spirit. As it was in the beginning, is now and will be forever, Amen." It reminds Benedictines of the old tradition they are part of and speaks about hope for the future.

Authority in the community

The abbot (or abbess) is the monastic superior, representing Christ in the community, which makes his responsibility particularly religious.⁴³¹ The prior (or prioress) is the second in authority to the abbot and carries out duties delegated to him by the abbot. Usually, both are elected by the community members. Leadership in the community derives not from seniority, but from discernment, teaching and spiritual maturity. Anselm Grün osc, who has been cellarer for many years at the Benedictine Abbey of Münsterschwarzach, describes Benedictine leadership as a spiritual assignment, aiming to serve the people, waken their inner life and develop their possibilities and talents.⁴³² The monastics are called to obedience to the Abbot and this brings along a great responsibility for the Abbot. Saint Benedict must have been aware of the risks that might cohere with this responsibility, for in the Rule he emphasises that a wise council is needed as well and that individual practical and emotional needs should be cared for.

To decide on major issues, the abbot is told to summon the whole community. Interestingly, Saint Benedict insists on consulting all members, "because it often happens that the Lord makes the best course clear to one of the youngest" (RB 3). Benedict's openness to counsel makes clear that he understood authority in terms of wisdom rather than privilege. In some

cases it is the abbot who decides, but in cases affecting the whole community, decisions are usually made by the majority.

The decision process on the future of the farm of the Trappist Abbey in Zundert illustrates the process of communal consultation.⁴³³ In the 1990s, new investments were needed to meet new environmental and animal welfare regulations. This led to a searching process that lasted five years, in which the community dealt with questions like whether it is justified to make huge investments in an agriculturally uncertain period and whether the economic demands are still in accordance with the aims of monastic life. In 1997, the community conducted a final survey among the brothers and concluded that the majority did not wish to invest extensively in a dairy farm. By voting the community decided to sell the dairy cows. After another series of communal discussions, the majority decided to continue as an extensive organic farm with beef cattle. The values underlying the agricultural system of this Trappist Abbey is further described in section 6.4.2.

Normally, the abbot, the prior and the cellarer of the Trappist monastery of Zundert have a 'small council' every Sunday, to discuss daily issues. In addition, this monastery has established a 'major council', consisting of seven brothers, chosen by the community for two years. This major council discusses things like the assignment of functionaries, work appointments, and the admission of postulants. Every Sunday evening, during the social meeting, the abbot informs the community about daily issues in the coming week. Other brothers can report about their experiences. When needed, the community organises extra meetings when issues need to be discussed that concern the whole community, like the discussion about the future of the farm as mentioned above. Furthermore, they have special committees for issues like liturgy, finances, and agricultural issues.

The Rule recognises that a community consists of different persons at various stages of spiritual and emotional development. While it clearly marks limits to what can be tolerated, it also provides ways to deal with people who fail to keep the Rule. An important task of the abbot is to forestall wrongdoing and admonish disobedient monks. If inappropriate behaviour continues, Benedict recommends a temporally separation from communal life (RB 23-25). This idea can also be found in the communities of the Amish and the Hutterites, as described in chapters 3 and 4 respectively. Exclusion from the table or liturgy is meant to bring the offender to better understanding as to how his or her behaviour has violated the common good. This process is therapeutic rather than juridical, and the goal is reintegration.

Community Order

RB 63 describes three criteria for the order of precedence in the community: the date of entry, monastic observance and decisions of the abbot. For Saint Benedict, it is not age that counts, but spiritual maturity. Apart from those persons the abbot has promoted for a specific reason, all others usually remain in the order of their conversion to monastic life. Juniors in monastic life should show due respect for their seniors, and seniors should love and care for the juniors.

The elderly should be given loving consideration and are not strictly bound to the provisions of the Rule in matters of diet (RB 37). Elderly in a monastery do not retire and are active as long as they can. Brother Ruys of the Abbey of Egmond, who worked in the candle factory until he was 89 years old, is very much aware of differences in experiencing old age inside and outside monastic life. "Many people do not like to get old; they feel side-lined and suppose that the best in life is way past. Here, when we get old, we can still continue to grow."⁴³⁴

Cultural symbols

A well-known cultural symbol of monastic life is the habit.⁴³⁵ The habit reminds the monk and nun of their choice for monastic life. One of the monks of Egmond tells: "It reminds you of the distance you want to take from worldly matters. Besides, it is a sign of brotherhood that I appreciate very much. The habit expresses this solidarity." Because all the habits are the same, no emphasis is laid on the individual monastic. He or she is part of the community. Many monastics wear their habit all day, although in most monasteries this has not been obligatory since the 1960s. Interestingly, the young monks and nuns especially appear to choose to wear the habit all day again, to visualise their monastic identity.

Most monasteries can be recognised by a specific architecture, although many kinds of buildings are used as monasteries. Usually, the cloisters consist of places that serve the daily needs of body (dormitory and refectory), mind (library and chapter house), and spirit (church). The buildings of Benedictine and Cistercian monasteries form the material framework for the practice of monastic values such as community, isolation and stability. As the daily office arranges time for the welfare of the monastics, arrangement of space has a healing effect as well. Cistercian cloisters in particular are characterised by harmony and soberness, both outside and inside the buildings. In addition, the wilderness that was sought in the past is still recognisable in the fact that many, although not all, Benedictine and Cistercian monasteries are surrounded by natural areas.

The buildings, the location of the monastery, the surroundings, the identification as Benedictine, the rhythm of the day, the silence, the moderation, the early rising – it all symbolises and designs the monastic way of life and a strong social capital. Although the application of all these aspects may differ slightly within the Benedictine order, the external symbols are far from irrelevant and clearly demonstrate monastic identity.

Monasteries and modernity

Since Vatican Council II in the 1960s many alterations and modernisations have taken place in monastic life. In many ways this life has become less strict and frugal, varying from the meals and heating systems to involvement in decision making and expression of faith. In most monasteries, the offices are now held in the local language instead of Latin. The monasteries allow more freedom for monks and nuns to visit relatives or a physician, the bars have been removed from the female monasteries, and women have received more opportunities to be involved in organisational structures. Nowadays, most monasteries follow a mix of a traditional way of life with modern aspects.

The influence of modernisation is particularly visible in the development of monastic agriculture and a replacement of simple manual labour by machines, leading to a decline in the number of workers needed for communal agricultural labour. In the 1950s most Trappist monks worked on the farm in one of the many branches. The monastic farm of Zundert, for example, had cows, pigs, chickens, horses, fruit, vegetables, and grew beans, rye, wheat, barley, and beet. It was a closed farming system. Owing to mechanisation and specialisation, the community chose to cut off some branches and to specialise in other branches. Some branches had to stop because they were no longer cost-effective or because of lack of specialised knowledge. Where the monastic farm used to belong to the whole community, causing a sense of connectedness through labour, it more and more became a one-man business. That was the start of a process of reconsideration in the community of Zundert.

Inside the monasteries many modernisations have been applied as well. Usually television

and radio are present for the daily news and special occasions. Sometimes only the cellarer listens to the radio and recapitulates the world news of that day, in order to keep connection with the outside world and to be able to pray for it. The amount of modernisation varies a great deal between the monasteries. Some maintain an up-to-date website, while other communities hardly use computers. Most monasteries have sound equipment in the church and the monastery, and many porters carry a beeper in their pocket that warns of a ringing telephone or doorbell. The role of technology in Benedictine life will be elaborated further in section 6.5.4.

From its earliest days, the Benedictine movement has been characterised by contradictions and tensions – between the search for solitude and the community, between the desert and the city, between retreat and mission, between rootedness in tradition and desires to break new ground, between ancient forms and renewing creativity. The deep sense of tradition makes Benedictines reluctant to change, other than slowly (Milroy OSB, 2004). This process is to some extent comparable with the reflective way of modernisation as described in chapter 3 on the Amish. In addition to a changing liturgy, it is particularly visible in the way the monastic economy is shaped. Before we turn to the Benedictine economy, the vision on labour, and agricultural practices in the next section, we will first recapitulate the main aspects of section 6.3.

Recapitulation

Benedictine quality of life is to be found in submission towards God and growing in monastic life. This way of life is largely described in the Rule of Saint Benedict, which prescribes a daily schedule of public prayer, personal meditation and manual work. The strict time schedule is perceived as provision of freedom and prevention from distraction. The vows of *stabilitas loci*, *conversio morum* and *obedientia* help the monastic grow in spiritual maturity.

In cenobitic monastic life, the interplay of the individual and the community is fundamental. In general, Benedictine life is characterised by a strong social capital. The vow of *stabilitas* includes a strong commitment towards the community, involving mutual dependence and social trust. Obedience towards the Rule creates transparency about authority, expected behaviour, and sanctions. The shared Benedictine philosophy of life includes the willingness to contribute to a strong community.

Regarding environmental impact and sustainability, the most interesting aspects of Benedictine worldview appear to be the view on individual and communal property, the role of time, the values of moderation and humility, and the vow of stability, which will be further discussed in section 6.6.

6.4 Benedictine economy

6.4.1 Vision on labour

Before the institution of monastic life in the Western world, labour was often regarded as a necessary evil. Influenced by the Desert Fathers, Saint Benedict introduced the idea of free labour (Alston, 1907). Manual labour was perceived as a means to restoration of a healthy balance between body, spirit and soul; in practice it appeared to be tough work. Many monks were occupied with tilling the ground, draining marshes, controlling wild beasts, and transforming plains and forests into fruitful fields and meadows. With their principle of labour

and its results, monks became very powerful and influential in areas where new monasteries were established. In times of distress or famine, many people were saved from starvation by monastic labour.

Since the start of Benedictine monastic life, a diversity of labour and crafts has been carried out. Monks and nuns have been occupied with agriculture, education, science, arts, architecture, and many other tasks and crafts. These activities have varied greatly according to local circumstances. Nowadays we can still find Benedictines teaching, practising arts or agriculture, being active in pastoral care, or devoting themselves completely to study. All kinds of work compatible with community life and the *Opus Dei* can be accepted. This freedom in the choice of work is provided for in the Rule, since the fact that a person is working is more important than the kind of work that is done, as long as it fits in with monastic values and the community can be maintained. However, this does not mean that monastics are free to choose their jobs. Usually the abbot decides which job a person has to do. As Trappist Brother Han explained: “I do the laundry and I am the painter. When I started I didn’t like to do the laundry at all. It really forced me to humility. Gradually I started to appreciate it and I found a certain peace in doing it. It has become a kind of praying now. But I must be aware not to get attached to it, because soon my job might be changed.”⁴³⁶ In the past, it was normal that monks got a new task every year. Gradually this policy changed because of an ageing community and the fact that specific tasks require specific skills, and nowadays monastics usually keep a job for a longer period.⁴³⁷

Saint Benedict warns against specific skills leading to pride (RB 57). In particular persons with creative gifts should use these with “proper humility”. When monastics exaggerate their competences, they should be forbidden to exercise their skills further and may only return with an attitude of humility. Selling of products must be done honestly and prices must be set carefully, “to avoid any taint of avarice” (RB 57). The price should be somewhat lower than that demanded by secular workshops “so that God may be glorified in everything” (RB 57). Work must always be focused on the community and be subordinate to monastic life.

The Rule demonstrates a focus on the character and qualities of a person, rather than a description of the task itself. For Benedict, good practice follows from a mature spirituality and wisdom. The Rule is very explicit on the care for the sick and those who are not very strong. Work should never be an overload for monks, but serves to promote growth in the *conversio morum*.

Lay brothers

As monastic property grew, the amount of work increased drastically. This led to the institution of lay brothers, *conversi*, who were working most of the day.⁴³⁸ They made their religious profession, but were not compelled to live up to the entire Rule. Generally, in the 12th century, the average number of monks was about 20 *conversi* and 15 contemplative ‘choir monks’, or *monachi* per monastery.⁴³⁹ Some lay brothers were working in the household or in crafts, but the majority were working the land. The *conversi* lived strictly separated from the *monachi*; they had their own dormitory, refectory and chapter room. At the liturgy of hours, the *conversi* had their own very simple religious ceremony, primarily consisting of reciting the Lord’s Prayer. Lay brothers did not take part in *lectio divina*.

During the 13th century the number of *conversi* decreased and laymen were employed for the kitchen and the farm.⁴⁴⁰ *Conversi* were offered qualitatively better jobs. During the 19th century the concept of *conversi* underwent a revival, especially in the Cistercian Order.⁴⁴¹ The

position of the *conversi* and the frequency of contact between them and the *monachi* differed greatly between monasteries. In the 1960s the status of the lay brothers changed and all brothers became equal. One of the monks in Egmond looked back and said: "In the past the active and contemplative were often played off against one another. We [the contemplatives] had to learn to see ordinary things in a different way, to experience the invisible vertical that can only be found in the horizontal."⁴⁴² Nowadays, all monastics are occupied with prayer, study, and manual labour, as was originally envisioned in the Rule of Saint Benedict.

Economy of the monasteries of Vallombrosa, Citerna and Lioba

To give an example of the economy in present-day monasteries, I will briefly describe the kinds of labour as practised in the communities of Vallombrosa, Citerna and Lioba. These monasteries are not occupied with agriculture. The practice and the vision behind the monastic farming systems of the two Trappist monasteries will be discussed in section 6.4.2.

For many years, deciduous trees surrounded the abbey of Vallombrosa. The production of charcoal used to be an important source of income. Later the market for softwood increased and nowadays the forest mainly consists of conifers. The present community has become quite small (8 men) and because of a lack of hands, they do not practise agriculture or even have a garden. Dinner is purchased from a nearby restaurant. The work consists mainly of receiving guests, showing tourists around the ancient abbey, distilling liquor, running the abbey shop, leading masses for groups, pastoral care, and domestic work. Two volunteers help with the daily cleaning and preparation of the meals.

Citerna is probably the only monastery that has two periods of *lectio divina* per day, for they consider *lectio* as the central point of monastic life. One day in the month is reserved for individual retreat, with a communal exchange in the evening. The loft consists of a hermitage and a small chapel for personal use. Behind the monastery, the nuns have an orchard with olive trees and a vineyard. They make their own wine. The olives are grown for olive oil, which is produced outside the monastery. Other monastic tasks are working in the organic vegetable garden for their own use, the bookbinding, all kinds of domestic work, and receiving guests. Behind the monastery is an old building, which is rented out to groups of up to 40 persons.

The economy of Lioba is based on art. The workshops consist of a weaving mill, a pottery, workshops for woodworking and metallurgy, a batik shop, a sewing room, and a room for calligraphy. Mother Hildegard emphasised that by giving shape to matter, a person is being shaped as well. Most of the sisters work about four hours a day, besides the liturgy, *lectio divina*, and domestic work. Although in the past some sisters worked late into the night and fell asleep at the weaving loom, they now work at a lower pace. However, weaving is still a tough job, as one sister explains: "The designs are now simpler than they used to be. Figurative art does not fit in modern churches, so now we often weave plain fabrics, which is a bit boring. At these moments I must realise that I'm doing this for God's glory. But weaving is not as contemplative as many people think, because there is a tremendous hubbub when all the looms are in use." Another sister adds: "The loom is a good way of getting rid of your anger!" Since many nuns have reached pensionable age, retirement payment has become an important source of income as well.

The examples of the above-mentioned monasteries show the diversity in work that exists within the Benedictine Order and the impact of the location, skills and history of a particular community. Now we have looked at Benedictine labour and management in general, and the monasteries of Vallombrosa, Citerna en Lioba in particular, I will continue with the issue of

agriculture. Cultivation and agriculture have always been important aspects of Benedictine monastic life. In the discussion on sustainability, the Benedictine view on agriculture is very relevant. Benedictine values are translated into a kind of agriculture as practised in the Dutch Trappist Abbeys of Echt and Zundert, which are described as specific cases in the next section.

6.4.2 Agriculture

The life and achievement of Saint Benedict were in fact paradoxical. Benedict started with seeking the desert and ended by civilizing it. Likewise, in the past Benedictine monasteries looked for desolated places to settle down, but soon these areas became cultivated (Milroy OSB, 2004). The monks were at the forefront of developing mediaeval Europe into farmland by cutting back forests and reclaiming wetlands, and became profoundly influential in the emergence of European civilisation. In particular the Cistercians with their many lay brothers were efficient in cultivating numerous marshes and wastelands. Whereas the Desert Fathers saw beauty in unspoiled wilderness, Saint Bernard of Clairvaux emphasised the beauty of labour in cultivating the fields and giving nature fertility and purpose.⁴⁴³ The mediaeval monasteries had agriculture, livestock, vegetable gardens, orchards, irrigation channels and waterways for nourishment and raising fish.

Nowadays, many Benedictine monasteries have given up farming, mostly because of a shortage of hands or because other tasks have come to the fore. Within the Benedictine tradition, Cistercian monasteries in particular are still practising agriculture and nature conservation. Father Malachias referred to a regulation from the beginning of the Order of the Cistercians: “The monks should be able to support themselves by manual labour, agriculture and cattle breeding.” In this regulation one can recognise a vision of the importance of agricultural and manual labour in monastic life, as still practised by the two Dutch Trappist communities. Brother Johannes remarked at coffee time: “We are different from the Benedictines. We both live according to the Rule of Saint Benedict, but Benedictines are more intellectual. Trappists are more focused on manual labour.”

The earlier-mentioned survey among 52 Cistercian monasteries in 14 countries showed that most monasteries were using responsible farming methods, including organic gardening, erosion control and the use of environmentally safe chemicals. Some mentioned significant measures to preserve or develop natural areas, like a conversion of swamps into wetlands, putting aside land as natural reserves and reforestation programs.⁴⁴⁴ The Benedictine Abbey in Fulda has specialised in organic gardening. These sisters recommend their products with the slogan ‘organic for 375 years’ and sell books and organic products via the internet.⁴⁴⁵

Now the cases of the Dutch Trappist Abbeys *Lilbosch* in Echt and *Maria Toevlucht* in Zundert will be described in more detail.

The case of Trappist Abbey Lilbosch in Echt

Father Malachias supervises the farm of the Abbey *Lilbosch*, which consists of about 110 hectares for integrated agriculture and 30 hectares for nature development. The main crops are sugar beet and grain. The grains are organically grown. This is not possible for the sugar beet, because of diseases and the amount of manual labour needed for organic cultivation of sugar beet in this area. The monks use as few chemicals as possible and produce the beet according to the rules for ‘integrated agriculture’. In addition, the farm is occupied with nature conservation and development, free-range pigs for meat production, and dairy cows. Since the sugar

beet is not grown organically, the farm is not labelled on 'organic farm', although all other aspects are organic.

The 30 hectares for nature conservation are part of a nature development project that started in 1995, aiming to create a more open area and to restructure the waterways to create habitats for a diversity of flora and fauna. The Abbey's property contains two seepage areas. In the future the monks wish to develop the surroundings of these seepage areas further by removing alders and ash-trees, because they need too much water. The area is noted for its flora and fauna and in 2010 it became one of the Nature 2000 areas. Special species in this area are, among others, Marsh Lousewort, European Tree Frog, Geoffroy's Bat, Golden-ringed Dragonfly, and Stonechat.⁴⁴⁶

The livestock consists of free-range pigs and '*blaarkoppen*', an old Dutch, or even more specific from Groningen, breed of cattle. The abbey raises about 100 pigs at a time. They come as piglets, are raised for their meat, and sold as 'cloister pigs', under the brand name 'Livar'.⁴⁴⁷ The pigs are fed with grain and corn grown on the farm. The monks used to milk cows, but since the monk responsible for the dairy cows has left, nobody has picked up the milking. Five cows are left now. Many monks and guests regret this, because they appreciated the fresh milk and the homemade cheese. Now only yoghurt is homemade, with milk from the neighbour. The natural areas are grazed by Galloway cows and Konicks horses.

The kitchen garden and orchard are both organically managed. The garden provides 75% of the vegetables needed for the monks' own consumption. The orchard consists of old varieties of 'high trunk fruit trees', among which are 30 varieties of old '*bellefleurs*'. In addition, the abbey keeps bees for the production of honey and chickens for the production of eggs, all for their own food supply.

In 2007, when I did my field study, the abbey consisted of 16 monks. Because the average age in this community is relatively low, the monastic farm can largely be managed by the monks themselves. In addition, three people from outside the abbey are employed for a total of 48 hours per week to work with the bigger machines for ploughing, sowing and harvesting. The monks usually occupy themselves with weeding, harrowing and animal care. The farm is the only source of income from labour. Therefore, Father Malachias emphasised that the farm is not just a kind of indulging in a hobby, but an enterprise that must pay a return to support the community. On the other hand it is a monastic farm with a specific philosophy and spirituality that has other values than purely finances. The monks mention a respectful way of dealing with the animals, dependence on the weather, the silence of nature, the organic and existential connection between humus and humility, and giving space to the specific nature and beauty of plants and animals, as both preconditions and opportunities for real monastic labour.

Vision and values

The abbey aims to produce organically, for both the present and future generations. For the present generation, Father Malachias emphasises "doing justice to creation" in encouraging the diversity of flora and fauna and caring for less visible parts of nature, like water and air quality, because they support good nature quality. By future generations he means the continuation of the Abbey: "We must not take out a mortgage on the future generation of monks."⁴⁴⁸ Father Malachias describes nature conservation and the farm as both a source of income and a source of joy. He stresses the significance of other values of farming, besides the finances. "It is about awareness. We as human beings do not own this earth. It is given to us on loan. We are called to

take care of it in the image of God, in his name, in his love. No exploitation. We must not strip the earth bare. In fact it is about stewardship, but I have trouble with the word. It is a financial term [in Dutch, *MV*], as if it is all about interest.⁴⁴⁹ What matters is that we are not the owners.”

Besides awareness, Malachias points out that this way of farming may help people to open their eyes for “less beneficial, but very important values such as beauty, joy, colourfulness, God’s visibility in nature, and the individuality of things and animals. The landscape has an individuality as well. We must not plant trees that don’t fit here. Likewise, every monk has his uniqueness. We think it is important to run a diverse farm, where every monk can work silently in his own rhythm. It is important that we see and develop that inner rhythm. A diversified farm has much potential and provides room for growth. In this way every monk can find work that suits him.”

In addition, the community wished to be self sufficient in its energy use. In 2008 they did a feasibility study to investigate the possibility of fermenting and converting crops to high quality energy, for their own use and for a clinic next to the abbey. In order to run a cost-effective system, the monks made an agreement with three neighbouring farmers. The abbey would provide grain and corn and the farmers would supply manure from cows, chickens and pigs. The project however could not exist without government subsidy yet and when the Dutch government stopped paying the national subsidy on green energy, the project stopped. An important reason for generating their own energy is that using fossil fuels depletes resources for the next generation. However, cultivating grain for energy also placed the monks in an ethical dilemma: grain is food and elsewhere people are starving. However, Father Malachias perceives more advantages than disadvantages. These crops are usually not suitable for human consumption, except for the rye. In most cases it is too cold in the Netherlands to grow wheat for human consumption and usually this wheat is used as animal feed.

In 1997 the abbey started to use a helophyte filter. The community is very satisfied with it. Malachias calls it a ‘powerful system’ that confronts people with their own waste. It fits very well into their philosophy to be as self-sufficient as possible. Besides, the community does not want to pay off their waste anonymously by paying a levy. They wish to be responsible for their own waste.

The Trappist farm in Echt is developing continuously and Father Malachias emphasises that consideration and integration of values and interests yields different outcomes at different times, as was often the case in Cistercian history. The basic attitude of monastic agriculture is a focus not purely on economic interests or yields, but on other values and dimensions in creation, and particularly the community’s environment, because nature refers to its Creator.

The case of Trappist Abbey Maria Toevlucht in Zundert

The Trappist monastery in Zundert has 28 brothers. The main sources of income are the guest-house, the farm, the shop and the old age pensions. The community started in 1900 with a farm and 25 hectares. Until the late 1950s the surrounding fields, mostly wet heath land and marshes, were reclaimed and cultivated and the property of the abbey expanded to 70 hectares. In the 1950s the farm had a closed, self-supplying system, including agriculture, cattle, dairy, vegetables and fruit. Because the reclaimed land appeared to be unsuitable for arable farming, the abbey changed towards an intensive dairy farm.

When in the 1990s the community had to decide about investing in a new barn that would satisfy demands for modern housing and a good environment, the brothers started a discussion and a searching process at a deeper level. The community asked itself whether such a

huge investment and kind of agriculture could still be combined with the aims of monastic life. Brother Arnold, who was head of the farm at that time, discovered that, although the brothers were sentimental about the agricultural past of the Trappists, they were in fact unaware of the reality of the needs and demands of a modern farm. In 1998 the community decided to give up farming. One of the reasons was that the farm manager had become a fulltime farmer and was rarely able to participate in the divine office anymore.

After the cows were sold, the community considered what to do with the fields: sell them, rent them out or keep them. A great majority chose to keep the management and to start an extensive organic farm with cattle. An important reason for keeping the land in the community was to maintain peace and rest in the surroundings of the abbey. Brother Gerard explains: "Monks have often been innovators. We now have to be innovators again, but in a different way. It is a social order and an assignment on behalf of creation, to bring forward other aspects of agriculture. I hope we are returning to where we started, the ground, but in a new way with organic farming, producing pure food." Brother Cornelis, the present farm manager, replied: "I am concerned about pollution and exhaustion of nature, hunger and poverty in many parts of the world. These things are connected. We do not want to import raw materials from the tropics, where people are confronted with food scarcity and exhaustion of the soil. We must treat the earth in a different way; restrict ourselves to what is really needed in order to leave enough for other humans, animals, plants and wild nature. What we need is a deep connection with all of creation and another way to achieve happiness than through possessions. That starts with meditation, prayer, simple work in nature. I am happy that our farm seeks for new ways." Brother Han: "As Christians we must care for what is in distress and that is nature now."⁴⁵⁰

The brothers searched for cattle breeds that would fit into the new farm style and found these in France: *Parthenaises* and *Maraîchines*. These cows are strong, cope well with marshy land and are easy-calving. The *Parthenaises* have a good quality of meat and are easy to handle, while the *Maraîchines* are steadier and tougher. By keeping a herd the community can help to maintain these breeds. They usually have about 80 cows, with peaks up to 100. Like the Trappists in Echt, the Trappists in Zundert sell meat, although they are vegetarians. This might sound contradictory, but the brothers do not in principle reject the slaughtering of animals. Trappists have always been vegetarian for reason of frugality, as will be further explained in section 6.5.3 on nutrition. Besides cattle, the Trappist community has chickens belonging to two old breeds from their area: the *Brabanter* and the *Kraaikop*. The choice of these old breeds is made because of the wish to maintain these disappearing breeds and to contribute to genetic diversity. The brothers pay much attention to the well-being of their animals. The cows are outside as long as possible, but when in winter the fields are too wet, the cows stay inside a spacious barn with straw with the facility to wander outside. The chickens have plenty of sand for taking sand-baths. Brother Cornelis explains: "Within the limits of what is practically possible, animals should be able to show natural behaviour." The monastic farms also practise beekeeping.

Most of the fields around the abbey are used as pastureland. In addition, the community grows different kinds of grain, such as rye, wheat, barley, and maize, mainly for feed. Some grain is used for their own bakery. As an experiment the brothers also sowed a hectare of dark purple peas, the so-called '*capucijners*', for these are known as "meat for Trappists". The abbey is surrounded by nature reserves.⁴⁵¹ Likewise, the brothers aim to give room to rare species of plants and animals on their property and maintain natural areas. So they stopped manuring the sides of the fields and gave up fertilising the fields in the woodlands. A great diversity

of plants, such as the royal fern, ragged robin, and pondweed now grow on these poor areas. Likewise, the grain fields give room to typical flowers like the cornflower and the poppy. The lanes of trees, woodlands, wild flowers and ditches create good habitats for animals like butterflies, dragonflies, frogs, bats, swallows, partridges, owls and polecats.

The aim of the organic farm is to have closed cycles of raw materials, feed, manure and compost on the farm or in the nearby area. Brother Cornelis gives two reasons for that: “The community does not want to import feed from countries where people are starving and a closed cycle prevents a manure surplus poisoning ground and water.” In addition, the farm is extensive, which means that the ground is not exploited for utmost yield. Weed control is done mechanically. The soil is kept fertile with cow manure and clover only. The community uses seeds that are not genetically modified. The animals are fed with grass and grain from the farm, hay from the nature reserve and some additional organic concentrates. The use of medicine is very limited and also caesarean sections are the exception.

The abbey has a huge vegetable garden that has been organic for more than 40 years. For years this garden could supply the community and their guests with vegetables year-round, but owing to a lack of hands the garden has become smaller now. The community is no longer completely self supplying and the yield depends on, as Brother Gerard described: “the availability of brothers, the whims of the weather, the interests of rabbits and caterpillars, and the toughness of the weeds”. Ten years ago the community installed a polytunnel in order to be able to harvest early vegetables in April, like spinach, turnip tops and lettuce. During summer the brothers grow tomatoes in this plastic greenhouse. For the winter cabbages and root vegetables are ensiled in the ground, pumpkins and onions are stored in the cellar, other vegetables are either frozen or pickled, and some vegetables can remain in the frozen ground.

Farmer Brother Cornelis is glad he is an organic farmer, emphasising respect for creation. “For me that is logical because of my faith and it suits our Trappist way of life. But it is not that clear for all brothers. Some think it is strange, others do not really care. Anyway, the one brother is occupied with farming and the other is more focused on liturgy or songs.” Brother Cornelis has many plans for the future, relating to the growth of old grain species, nature conservation and maintenance of the old lanes. He often has contact with nature organisations outside the abbey walls. Brother Frans, the former farmer, concludes: “The involvement of brothers in the farm has grown. Many monasteries have given up farming; it is a great richness that we still have a farm. Being dependent on nature prevents over-confidence, because you are aware of your smallness. That is what being a monk means for me.”

Recapitulation

Work is an essential aspect of Benedictine life, for it is perceived as good for body and mind. The Rule of Saint Benedict promotes a responsible attitude towards tasks, material goods, and people. In his description of various tasks, Saint Benedict focuses on specific characteristics, values and a mature spirituality of the person, from which good practice would automatically follow.

As far as the Benedictine view on agriculture is concerned, we see that, although many European monasteries have given up large scale agriculture, the monasteries that are involved in agriculture often practise farming methods which show respect for nature and people. This practice is motivated by the basic Christian belief that nature is created by God and humans are commanded to be good stewards who respect creation. As we have also discussed in section 6.3.1, caring for nature is also a way of giving praise and honour to God, supplementing

the praise of God as creator of the earth as sung in the psalms. This might be connected to the value of humility, which means that humans are aware of their place on earth. Another motivation is rooted in the vow of stability, which involves a deepening affinity to a certain place and a sustainable care of the land, to maintain it for generations of monks to come.

Now we have discussed the Benedictine economy and particularly the view on nature and agriculture in relation to the environment, we will turn to the sustainability of Benedictine communities in a broader sense.

6.5 Sustainability and environmental impact

This section on sustainability and environmental impact focuses on specific behaviour choices regarding energy use, transport, and nutrition. Furthermore, it gives a general description of the environmental impact of the Benedictine and Trappist monasteries on the basis of the IPAT-formula⁴⁵², dealing with population, affluence and technology, in relation to Benedictine vows and values.

6.5.1 Energy use

Because many Benedictine communities live and work in old cloisters or abbeys, consisting of huge and poorly insulated buildings, the total use of energy is usually quite high, particularly in the colder regions of Europe and North America. These monasteries often face a dilemma: they prefer to stay in these historical buildings, while the number of monks and nuns available to maintain the buildings is decreasing. Besides, the buildings and particularly the chapel often have a public function as well. Whereas in the past the buildings were only kept frost-free, now several parts of the monasteries are heated. Because the average age of the monastics has gone up, some monasteries have decided to have a higher average temperature in the buildings. However, in general the average temperature in monasteries is still quite low and monks and nuns are encouraged to wear warm clothes under their habit. In particular the Abbey of Vallombrosa, built in 1015 and extended gradually, consisted of many rooms, open space and an enormous chapel. Owing to its location high up in the hills, it was very cold inside the monastery during my stay, even though it was the end of April. The monastery of Citeria on the other hand was located in a valley in Umbria and had a pleasant temperature.

Like most monasteries, the buildings of the Trappist community in Zundert grew gradually. It started in 1900 with a wooden barn and a small stone chapel. In 1909 the workshops were ready and in 1911 the brothers put the church into use. In 1912 the east side was finished and in 1929 the south part. In the 1960s many parts of the monastery were reconstructed and the buildings became more open and plainer. In 2005 the side with the guesthouse was completely renovated. The architect was asked to interpret Cistercian architecture in a modern way. Starting points for the draft were the concepts of plainness, simplicity in material, shape and detail, asceticism, silence and emptiness.⁴⁵³ The result is a beautiful interwoven construction with old parts of the monastery and new natural materials, in which the serene atmosphere is maintained. The new buildings are plain and functional, but Brother Cornelis regrets that the application of specific energy-saving measures was not an issue during the reconstruction.⁴⁵⁴ Hospitality was given a higher priority than energy-efficiency.

That it is possible to make old buildings more energy-efficient can be proved by the Trappist monastery Lilbosch, which has taken specific measures for energy use. Father Malachias

explains that the monastery has double-glazing and insulation, and uses ‘green energy’, although he has mixed feelings about the latter: “It feels like we want to buy off our energy. It has become an invisible flow, anonymous. It no longer has a human measure. (...) That is why we wish to run our own energy supply. We are also going to work with a combined heat and power supply system, because usually much heat gets lost.”⁴⁵⁵ In 2008 they did a feasibility study whether converting to an energy supply based on biomass would be possible. However, the Dutch government stopped paying subsidies for green energy projects soon after the study and without subsidies it appeared not to be possible to build the biomass system. In Italy abbeys and monasteries have been state property since the end of the 18th century and communities that live in these buildings can therefore not decide on all aspects of energy-efficiency.

The daily use of electricity is usually low, as a result of the choice for a frugal and sober lifestyle. The monastics try not to waste anything, including energy. Therefore the lights are turned off when they are no longer needed, appliances are turned off after use and doors are closed to keep the warmth inside. In addition, the monastics prefer manual labour and use relatively few appliances in the kitchen and the house. In many monasteries dishes are washed by hand. However, guests are not required to follow monastic daily habits. They are free to manage the temperature in their rooms when possible and to take showers for as long as they wish. When I asked the brothers about it, the guest brother replied that hospitality and freedom for the guests are seen as more important than energy-efficiency.

Recapitulating, we can conclude that many Benedictines and Cistercians live in old buildings, often resulting in a high energy expenditure for heating, although the Trappist monastery has proved that it is possible to make old buildings more energy-efficient. The use of electricity in the monasteries is usually low, as a result of their sober and frugal lifestyle, including the preference for manual labour. Hospitality is an important Benedictine value and all the communities I visited welcome guests, who are free to use energy in the way they wish.

6.5.2 Transport

In general, Benedictine life is characterised by little travelling by the average monk and nun. Benedictines explicitly take the vow of stability, which involves a commitment to a particular community and place. Most monks and nuns work behind the monastery walls, to be able to alternate work with the *Opus Dei*, which implies hardly any commuter traffic and a small number of travel miles by car. Everything the monastic needs is present in the monastery and therefore there is no reason for travelling.

Since Vatican Council II monastics have had slightly more freedom to travel to family or the physician, but still trips are generally confined to once a year, although this might differ between the monasteries. Some monastics have specific jobs that necessitate travelling, like the sister in Lioba who is responsible for delivering art to clients or

Box 6.2 From my diary: In the car with Sister Maria

I was to be picked up from the train station by Sister Maria, a warm-hearted nun who appeared to have a very special driving style. Sometimes she just stops in the middle of the road to think about where to go. Cars pass by left and right, honking loudly. Then the Sister suddenly changes her mind and decides to take another route. In the wrong gear, with a roaring and shaking car, she cries: “Oh mama Mia” and “Mio Dio”! (...) Sister Maria will bring me back to the train station. After we get in the car, she makes a sign of the cross, prays aloud for protection of the Father, the Son and the Holy Ghost and steps on the gas. Since I have already experienced her driving style on the way here, I am glad.”

the Italian brother who was invited to bless a ship in Venice. In particular Benedictine priests who are occupied with teaching, preaching and pastoral care need to travel regularly. Some Benedictines leave the community to go on mission by plane. All the Benedictine monasteries I visited appeared to have only one or two cars for all residents. The monastics also make use of public transport.

Because of the growing number of visitors to Benedictine and Cistercian monasteries, transport to the monasteries is growing as well. Although many of these cloisters and abbeys are located in relatively isolated areas, all the monasteries I visited could be reached by public transport.

6.5.3 Nutrition

RB 39 and 40 deal with proper amounts of food and drinks to be provided and demonstrate a balance between frugality and consideration. Saint Benedict prescribes that every main meal should at least have two cooked dishes “to allow for differences of taste so that those who feel unable to eat from one may be satisfied with the other” (RB 39). When the workload of the community is heavy, the abbot or abbess may add to the amount of food. However, the principle of moderation must be taken into account: “We must always be careful, however, to avoid excessive eating which might also cause indigestion. Nothing is so opposed to Christian values as overeating” (RB 39). Saint Benedict reluctantly suggests that a small amount of wine per day is allowed: “We should drink [wine] in moderation and not till we are full” (RB 40).

In practice, the meals in the monasteries I visited are usually simple, tasteful, and nutritious. The menus corresponded closely with the local eating habits. In the Dutch Benedictine monasteries I got a glass of water

or a cup of tea with my meal. The Trappist monasteries served beer and the Italian monasteries offered me wine. After Vatican Council II most monastic meals have become less austere, although they are usually still plain. Owing to decreasing numbers and increasing average age, some monasteries have given up cooking and order the main dish from a restaurant or catering service on a daily basis, as was the case in Lioba and Vallombrosa. Some sisters regret the use of a catering service, because they lose influence on the production and content of the meals. Sister Zoë from Lioba told: “When we had more young sisters, we had our own garden. We often had organic meals, also for health reasons. Now this has changed. We have a cook from outside the community. We hardly eat organic anymore.”⁴⁵⁶

Other monasteries, like Citeria, Lilbosch, and Zundert, cook their own meals with, to a large extent, home grown vegetables. These monasteries grow their vegetables organically and are to a large extent self-sufficient. Purchased ingredients are not explicitly organic.

Box 6.3 Menu of the Trappist Brothers in Zundert until the end of the 1950s

Breakfast:	195 grams of bread and 0.5 litre of coffee with milk.
Lunch:	buttermilk porridge, potatoes, vegetables and butter sauce. Bread as much as wished, fruit, 0.5 litre of beer or coffee with milk.
Dinner:	brown beans (on Saturdays rice porridge), bread as much as wished, oil and vinegar, cheese or fruit, 0.5 litre of beer or coffee.

The only variation in the menu was a different kind of vegetable and fruit.

Source: Abdij Maria Toevlucht, Zundert, 2000, 173.

The emphasis is not so much on organic nutrition, but more on simple, frugal and nutritious food. In Citerna, the leftovers of the lunch were processed to make the soup served with dinner.

When during the interviews I pointed out that the ingredients for breakfast were not organic or Fair Trade, often the monastic I was interviewing appeared not to know about that. Father Malachias, who is the head of the organic Trappist farm in Echt, replied surprised: “Is that so? Then we do not make a connection there with our ideas about sustainable agriculture. It is just purchased by someone who is always doing it the same way, out of habit.”⁴⁵⁷ Sister Zoë of Lioba replied: “I didn’t know that. But there is much we do not know. Many things just pass us by.”⁴⁵⁸ This is an interesting aspect of Benedictine organisation: people are made responsible for a specific task and other brothers or sisters rarely interfere in what is perceived as relatively small decision-making processes, like the brand of apple sauce.

Trappists have a strict vegetarian diet, following the Rule that “[E]veryone should abstain completely from eating the flesh of four-footed animals except, of course, the sick whose strength needs building up” (RB 39). After Vatican Council II many Trappists started to eat fish. Father Malachias explains the reasons for a vegetarian diet: “We have a vegetarian diet for two reasons. Firstly: meat is food for the rich. Tremendous amounts of feed are needed to produce meat. That is an enormous waste of food and it makes meat an expensive product. We wish to be poor monks and eat the food of the poor, so no meat for us. The second reason is that meat is hard to digest. We wish to be conscious during the day and be open for God. Therefore we must not eat a heavy meal, but a light diet.”⁴⁵⁹ The brothers of Zundert stress that they are vegetarians for reasons of frugality and solidarity with the poor who cannot afford meat. Just recently, mistreatment of animals and the world food shortage have become extra reasons for a vegetarian diet. Benedictines usually eat a small amount of meat, although during the field research some individual Benedictines appeared to prefer a vegetarian diet.⁴⁶⁰ The sisters of Lioba have a vegetarian day on Wednesdays and consume fish on Fridays.

Usually the monastics have their meals in silence, while one of them reads out a chapter of the Rule or another book. The Rule prescribes that the text should be read regularly “so that no one may have the excuse of ignorance” (RB 66). In some monasteries the microphone is connected to a speaker in the guest refectory. In the guest houses of the Trappist monasteries silence and contemplation during the meals were encouraged as well.

6.5.4 Environmental impact

This section on sustainability of Benedictine communities describes the monastic environmental impact in general on the basis of the IPAT-formula, dealing with population, affluence and technology, in relation to Benedictine values.

Population

Since the monks and nuns commit themselves to celibacy, the population growth of monasteries by births is zero. As described in section 6.2.2, the total number of Benedictines is declining and the average age in the communities is rising. Although the number of Benedictines in East African and Asian regions has increased, monasteries in Europe and North America are decreasing at a faster rate. In 2000, the Benedictine Order numbered over 8,400 monks and over 17,000 nuns throughout the world (Rippinger OSB, 2004, 20). Notably, however, the number of oblates is growing. In 2008 the Vatican counted 25,481 oblates in 50 countries, which means that the Benedictine Order now includes more oblates than ordained monks and nuns.⁴⁶¹

Affluence

During Benedictine history there has been a difference in affluence between monasteries as a whole and between the individual residents of the monasteries. Although Benedictine monasteries might have been very rich in the past, culminating in the 11th and 12th centuries the lives of individual monks and nuns have always been characterised by moderation and renunciation of personal property. As we have seen in section 6.3.2, everything in the monastery is to be held in common. A monastic may trust that the superior supplies all needs. Distribution of goods must be done in accordance with people's needs, taking into account individual weaknesses (RB 34). The Benedictine value of moderation offers an alternative vision of consumption, not based on wants but on essential needs.

As mentioned in section 6.3.2, the cellarer must take care of the monastic goods as though they were sacred vessels of the altar. This means that nothing is to be neglected nor wasted. The cellarer is encouraged to be frugal and moderate, and in more modern terms: to make ethical choices on producing, buying and using things. Abbot Klassen OSB explains the meaning of this rule for his monastery: "We avoid wasting community resources when we purchase carefully, when we buy things that will last a long time. God doesn't make junk and neither should monastic communities made in God's image. That is why our carpenter shop makes furniture that could be guaranteed for 100 years. Neither should we buy junk, but rather goods which are durable, simple with a sense of design" (Klassen OSB, 2006).

RB 55 describes specific regulations on clothing and footwear for the community, for which local conditions and climate should be deciding factors. Clothes must be plain, warm, good, and fitting. When new garments are issued, the old must be returned to be distributed to the poor. Again the Rule emphasises that the superior must provide for whatever the members of the community really need, "in order to root out completely the vice of hoarding personal possessions". In practice, when monks and nuns do not wear their habit during the day, they usually dress in plain, non-stylish, practical clothes.

In discussion with monastics about affluence during the field research, they all emphasise that happiness will not be found in material things. Sister Mathilde of Citerna stresses that she has everything she needs: a small room with a bed, a table, a chair and a cupboard. The monastery has a communally owned television, to watch the daily news. "Material things are distracting. They keep you away from God. They also keep you away from yourself, from getting to know yourself deeply inside. You must first endure yourself to be able to live in a group."⁴⁶² Sister Oeachsi of Lioba: "I often think: 'Why do I prefer monastic life and my brothers and sisters not?' I don't know the answer. I don't understand why I can do without what others need: possessions, achievements."⁴⁶³

In the past, many Benedictine monasteries were very affluent. At present, affluence differs very much within the Benedictine Order. Regarding the individual monks and nuns, we can argue that they have a relatively low affluence, for they do not have many personal possessions. Most communally possessed goods are quite durable.

Technology

During the Middle Ages, the Benedictine monasteries were well known for their technological sophistication. Because the various monasteries had a good communication network, technological developments and information were spread rapidly. In the 12th century, the first Cistercian monastery in Clairvaux reports on the use of waterpower for farming and milling (Lawrence, 2000). Other well-developed technologies and skills were agricultural and

architectural technologies, and metallurgy. A famous invention was the construction of a remarkable clock and astronomical indicator by Richard of Wallingford, Benedictine Abbot of Saint Albans from 1327 until his death in 1336.⁴⁶⁴

Nowadays, the role of technology differs greatly between the different monasteries. Since most Benedictine monasteries stress the importance of manual labour, technological developments are usually only implemented when they are needed and contribute to monastic life. Often specific technological appliances are used by a small number of people. Many monks and nuns never work with a computer. Brother Johannes of Lilbosch explained he had only taken a picture once in his life. A nun of Lioba said she had never used a bankcard with a PIN code. In Zundert, on the other hand, many modern appliances could be found in the two-years old buildings attached to the older abbey. Moreover, many monasteries have a presence on the internet.⁴⁶⁵ Benedictines do not oppose technology in itself, as long as it fits their values. An example is the generation of energy from manure and grains as practised by the Trappists in Echt (section 6.4.2).

Abbot Klassen describes the risk of technological developments challenging moderation: “We are probably most vulnerable to waste in the area of computer technology, where obsolescence is such a fact of life. Computers, printers, and other instruments driven by computers are outdated as soon as they are purchased. How can we get out of this vicious cycle and remain close to the frontier of that technology?” (Klassen OSB, 2006). Generally, we can say that Benedictines welcome and sometimes develop technology as long as it serves monastic life and values.

Recapitulation

Many Benedictines and Cistercians live in old energy-inefficient buildings. The use of electricity in the monasteries is usually low, as a result of their sober and frugal lifestyle. In particular Trappists appreciate manual labour and therefore make a relatively low use of appliances. This is not for environmental reasons, but mainly because manual labour has a healing effect on the body, spirit and mind. Hospitality is an important Benedictine value and guests are free to use as much energy as they wish. Owing to the vow of stability, most monastics work inside the monastery and therefore the amount of travel is quite low. All the monasteries I visited own one or two cars for the complete community. Regarding nutrition, we see that the communities which have a vegetable garden all choose organic production, mainly out of respect for God and His creation. Most purchased products appear not to be organic, which depends on the preference of the person who is responsible for the purchases. It is usually perceived as a small topic that is not discussed communally. Trappists are strict vegetarians, because of frugality, solidarity with the poor and because meat is hard to digest. Benedictines usually do eat meat, although their meals are simple, obeying the Rule of Saint Benedict.

The Benedictine order shows a relatively low environmental impact following the IPAT-formula. Population growth is zero owing to celibacy. The affluence per person has gone up slightly the last decades, but is still characterised by moderation and communal use of monastic possessions. The central Benedictine concept is that monastics receive what they need. By emphasising that consumption should not be based on wants, but on essential needs, the value of moderation may offer an alternative way of dealing with consumption. The Rule of Saint Benedict that all things should be treated with care and nothing should be neglected nor wasted is generally practised in all visited monasteries. Monastics live in a frugal and moderate way, and have relatively few personal possessions. Usually, monasteries purchase durable

furniture and other communal goods. The use of technology may vary between the diverse Benedictine monasteries. In general, we can say that it is applied as long as it contributes to monastic life, in which manual labour still has an important place.

6.6 Benedictine worldview and sustainability

The previous section on environmental impact showed that Benedictine behaviour choices are positively affected by the vow of stability and the value of moderation. This final section will discuss the relationship between the Benedictine worldview and sustainability in more detail by using the information and data as presented in the previous sections. The section will first deal with the main clashing values which appeared to be significant in the process of decision-making regarding behaviour choices in section 6.6.1, of which some are comparable to those of the Franciscan Order. I will conclude with the promising values and other aspects of the Benedictine worldview that are relevant in relation to sustainability in section 6.6.2.

6.6.1 Clashing values

In many European and North-American monasteries the average age is rising, with comprehensive consequences for the continuation of the communities. A specific consequence of the higher average age is a higher temperature in the buildings, leading to an increasing use of energy. Besides, the number of people in need of care is growing, while fewer people are available to provide this care. Other tasks remain unaccomplished, because of a lack of hands. This has resulted in changing monastic time schedules, leading to a new balance of work, study and prayer. In many monasteries one or two prayer hours have been skipped or are combined into one, to provide for working hours to fulfil necessary tasks. Usually this has affected the so-called 'little hours' of Prime, Terce, and None. Furthermore, a diminishing population has forced communities to contract out specific tasks, like cooking, gardening, or washing. Some of them regret the use of a catering service, for it means giving up autonomy and say in the content and production of the diet. Another consequence is that many monasteries have given up working the land.

Box 6.4 From my diary: Visit to Vallombrosa

Around half past five the Vesper starts. Many tourists are still wandering around the abbey, and regularly they enter the church with much noise. This is disturbing and I notice that the brothers are disturbed as well. Suddenly the abbot leaves his chair and walks to the entrance of the chapel to ask for silence. Then it gets quieter again. For some people the abbey is just a touristic place, while for the monks it is a place of prayer. Here the hospitality highly clashes with one of the most important aspects of monastic life: praying the divine office.

The value of hospitality regularly causes clashes with other values. In particular the contemplative monasteries, as most Benedictine and Trappist communities are, may perceive the growing number of guests as disturbing silence and rest. Saint Benedict provided for that in his Rule: "The kitchen to serve (...) the guests should be quite separate, so that guests, who are never lacking in a monastery, may not unsettle the community by arriving, as they do, at all times of the day" (RB 53). All monasteries had separate guest rooms, a guest kitchen, separate dining room and an appointed guest brother or sister. Nevertheless, the growing number of guests brings along much traffic,

a higher energy-use and the need to provide good food and shelter. For all the communities I visited the values of hospitality, including giving a certain amount of freedom for guests, appeared to be more important than restricting them in any sense for environmental reasons.

Another clash of values occurs in the interplay between economic and non-economic values. A monastery may wish to live according to its values, but sufficient income is needed as well. Sometimes this clash is caused by the lack of hands, as mentioned above, but sometimes it has to do with local circumstances. Father Malachias experiences an ethical dilemma in using pesticides: "At long last we have chosen to use minimal chemical pesticides for the sugar beet, because they might harm other people. Cultivating sugar beet in the Netherlands is an ethical issue anyhow. We deprive farmers in poor countries of their income. But the big guys, who will not notice less profit, usually run these companies. The really poor worker will not be affected; you won't help them by buying cane sugar."⁴⁶⁶ This Trappist monastery is aware that the choice for organic farming and nature development involves certain agrarian and financial risks. Nevertheless, enterprise is not only a matter of money. According to Father Malachias, money and economic interests should never be a goal in themselves, but they derive their sense and meaning from the deeper values they serve. "Sensible enterprise does not seek maximal profits, but tries to integrate sufficient yields with other values to achieve the right balance."⁴⁶⁷ This process is characterised by many clashes between economic and non-economic values.

A specific clash of values concerns the production of pig meat at the Trappist Abbey of Echt, since the brothers are vegetarian themselves. The choice for raising pigs was mainly led by financial considerations, although it has now developed into a specific way of raising these pigs. The way they are kept suits their philosophy of organic farming well. The same clash can be observed at the Trappist Abbey of Zundert, which raises cows for meat. Brother Cornelis explained that raising cows for meat was the only way to maintain the farm in an economically healthy way and remain organic.⁴⁶⁸

A clash relating to environmentally sound consumption is caused by the wish to give individual monastics autonomy in the fulfilment of their tasks, which are usually supervised by one senior. In many cases the specific monk or nun develops a routine, which is not easily changed and is something other monks or nuns are usually not aware of. An example is the purchase of breakfast ingredients in the monasteries of Echt and Lioba, as mentioned in the section on nutrition. Many monks and nuns appear to be reluctant to confront others with their behaviour, for it is the responsibility of their superior. This monastic autonomy implies that choices regarding sustainability largely depend on individuals who either make a low environmental impact their priority or for whom it is not an important issue.

A continuous clash of values takes place in the interplay of traditional Benedictine monastic life and the challenges of modern technology. The Benedictine movement has always been characterised by tensions and clashing values. Father Malachias explained: "Clashes of values happen regularly. We get dirty hands; we must learn to live with it. We also suffer from the greyness of existence."⁴⁶⁹ As we have seen in section 6.3.1 and can learn from Benedictine history, the main goal of monastic life remains to search for God and follow Christ.

6.6.2 Promising values

Benedictine history, the Rule, the present monastic practices, and even the clashing values do offer some principles for environmental care and a view on nature and materialism, which can be of much interest for the debate on sustainability. The Rule of Saint Benedict focuses on

a cenobitic, communal way of living, aiming at a mature stability and respectful dealing with time, places, people, and material goods. Besides many religious instructions, it offers insight into his view on manual labour and a daily work schedule. In this final section, I will elaborate the most relevant aspects of the Benedictine worldview for the discussion on sustainability. These elements are summarised under four headings: the Benedictine vow of stability, their vision on property and moderation, the value of humility and the role of time.

Stability

The vow of stability might offer an interesting basis for sustainability, because it makes people commit themselves to a certain place. Where in broader society working and living are often decoupled, Benedictines work and live at the same place. This, in the first place, minimises the amount of transport. In the second place, it encourages a rootedness in the local environment and an awareness of the needs of people and nature in this environment. The monastic vow of stability also involves the wish to maintain a certain place for generations to come, implying a sustainable way of dealing with monastic natural and agricultural grounds, the buildings, and the people in the community and the neighbourhood. Benedictines explained that when they were more involved in their surroundings, and got to know the ecosystems, flora and fauna, their communities could take more sustainable decisions, which not only favoured nature, but also the durability of the community.

As stated in section 6.3.2, the Benedictine vow of stability also refers to a more spiritual stability and an inner attitude of steadfastness. Rootedness in a specific place might generate conditions for human and spiritual growth. In Western society, many people tend to be gyrovagans by their reluctance to make a commitment, whether this implies a physical commitment or a more spiritual stability. In the Benedictine view, stability should encourage inner peace, rest, and religious maturity. It appears to be a basic element for finding quality of life in spiritual and relational aspects, rather than in consumptive behaviour.

Property and moderation

The community is the centre of cenobitic life. Saint Benedict emphasised that all monastic property should be held in common and that nothing may be regarded as personal possession. The underlying idea is that everything, even the monk's body and his own will, is consecrated to God. All goods must be shared, within the community, and with the poor outside the community. It is not essential that every person gets an equal amount, but that everyone receives according to his needs. Regarding these needs, Saint Benedict is both clear and considerate: the focus should be on moderation and modesty, but when a person is in need, he must be provided with good clothes and good food. The monastic must focus on moderation to prevent avarice and to promote peace by satisfying actual needs. In this way, Benedict offers an alternative view of consumption, which is based on essential needs and not on insatiable desires. Benedictines emphasise that satisfaction and quality of life are not to be found in material goods, but in spiritual things.

The Rule of Saint Benedict encourages a respectful and reverent way of dealing with material goods, as RB 31 prescribes that all monastic goods should be cared for as though they were the sacred vessels of the altar, referring to God. This Benedictine view of 'sacredness of things' is often extended towards nature conservation and good care of the environment. For many Benedictines the idea of 'sacredness' is connected with the idea of stewardship, which means that human beings do not own the earth. Material goods, as well as nature, are seen as God's property

that should be treated with gratitude and responsibility. Everything in the monastery should be devoted to God, attributing a deep value to every simple utensil. As steward, the Benedictine monk or nun is aware of a devout responsibility for monastic goods, including nature.

Humility

The essential point of humility as seen in the Benedictine tradition is an awareness of the relationship between human beings and, firstly God, secondly other people and nature. Humility makes the monastic acknowledge that he is a creature, and that all life is *humus*, connected to the earth. In this way, the virtue of humility makes clear that humans are part of creation, and should cultivate the earth as stewards, not as owners. Humility is the opposite of arrogance, whether it is arrogance towards other people or towards nature. Humility involves accepting limitations and taking up responsibility for the consequences of one's acts, both towards other people and the environment. Besides, nature itself has much to teach human beings about the limits of life and the natural cycle of birth and death, which is also understood in spiritual terms.

Time

The old Benedictine idea of alternating times of work with times of prayer and study appeared to be very helpful to prevent the monastic from becoming overwhelmed or submersed by work. Although many monasteries do bring along a huge amount of work, the strict time schedule prevents the monk or nun from becoming a workaholic. The structure helps him or her to concentrate on the present and to focus on what needs to be done. Daily hours of prayer and meditation bring all aspects of life into larger perspective and undergird them with an awareness of the presence of God. Contrary to what many people experience in modern society, in monastic life all things are interrelated and connected. In Western society, more structural alternation of work and time to meditate might result in better concentration, prevention of stress and burnout, and more efficient use of time and materials.

The Benedictine Order has left an impressive legacy in relation to the development of Europe. Despite diminishing numbers, the Order is far from dying. The monks and nuns show a vibrant religious life, practising the old, but still relevant Benedictine tradition of praying, working, and *lectio divina*. Their coherent way of life shows a well-considered translation of their religious values into daily practice and a good balance between work and reflection. The four elements mentioned above may in particular add to the challenge to lower environmental impact and to encourage sustainability in our society. The vow of stability implies a commitment to a certain place, and, together with the value of humility, encourages willingness to facing the consequences of one's decisions and acts. Translated to broader society, these values stimulate taking responsibility for the environmental impact of our consumption and production, rather than shifting out problems to nature, other people, or the future. Regarding property, the Benedictine worldview accentuates modesty and reflection on essential needs, and material goods are to be treated with gratitude and responsibility. Benedictine life is all about finding the right balance, between work and reflection, between individuality and community, and between the spiritual and material. The Benedictine worldview and its daily structure offer a framework that may not only encourage the monastics, but also broader society, to stay focused on quality of life and sustainability.

Chapter 7 Values, quality of life and sustainability

7.1 Introduction

Our world is confronted with significant global problems. The term ‘environmental crisis’, as used by the historian Lynn White in the 1960s⁴⁷⁰, is still topical, now covering different kinds of problems relating to the environment and human life. The consumption of material goods has increased enormously over the last decades and the environmental impact is exceeding the carrying capacity of the earth. Climate change and the loss of biodiversity have become interconnected with other global issues, like the threatened food security and energy supply, exhaustion of certain minerals and economic problems. In order to maintain a worldwide quality of life, we need a profound structural change in consumption and production patterns and a reflection on the worldview that underlies these patterns.

Christianity has had a major influence on the development of Western culture and worldview. The Benedictines and other Catholic Orders played an important role in the cultivation of many wastelands into farmland. The impact of Christian values on Western development however has been criticised as well. Lynn White argued that a certain interpretation of biblical texts was an important cause of environmental problems, for it would justify exploitation of the earth by the ideas that it has been created for human benefit and that humans are ordered to rule over the animals and the earth. Earlier, the sociologist Max Weber related the rise of capitalism to Protestantism, because of its work ethic, thrift, and the moral meaning it assigned to economic activities. On the other hand, Christian values also encouraged frugality, responsibility and care for people and nature. Christianity has had a major influence, not only on ideas about development, but also on ideas about quality of life. Therefore, I have taken up White’s suggestion to reconsider the Christian worldviews and values in which Western culture is rooted, in order to find starting points for the solution of environmental problems and reconsideration of ideas about development. Like White, I think it is essential to focus on values that underlie ideas about the aims and direction of development and progress, as well as to consider seriously what quality of life consists of.

The main assumption of this dissertation is that to achieve sustainable behaviour in the ecological sense in the long term, it must correspond with values and ideas about quality of life that lead to behaviour choices with a lower impact on the environment. These values need not necessarily be environmental values, but can also be other values, like for example moderation and solidarity. When these values are connected to or rooted in a shared worldview, as we have seen among the four communities, these behavioural choices are more likely to be maintained. In order to find examples of values and behaviour patterns that do lead to sustainable choices and might bring about a connection with Western society, I searched within the Western Christian tradition for long-existing communities that seem to have a relatively low impact on the environment.

Most research on the relation between religious worldviews, values and behavioural choices focuses on either the micro level of individual choices or the macro level of denominations or countries. The meso level of communities, and particularly religious communities, is rarely examined and might be an interesting approach for studying this relation coherently. Values and behavioural choices belong to a specific social context. Within a community, shared values and ideas about behaviour are to a certain extent embedded in communal agreements and supported by the social capital of the community. Each of the four religious communities that have been studied for this dissertation, namely the Amish, the Hutterites, the Benedictine and Trappist Orders and the Franciscan Order, represents a radical interpretation of large religious movements in Western history: Anabaptism as a specific form of Protestantism, and Roman Catholicism. These religious communities have existed for hundreds of years, with a shared worldview that is relatively clear-cut and a social context in which the shared values and behavioural choices are controlled and maintained. An important question is whether the communities I visited are representative of the broader community. Every community has its own character and history, but generally the communities I studied appeared to reflect the broader communities they belong to. This has been confirmed by Donald Kraybill (Amish), Rod Janzen (Hutterites) and the abbots and guardians of the monasteries I visited. The Hutterite community I visited has been deviant from the broader Hutterite community in the past, but has become more mainstream Hutterite recently.

Using the method of participating observation, I studied the values and behavioural choices of these religious communities regarding nutrition, transport, energy use, and agriculture in their cultural setting, to investigate how worldviews can be translated into values and ideas about a 'good life' leading to a lower impact on the environment and a way to persevere in these behaviour choices. Behavioural choices with a relatively low impact on the environment are usually not based on a specific or explicit pro-environmental philosophy, but on ideas about quality of life and values. It was however not always easy to determine and analyse separate values underlying behavioural choices. Many choices have a long history and (gradually) developed under the influence of religious beliefs, culture, circumstances, State rules, distinction between different branches, and social relations. The Amish and the Hutterites in particular are steeped in these values from early on, and some members are not used to explicitly analysing or unravelling these values. When I asked about the motives for specific behavioural choices, some respondents answered: "We do it this way, just because we're Amish", stressing their communal identity and the sum of values that make up their quality of life.

The community appears to be an essential social context for maintaining shared values and preferred behavioural choices. Although all communities have faced significant changes, they have often been carried through in a controlled and considered way, to safeguard their identity and preferred quality of life as much as possible. None of the research groups however functions as a blueprint for sustainable living in the ecological sense. They also make collective decisions leading to behaviour with a negative impact on the environment. In both Amish and Hutterite communities the population growth is conflicting with ecological sustainability in the long term.⁴⁷¹ The monastic orders on the other hand take the vow of chastity, which is not sustainable either. Furthermore, Amish prohibit higher education and therefore might lack knowledge needed for environmental technology. Many monastic communities are situated in old non-insulated buildings involving a high energy use.

Nevertheless, the values and ideas about quality of life of these religious communities do bring along important perspectives for gaining sustainability while keeping quality, particularly the way these values contribute to a reflective process of change. An important question is how the communities have been able to succeed in maintaining their quality of life. How did it work and what were the consequences for the communities? How and in what way can the broader Western society implement these values and ideas about quality of life in order to lower its environmental impact and develop more sustainable patterns of consumption and production?

7.2 Reflection on the religious communities

7.2.1 Maintaining quality of life

The communities focus on the maintenance of their quality of life, which is predominantly described in religious terms. Their values that make up quality of life are not isolated principles, but are rooted in a shared worldview and maintained by a clear social structure. An overview of the main values is depicted in box 7.1, in which I have accentuated values that are to my opinion most typical of that community. Values directly concerned with faith and religious freedom are placed on top of the value hierarchies and are invariant and non-negotiable. A distinction can be made between terminal values, which refer to desirable goals or end-states of existence, and instrumental values that refer to prererable modes of behaviour, or desired modes of action, as means of achieving the terminal values.⁴⁷²

Box 7.1 Main values of the studied communities			
Amish	Hutterites	Franciscans	Benedictines
religious life moderation (local) community uniformity forgiveness obedience respect for tradition modesty responsibility helpfulness willingness to work separation from the world non-violence	religious life community order conformity sharing of possessions submission obedience discipline respect for tradition frugality willingness to work avoidance of the world non-violence	religious life moderation community poverty devotion to God obedience charity solidarity gratitude praise humility respect	religious life moderation community stability devotion to God obedience <i>lectio divina</i> humility hospitality silence attention stewardship

Amish faith can best be characterised by a reliance on God. Unanswered questions are generally accepted and addressed to God. Amish witness to their faith in daily life, which can be described as moderate, plain, patient and responsible. In Hutterite ideology, communal living and sharing of possessions are believed to be Christian commands.⁴⁷³ Their religious focus is

submission to God and deduced from that, submission to the colony's authority. Most Hutterite values are therefore focused on discipline in order to maintain colonial life. In both Catholic Orders 'religious life' was often mentioned when asked for the most important thing in life. This term refers to both beliefs about monastic life in the present and beliefs about eternity. The Franciscan order is characterised by its choice for poverty, moderation, charity, and the focus on gratitude and praise towards God. Benedictines emphasise devotion and obedience to God and to the abbot, encouraging the individual to become humble and mindful of God's presence in life. This is also furthered by their monastic life with alternation of work and prayer, the *lectio divina*, and silence. The communities have succeeded well in keeping their values and consequent behaviour. They practise what they believe and provide the necessary framework to maintain their quality of life. Three things in particular appear to be relevant, namely a rootedness in a shared worldview, social capital, and a reflective way of change with a strategic border control.

Shared worldview

The main values are rooted in a shared religious worldview that pervades and transcends almost all aspects of life and are translated into historically developed codes of conduct and connected to explicit rules and vows. Many of these codes of conduct have become part of the communal identity. All community members underwent a certain process of socialisation and a 'ritual of commitment', subscribing and committing themselves voluntarily to the communal religious worldview. Whether it is the novice who takes the monastic vows, or the Anabaptist who is baptised, for all it is a combination of confession of faith and commitment to the community. This religious ritual is inextricably bound up with acceptance of communal values, norms, obligations, expectations, and sanctions. A clearly marked ritual helps the individual to persevere in subsequent behaviour. The communities stress the importance of celebrating their faith and religious rituals. Furthermore, they remind themselves of basic aspects of their religious worldview and religious or historical writings on a regular basis, to further a sense of rootedness and conformity of ideas, values, norms and behaviour choices.

The religious worldviews of the communities contrast with those of the broader Western society in many ways. Whereas in society worldviews may appear to be fragmented and people tend to construct their own belief systems 'à la carte', the communal religious beliefs and values are interconnected and stand in a long history. In modern society, discrepancies between convictions and practices may exist, particularly in the short term, and are often not experienced as problematic. The communities on the other hand take their values seriously and translate them into practical behavioural choices, accepting the consequences of their convictions and beliefs. In contrast to the modern value of hedonism, they limit their possessions and activities, and adhere to values of modesty and moderation, in which they find enjoyment and a way to safeguard their quality of life.

Social capital

In the communities, many values and coherent behavioural choices are embedded in a strong social context and maintained by a system of social care, control and correction, and are therefore likely to remain in the long term. A point for consideration is that this also applies to behavioural choices that do not reduce environmental impact, like the high birth rate among Hutterites and Amish.⁴⁷⁴ Social capital and communal structure have developed over centuries

and systems of reciprocal care and mutual trust have become part of the communal culture, with the Amish barnraising as a striking example of communal care. Robust social capital makes communal life rather predictable and trustworthy.

All communities have a sophisticated system of social control, aiming to keep their culture and identity. Personal wishes ultimately have to be made subordinate to communal norms, rules and traditions.⁴⁷⁵ Social control is subtly present in everyday life and usually works out adequately. In extreme cases however, when a person persists in deviant behaviour, religious leaders will admonish the individual who, at a certain point, will have to choose between giving up his or her personal desire or to leaving the community. Such a system of social control obviously maintains social structures in a healthy, well-functioning community. However, this control system runs the risk of leaders misusing their authority, which will eventually undermine social capital and cohesion. In all communities authority is related to religious leadership, which can make it hard to criticize the functioning of the leaders.

These forms of submission and conformity conflict with Western individualism and personal autonomy; hardly any outsider appears to join Amish or Hutterite communities, and monasteries are closing down in Western countries. Even for a number of Amish and Hutterite youth the price of giving up specific desires, personal freedom and autonomy is too high and they decide to leave the community. Nevertheless, about 85% of Amish and over 90% of Hutterite youth remain in their community, for it is exactly this communal life and social context that provides a structure for maintaining a preferred quality of life. Furthermore, the ritual of adult baptism as a symbol of submission to God and the community encourages a conscious commitment to the community and the number of baptised members leaving the community is very low.

Reflective change

The value hierarchy reflects the community's value preferences, but the hierarchy is neither abstract, nor static. The communities are part of their surrounding culture, embedded in the wider society, which influences communal life and may cause conflicts in practising values. Conflicting values usually force the community to reflect on what determines their quality of life and the importance of communal values, and thus to re-establish their value hierarchy. In some cases the community gradually adjusts its interpretation of a value: present moderation is a luxury compared to the moderation of 100 years ago, even among the Amish. In other cases the community will not give in and struggles to safeguard its values, as illustrated by the 'school conflict' (see section 3.2). An interesting question is to what extent the community is willing and in a position to make compromises or even sacrifices in order to remain able to adhere to certain values.

All communities experience tensions between on the one hand the necessity of maintaining economic viability, leading to ineluctable changes, and on the other hand the wish to keep their main cultural and religious values. The Amish and Trappists in particular have incorporated the principle of weighing values and have largely succeeded in modernising in a reflective way together with strategic cultural border control. New developments and technologies, including their experienced or expected effects on the community, are subject to public reflection and consideration, leading to clear communal choices in which religious values, cultural symbols, and social cohesion are safeguarded as much as possible. Depending on the subject, it can take several years before the community decides to accept, reject or modify a development or innovation.

The choice for reflection in processes of modernisation and economic decisions emanates from ideas regarding progress and growth in relation to quality of life. In general, the communities do not perceive economic growth as a goal in itself. Sufficient income is a precondition for subsistence, but is not associated with progress and growth. Monastics in particular describe progress and growth in spiritual terms, focusing on growth in maturity, well-being and quality of life. Too much economic growth is perceived as a threat to spiritual life and group cohesion. This can be illustrated by the beer production of the Trappist Monastery in Westvleteren. Since their beer was declared the best beer in the world, demand has increased enormously. Nevertheless, the monks stick to a limited production, for they do not want the beer production to influence their daily divine office. Likewise, Amish businesses that grow beyond the boundaries of their propriety are frequently split or sold to non-Amish businessmen (Kraybill and Nolt, 2004, 45). This reflective way of dealing with change, taking values as the starting point in the processes of change and adoption of innovations, has helped the communities to further economic viability, while preserving their core values and quality of life.

7.2.2 Community comparison

Having investigated the value hierarchies and the way the communities strive for maintaining quality of life, I will now present a comparison between the communities and discuss substantial differences that are relevant to the discussion on religious worldviews and sustainability, namely the coherence between religious beliefs and daily practice, leadership and authority, openness to the outside world, agricultural scale, and the future of the communities.

Where Amish, as well as the Catholic Orders, search for coherence between their religious beliefs and daily practice, Hutterites are hesitant to interpret their religious beliefs. Hutterite thinking is characterised by a dualistic worldview, in which spiritual and material life are separated. Spiritual life is mainly translated in domestic life, but hardly at all in economic activity, whose profits only serve to maintain spiritual life. Whereas their spiritual life is conserved as much as possible, their farming systems belong to the most modernised and advanced in Northern America. Hutterite religious beliefs are to a large extent based on sermons of their forefathers that are read daily. These sermons however are more than 300 years old and often lack answers for present-day problems. Because religious beliefs are not translated into current issues, Hutterites are facing an increase in conflicting internal values. The growing separation of the religious and economic sphere has many implications for the social, cultural, and economic development of the Hutterite colonies.

Within the Catholic Orders I found the Franciscan Order to be much more multiform than the Benedictine Order, both in lifestyle and in ideas. At the individual level the Brothers search for coherence between their beliefs and practice. Within the broader Order these different opinions and interpretations can coexist, making it rather pluralistic, although this is not perceived as problematic by the Order itself. This pluralism however may weaken the communal maintenance of values and conduct. Differences in pluralism between the Benedictine Order and the Franciscan Order may be explained by the sources on which their beliefs are based. While the Benedictine Order is grounded in the Rule of Saint Benedict, which has clearly written convictions and instructions, the Franciscan Order is particularly inspired by the life of its founder – a description mainly made up of legends. The Rule of Saint Francis is used more as source of inspiration than as a manual for Franciscan life, giving room for different interpretations and accents in Franciscan beliefs, values and identity.

The role of authority and individual influence on communal decisions differ somewhat among the communities. In the Catholic orders far-reaching decisions are usually made after a process of communal discussion and reflection. When choices affect the entire community, decisions are usually made by majority decision. Ultimately, it is the guardian or the abbot who decides, and monastics have to accept the outcome. In Amish church districts, communal decisions are taken by all baptised members during the biennial Council Meeting, although they generally follow the opinion of the elders. In case of an impasse, when a person persists in a deviant opinion without religious foundation, he or she will ultimately be compelled to submit to the communal decision or be excluded from the council. In the hierarchically organised Hutterite colonies, most decisions are made by the leaders. In specific cases the baptised men participate in the decision making, although the council may be overriding.

In both Hutterite colonies and Benedictine monasteries obedience to authority is strongly emphasised. Individuals will rarely interfere in matters they are not responsible for. As a consequence, new issues like environmentally sound cleaning products will only be introduced when the person responsible for purchase is positive about it. Hutterite women hardly have a say in such daily issues and Benedictines have, apart from the official meetings, few opportunities to discuss such issues. The Franciscan Friars are organised in a less hierarchical way compared to the Benedictines, with more room for informal conversations. Although the guardian has the last say, Franciscans have many opportunities to give their views, which encourages involvement in daily issues. Amish do not live in a communal setting and therefore are personally responsible for daily choices. In Amish society individual decisions are limited by communal norms and social control.

In order to protect their identity, the Anabaptist communities tend to avoid and seclude themselves from the outside world. Nevertheless, among all communities openness to the outside world is growing, not out of an internal desire, but mainly owing to economic necessity. Hutterites have physically separated themselves by situating their colonies far from the civilised world. It might be expected that Hutterites will have to deal with a growing tension between their traditional religious beliefs and values in colony life and the level of modernisation in their businesses. Knowledge about the advanced technology on their large-scale farms is limited to a selected group of men, which may cause inequality and as a result conflicts in their social cohesion. Amish have less room for avoiding the civilised world and contact with the outside world is growing, particularly in areas that are characterised by the shift from agriculture to enterprises. They however seem to succeed better than Hutterites in finding a balance between their values and level of modernisation, owing to their reflective way of modernisation. This reflectiveness is positive for maintaining values, but it might also hinder developments that might add to sustainability. Amish prohibit higher education and therefore often lack knowledge about environmental issues and green technology.

Another interesting issue many communities are dealing with is the search for a proper scale that fits to their values. Amish small-scale diversified family farms and businesses are organised in such a way that children can participate and learn specific skills and responsibility. Besides, Amish wish to keep their say in their farm practices as much as possible. Large-scale farming might involve a growing dependency on distant suppliers and customers, which is the case among the Hutterites, while decreasing diversity might bring along economic risks. Hutterites live on the Great Plains where small-scale farming is more difficult to practise. Besides negative consequences for nature and the soil, the large scale of Hutterite farm businesses also offers opportunities to introduce energy saving techniques, wind turbines,

air-controlled barns, and more efficient water irrigation. This larger scale needed for new technologies, however, can also be found in other ways, like the Trappists in Echt, who investigated cooperation with two adjacent farms in a project on biomass energy.

Despite the mainstream Western belief that expansion is unavoidable for economic reasons, most small Amish farms remain economically successful owing to relatively low costs. Over the years, Amish farming appears to be dynamic and flexible, combining agriculture with small businesses or specialised agricultural products. Likewise, the Dutch Trappist monasteries found certain niches in the market by selling meat as a specific brand.⁴⁷⁶ They emphasise the intrinsic value of animals, and stress that nature should not be exploited or narrowed to just a means of production. A proper scale for sustainable farming is defined by the right balance between sufficient yields on the one hand and care for animal welfare, human dignity, and biodiversity on the other hand.

Regarding the future, monastic orders in Western society are dealing with declining numbers and a higher average age, with consequences for keeping the monasteries economically viable. Many monasteries have already been closed down. The number of visitors and people interested in Benedictine and Franciscan spirituality however is increasing. The Catholic Orders will be challenged to maintain a viable monastic life and to answer the growing need for spirituality in broader society. The Anabaptist communities on the other hand are rapidly growing. Their challenge will mainly be to integrate their religious beliefs and values with the economic and technological changes that are needed for economic viability. In particular the Amish principle of reflective modernisation is expected to be necessary in order to sustain the community in this century.

Recapitulation

Now that we have discussed the quality of life among the communities, the way quality of life is maintained and salient differences between the communities, I will recapitulate which aspects appear to be important in order to maintain sustainability and quality of life, by highlighting four issues in particular:

1. Among the communities, ideas about quality of life are rooted in a coherent religious worldview and translated into clear values and subsequent behavioural choices. When this worldview is transparent, endorsed, repeated, and celebrated on a regular basis, this will very likely encourage the maintenance of the preferred values and conduct. Coherence between religious beliefs and practical behavioural choices requires an on-going reflection on religious principles and conduct.
2. Social capital is the cement of a community. The four communities have agreed on a communal social system, including a social network, rules and mechanisms of social trust and control. A community of like-minded people, communally supported rules and sanctions, and personal commitment, all contribute considerably to maintaining specific behaviours. It is a challenge to find the right balance between the individual and the community, and between conformity and room for personal identity.
3. In order to ensure quality of life, the communities apply a reflective process of change when necessary, taking salient values as their point of departure. They practise what they believe and provide the necessary framework to maintain their quality of life. They will reject certain developments which might affect their quality of life in a negative way. Green technology and innovations might be applied more in order to lower the environmental impact of the communities, as long as it is subservient to the communal quality of life.

4. Good leadership and clear decision processes are essential in order to maintain values and preferred conduct. The more decisions are enforced on the community without sufficient consultation or communal support, the more this may undermine cohesion and cause internal conflicts. Particularly when members have to deal with the implications of a decision in daily life, good leadership and an adequate decision process strengthen the acceptance of the communal decisions.

7.3 Promising values for a low environmental impact

This section responds to the question as to which values of the studied communities lead to a lower impact on the environment and a more sustainable pattern of consumption and production. As shown in box 7.1, ecological values as such hardly play a role in the value hierarchies of the communities and are not mentioned as deliberate motivations for their behavioural choices. This might be explained by the fact that most of their values were established centuries ago, when the concept of 'sustainability' in the ecological sense was not an issue yet. Another reason might be that 'creation' is not perceived as problematic and that care for nature is already (indirectly and often unconsciously) part of their daily practice.

The communities usually base their behavioural choices on other values, like community, stability, and moderation. These values and principles are rooted deeply in their religious worldview and culture and are therefore not very likely to change. In many cases these values encourage behavioural choices with a low impact on the environment. However, because most communities have not (yet) embedded environmental care explicitly in their worldview, these inspiring values need not necessarily lead to a low impact. When for example a community chooses for the cheapest products out of thrift or moderation, they are not very likely to purchase the often more expensive organic products. Or when they wish to buy a solid piece of furniture, they might choose for tropical hardwood without a FSC-brand⁴⁷⁷, without regarding the effects on biodiversity and the indigenous people. Even when a value offers much potential for the environment, it still has to be translated, consciously or unconsciously, into choices with a low impact on the environment. Knowledge about green products and environmental principles might encourage the communities to incorporate sustainability in their behavioural choices. The monastic communities gradually seem to be including environmental care more explicitly in the interpretation and legitimation of their values.

In the discussion on sustainable behaviour, generally two approaches can be distinguished: the 'green' and the 'grey' side of sustainability. The green side is mainly concerned with issues like nature conservation and organic farming, while the grey approach focuses on technological aspects and life style issues, like the use of materials and energy saving. These different approaches can to some extent be recognised among the communities as well. Amish and Trappists mainly started as agricultural communities. Although they are not organic farmers by definition, their way of farming offers many opportunities for natural diversity. Gradually these communities are becoming more open for technological innovation, like solar energy and biomass energy. Solar energy suits well the Amish way of life, because it ensures autonomy and small scale. Green innovations would relate very well to both the Amish and the Trappist communities.

The 'grey approach' can be recognised among the Franciscan brothers and the Hutterite communities. As an itinerant and urban order the main focus of the Franciscans was social

work and mission. When at the end of the 1970s the issues of justice, peace and environmental issues started to be debated, this fitted well into their worldview. Later, a more spiritual side of nature started to be accentuated among the Franciscan brothers, although this is usually translated into life style choices, like transport and fair trade products, and less into the 'green side' of nature conservation. The Hutterites have a strong accent on life style and when it adds to their economic situation, they are very open to environmental technology, like the installation of heat pumps. This might offer chances for lowering their impact on the environment. The Catholic monasteries usually have access to modern technology, but often lack money or people to apply these innovations.

This section will describe and analyse the most promising communal values and their direct and indirect impact on the environment in a qualitative way. Because I chose a qualitative research method, quantitative data have only been used as illustration. In order to be able to draw conclusions which are well-founded and can be substantiated about the environmental impact of these communities, additional quantitative research on the environmental impact of these communities is needed. The promising values described in this section are successively community and communal life, stability, moderation, humility, rhythm of life, and reflection.

Community and communal life

It is important to distinguish community from communal life. Community is not restricted to a certain locality, but is realised by people who share common values, beliefs, ideas, or spirituality with others, while communal life is bound to a geographical place, where people share parts of their daily life, their time, and sometimes also their possessions and money. Therefore, community is usually an important aspect of communal life, but communal life is not a necessary condition for forming a community. The religious community is an important means for sharing and maintaining common values and behavioural choices. It can encourage identification and a sense of belonging, and provides for a social and religious demarcation from the surrounding world, with clear rules, norms and sanctions.

Communal life offers many opportunities for lowering the impact on the environment. In Franciscan, Benedictine, and Hutterite communities most material things are communal property. Buildings, cars, tools, and devices are shared, leading to a considerably lower need for materials and energy. The communities save energy by centralised cooking, heating and laundry. Owing to the economy of scale, communal life offers the possibility to apply more sustainable systems that are harder to realise for individual households, like the generation of green energy or water purification by a helophyte filter. Furthermore, the scale of purchasing goods makes it financially more attractive to buy organic and fair trade products. Some communities, for example, choose to buy a complete (organically raised) cow and use all parts of it, instead of buying small packages of processed meat. In most of the communities I visited, members participated in communal gardening and shared both work and yield. Communities also offer more opportunities for recycling useful goods.

Because most persons work inside their community, their need for daily transport is minimal. During the last decades, along with an increasing access to means of communication, the amount and distance of travel has gradually increased, particularly among Franciscans, but to a lesser extent among Benedictines and Hutterites as well. Amish avoid the daily use of cars by sticking to horse and buggy as their main way of transport. Taxis and public transport are used for visits further away and are usually carefully planned and tuned to fellow travellers. In general, we can conclude that the choice for communal life offers many chances

for diminishing the number of travel miles. Community life does not, however, by definition lead to a low impact on the environment. In the Hutterite colonies, for example, every unit had its own refrigerator and freezer, while the central kitchen contained a frozen food storage compartment and a cold store as well. Furthermore, the energy-use of many monasteries was quite high, owing to the choice to remain in the old and badly insulated buildings because of their rich religious history (“people have been praying here for ages”) and the lack of money for renovating the monastery into an energy efficient property.

Stability

The Benedictine vow of *stabilitas* offers an interesting basis for sustainability, for it makes people commit themselves to a certain place and community of people. Stability provides the incentive to maintain a certain place for generations to come, implying a sustainable way of dealing with materials, natural and agricultural land, and people in the community and neighbourhood. Stability does not mean invariability or the absence of change. On the contrary, stability means to live in the present and to prepare for the future. Therefore, renovating buildings or even replacing them by energy efficient ones fits the vow of stability very well. Furthermore, stability has often led to sustainable choices regarding agriculture and more recently the wish to preserve natural areas.

Present-day monastics emphasise that stability, as commitment to and rootedness in a community, might generate conditions for a more spiritual, inner stability and growth as well. In Western society, many people tend to be ‘gyrovaguan’⁴⁷⁸ by their hesitance towards commitment, whether this implies a physical commitment or a more spiritual stability. In the Benedictine view, stability encourages inner peace, rest, and religious maturity. It appears to be a basic element for finding quality of life in spiritual and relational aspects of life, rather than in excessive consumerism.

A new interpretation of the Benedictine vow of stability might help the modern ‘gyrovagues’ to settle down. Stability indicates a commitment to a community of people and a specific place, and requires perseverance, trust and fidelity. Instead of instant and immediate gratification, stability helps to focus on confidence, modesty, and care in dealing with people and materials. As the Benedictine rootedness in a particular place has led to a careful way of working the land in order to maintain fertile soil for generations of monks to come, it might encourage Western people to commit themselves to the local communities they live in, to sustain the local economy, and appreciate and preserve the local environment and surrounding nature.⁴⁷⁹ Besides physical stability, it also refers to stability of the heart. As expressed by Esther de Waal: “Stability ensures that I remain earthed, grounded, in my own deepest interior self, not beguiled by fantasy or dreams into escaping from reality.”⁴⁸⁰ Rootedness in and commitment to a community or physical place might generate conditions for human and spiritual growth, leading to inner peace and more balance in life.

Moderation in material goods

The communities emphasise that moderation affects spiritual life in a positive way. Too much materialism might harm both personal and communal life, for it is believed to distract people from what is really important in life. The Amish emphasise that where abundance and luxury might lead to detrimental *Hochmut* (pride), *Deemut* (humility) and moderation bring real enjoyment, a principle that can be found among the other communities as well. The Amish teach their children that “sharing is caring” and encourage them to enjoy the simple things of

life. Because of their simple living, plain clothes and houses, and separation from the world, Amish and Hutterites, as well as old order Mennonites, are also known as 'The Plain People'.

The way we perceive material goods will affect the way we deal with these goods. For Hutterites all goods are ultimately seen as worthless; not so much economically worthless, but without real intrinsic value. This causes a certain attitude of indifference towards material things, an attitude that can also be recognised in broader society, regarding the litter thrown away in woods and verges, and nobody feels responsible to clean it up. Or, less visible, the amounts of products, like computers, devices, or furniture, which are still usable, but are thrown away because they are no longer up to date or just have the wrong colour. Benedictines, on the contrary, emphasise that nothing is to be neglected nor wasted, and goods should be treated with care. They translate the instructions to be frugal and moderate into ethical choices on producing, buying and using things. Like Amish and Franciscans, they see themselves as stewards over what is entrusted to them.

Moderation and self-restraint obviously lead to behavioural choices with a low impact on the environment. They generally mean a choice for sober furnishing, plain clothes, sustainable buildings, low-energy and durable, high quality goods, and avoidance of luxury and abundance. The communities do not follow fashion trends and repair and reuse goods until they are worn-out. The Amish have limited their needs by what is agreed on in the *Ordnung* and accepted in the social setting. In the communally living groups almost all goods are held in common and superiors supply the needs of the individual members. An important principle is that goods are not distributed in a uniform manner, but in accordance with people's essential needs and contentment. This search for what constitutes real needs and how to develop an attitude of satisfaction is a challenge for the broader Western society and essential in order to reform consumption patterns in a more sustainable direction.

The influence of Western culture has not passed by the religious communities and their consumption is growing slightly as well. The communities experience a tension between the values of simplicity and moderation on the one hand and a gradual process of modernisation on the other hand. Whereas the increase in consumption of products, like for example disposables, leads to a growing impact on the environment, modernisation also offers opportunities for environmentally sound choices. A gradual movement towards the application of environmentally sound products and technologies, like solar energy and organic products, can be recognised in the monasteries and to a lesser extent in the Anabaptist communities as well.

The value of moderation is very important in the discussion on sustainability, for it offers an alternative vision of consumption, not based on wants but on essential needs, leading to a relatively low impact on the environment, low throughput of matter and low use of energy. The value of moderation should not only be explained as buying less, but also includes a careful use of raw materials and a search for environmentally sound alternatives for necessary needs. Such a view of moderation emphasises a choice for quality instead of quantity. Conscious limitation of needs contributes to a personally perceived, non-materialistic quality of life and, when it goes along with a better allotment of basic supplies, it may consequently contribute to quality of life worldwide.

Humility

The value of humility is interesting in relation to sustainability, for it emphasises that you, as an individual, are not the centre of the world. Humans are believed to be creatures and not the creators of the universe. Humility stimulates an awareness of one's place in the order,

whether it is the established or the natural order, and a sensitivity to other people and natural surroundings. Furthermore, humility emphasises that all life is *humus*, connected to the earth. In this way, the value of humility makes clear that humans are part of creation, and should cultivate the earth as stewards, not as owners. Abbot Klassen remarked that the value of humility functions as a necessary corrective to the arrogance and acquisitiveness that has led to an increasing alienation from and exploitation of nature. Humility involves that people accept limitations and take up responsibility for the consequences of their acts, both towards other people and the environment.

Benedictines have gradually included nature in the earlier mentioned rule to take care of the monastic goods as though they were “sacred vessels of the altar”. Nature itself is not perceived as sacred, but it should be consecrated to God and treated with care. While Franciscans emphasise respect towards nature and gratitude to the Creator, Benedictines and Trappists approach nature with an attitude of humility and responsibility, based on the idea that humans have a unique position in creation, without denying the intrinsic value of nature. Father Malachias explained: “Our way of farming reflects our aims. We monastics try to deal with the human size and with the singularity of creation, whether this is in the fields, in the barn or in the community.” Combined with the vow of stability, this has led to a sustainable way of farming and nature conservation in many monasteries.

Rhythm of life

Franciscans and Benedictines keep a strict monastic time schedule, alternating times for work, prayer, and meditation through the day. Monastics explain that this time schedule provides structure and helps them to work more thoroughly, focusing on one thing at a time. The planned interruption of work prevents them from being submersed by it. These succeeding periods of rest, prayer, and meditation function as a re-creation of body and mind, putting the daily labour into a larger perspective. Prayer in particular is experienced as an essential practice, functioning as the backbone of daily life, necessary for persevering in monastic life. Such a communal time schedule may sound strict and confining, but it is highly appreciated for providing balance and an embedded reflectivity, which might be hard for an individual to maintain. The time schedule, together with the liturgical calendar, form a framework to help the monastic grow in religious life and to consolidate quality of life. Hutterites adhere to a structure with alternating time for work, meals, and a daily church service as well.

In the communities much time is spent on daily work. Income is needed for economic viability, but labour is also appreciated for personal development and dignity. Community members aim to work hard, but in a reflective way, with attention, respect, and care towards people and materials. They all more or less endorse the idea that people with too much free time and private money will gradually tend to materialism. For Hutterites, Benedictines, and Franciscans, work is detached from private earnings. Every person works according to his or her abilities and receives according to his or her needs. Owing to the pace and kind of work, elderly and disabled people can continue to participate in and contribute to the economy in their own rhythm.⁴⁸¹ Likewise, Amish persevere in their long days of hard work because of their characteristic unhurried, tranquil pace. In contrast to the broader society, economic viability in the communities is characterised by communal responsibility and solidarity, while, in well-functioning communities, labour is focused on personal growth and development. Although all communities are characterised by hard working people, they can persevere in this way of life owing to their time schedule, pace of work and allocation of tasks.

Reflection

The communities I studied have organised themselves in such a way that reflection has become embedded in daily life. Personal reflection to keep the individual focused on what is important in life, as well as communal reflection in decision processes, are highly appreciated. Important decisions are usually made in a well considered way, in a process of reflective change, which has been discussed in section 7.2.1. Reflection is needed for putting work and possessions in the right perspective and it may help people to find quality of life in the immaterialistic.

A specific aspect that needs to be mentioned here is silence. The monasteries encourage silence in order to create an atmosphere for reflection, prayer, concentration, and personal and spiritual growth. Silence is particularly noticable in Benedictine monasteries, but also recognisable in the other communities, reducing visible and audible distractions as much as possible. Silence is rare in the broader Western society, where an overload of stimuli interferes with conditions needed for reflection. Besides silence needed for reflection, the Rule of Saint Benedict speaks about taciturnity, to make the monastic think twice about his words, to make these constructive for the wellbeing of the community. Adhering to a natural rhythm and integrating rest and reflection in labour processes will obviously prevent much stress. The appreciation of silence and rest, as well as the collectively determined balance between work and rest are essential in relation to sustainability and a deepening of reflection on the question of how to maintain quality of life.

Recapitulation

The four religious communities appear to offer promising values leading to a low impact on the environment, while contributing to the communally preferred quality of life. Low environmental impact and quality of life can go together very well: they are not antagonistic categories. The value of community may contribute to maintaining common values and behavioural choices, while communal life itself offers many opportunities for lowering the impact on the environment. The value of stability emphasises commitment to a certain place and therefore encourages a sustainable way of dealing with property. The value of moderation accentuates another way of consuming, based on essential needs. The value of humility shifts the attention from the individual to the broader community. A balanced rhythm of life may provide for embedded reflectivity and a way to persevere in a preferred way of life. Reflection itself helps one to stay focused on values and quality of life.

7.4 Discussion

7.4.1 Connecting values to Western society

Having investigated the most inspiring values of the communities, the question arises whether these values are freely available, in other words, can they be copied out of their context? For the communities their values tend to be coherent and to complement each other, all rooted in a shared worldview and making up their quality of life. For some values, such as obedience and humility, a certain encompassing worldview and community are needed to give meaning to these values and provide a context to persevere in them. These values are not freely available and a futile ‘cherry picking’ will not work. However, this does not mean that these inspiring values are meaningless for the broader society. Some will more easily fit into Western value hierarchies for they relate to values that may be hidden, but still present in society, like

moderation and solidarity. Other values, such as stability, may touch fields of tension, like finding a satisfying balance between commitment and individual freedom. This section briefly analyses in what way the promising values for sustainability and ideas about quality of life can be connected to and become meaningful for the broader Western society.

The Renaissance preluded substantial changes in Western social structures and value patterns, which were accelerated in the 20th century. Developments such as a growing individualism, materialism, and globalisation contributed in many ways to prosperity and better living conditions, but also added to environmental degradation and loss of biodiversity. In order to redefine hidden values in Western society that lead to a low impact on the environment and a more sustainable pattern of consumption and production, I studied long-existing religious communities that are rooted in Western Christian culture, and particularly the relation between behavioural choices and ideas about quality of life.

An important lesson we can learn from these communities is that they take their values seriously and practise what they believe and vice versa. In broader society, worldviews are often made up of fragmentary belief systems, with a certain discrepancy between beliefs and practical choices. Together with the process of secularisation, fragmentation has developed rapidly since the mid-20th century. Among the communities, the ones that adhere to a coherent worldview and strive for a translation of their beliefs into daily practices and important developments seem to be better able to realise and maintain their quality of life. In contrast to instant gratification, they focus on persevering in their preferred way of life, and accept the consequences of their convictions. This asks for reflection on how to realise and maintain quality of life and a translation into daily practice.

For all groups the religious community is vital for maintaining their preferred values and conduct. However, commitment to such a communal context contrasts strongly with the individualistic way of life that is characteristic of Western society. In general, people are hesitant to give up their personal freedom and autonomy or bind themselves to long-term commitments in whatever form. The communities however emphasise that subordinating personal desires to the communal welfare is necessary and may bring much satisfaction. Stability and commitment may help people to focus not on short term gratification, but on quality of life for the broader community and long term effects on the environment. A well-functioning social context and good leadership are important for providing boundary conditions for sustaining values and enabling and preserving preferred behavioural choices. This is a challenge for our present day society, where social capital and clear social contexts are subject to inflation and erosion and may need to be redefined.

The communities offer a social structure for alternating work with periods of reflection. In broader Western society, many people experience an increasing pressure of explicit or implicit expectations in work and social relations and the work-life balance has become a pressing issue. Stress is a major contemporary social disease. Although Western society may be characterised by a strong work ethic, the need for a better balance between work and time for recreation and reflection is growing. An example is the movement of Downshifters, consisting of people who decide to diminish the priority of money and material things in life in order to gain more free time and a slower pace of life.⁴⁸² Important reasons for downshifting are the wish for more time, less stress, and more balance in life and a more meaningful life (Schor, 1998, 117). In a world that is getting richer, for many people being or staying happy has much more become an issue of choices regarding spending time than of spending money.

The value of moderation clashes strongly with the still growing level of consumption in

the Western world. Moderation will only be promoted in society when it gets connected to quality. Moderation diminishes a concentration on personal material desires and offers an alternative vision on consumption, not based on endless wants but on basic needs. We must learn again to distinguish basic needs from unnecessary wants and to choose quality in consumption patterns instead of an endless quantity of stuff. Consumption choices that are no longer mainly driven by immediate gratification, cheap bargains, or short term fashion rules, but deal with quality in the long term, will have a positive effect on the environment in the long term. A community of like-minded people can help to embed and maintain these values and consequent behaviour choices.

The way these values are dealt with in the communities differs somewhat and developments have been influenced by broader society as well. Because the communities are rooted in Western Christian thinking, they might be able to inspire Western society with values that are hidden in our culture and encourage the choice for quality of life with a lower impact on the environment.

7.4.2 Reflection on the theoretical framework

This study emphasises the role of worldviews, values, and quality of life in the discussion on how to realise a lower impact on the environment and sustainable ways of production and consumption. A focus on quality of life is important in addition to other roads towards sustainability, such as technological advances, economic reforms or policy system changes. These roads are complementary to one another and can reinforce each other to gain sustainability. This is necessary, because despite technological advances, the absolute level of consumption of energy and materials continues to grow, as the MEA concludes.⁴⁸³ The impact of values and quality of life, as well as the role of communities, are often underexposed in the discussion, and with this study I want to highlight these important and basic aspects of sustainability issues as part of the broader discussion.

Few studies have been published on the relationship between values, worldviews and sustainability, especially in relation to communities. The Dutch Sustainability Outlook (MNP, 2005)⁴⁸⁴, as described in chapter 2, studied the relation between worldviews and sustainability, building on the four scenario model of the IPCC. The MNP worldviews are composed of ideas of quality of life and normative views on development, forming four worldviews. The Outlook makes clear that often people do not act in conformity with their ideas about quality of life in the long term. While a substantial percentage of people work in an environment that is driven by the worldview that focuses on globalisation and efficiency, the MNP found that only 6% of the Dutch population prefers a society moving in the direction of progressive globalisation and individualisation. The majority however states a preference for more solidarity and regional coherence (MNP, 2005, 5-6). The MNP emphasises the importance of unravelling values and worldviews, in order to study ideas about quality of life in the long term and how they relate to behaviour choices.

In this study, the processes of weighing values and choices between conflicting values are studied, in order to determine better the relation between values and behavioural choices. The approach of value hierarchies stresses the idea that people adhere to a number of values which are valued differently. The top values in the hierarchies show which values ultimately outweigh others and make up the quality of life, both personally and communally. Some values might not be visibly translated into behavioural choices, but are still present and valued. This is interesting in the discussion on sustainability when this concerns values that might

lead to behavioural choices with a low impact on the environment. When such values are part of a person's value-hierarchy, even when they have a low position on the hierarchy, this might offer opportunities to connect to these values in order to encourage sustainable behavioural choices.

Furthermore, this study underscores the fact that in the discussion on sustainable behavioural choices not only typical 'green' issues should be concerned, but all behavioural choices that cohere with production, consumption and energy use. 'Environmental behaviour' in itself does not exist, because practically all human behaviour has an impact on the environment, whether it is a positive or negative impact, whether the impact is direct or indirect. This study on communities makes clear also that behaviour that is not explicitly guided by environmental motivations can lead to a low impact on the environment. Furthermore, it is important to avoid general conclusions on 'environmental behaviour' and to distinguish specific behavioural choices in clusters, such as nutrition or energy use. One can, for example, choose solar energy, but have a high environmental impact owing to the consumption of large amounts of meat. Therefore, studies on environmental behaviour can better focus on choices and the underlying motivation behind these behaviour choices within specific clusters, for they may accentuate different values that all belong to a person's value hierarchy.

The meso-level of communities appeared to be a very interesting field for studying the relation between religious worldviews, values and behaviour. The fact that these communities are quite exclusive, with clear rules and norms, made it easier to distinguish what belongs to their culture and identity and what does not, as well as which behavioural choices are desirable and which are a compromise between communal values and, for example, state rules. Further research might focus on studying the role of worldviews, values and behaviour choices in other kinds of communities. Can differences be found between religious and non-religious communities regarding sustaining values and behaviour choices? How much commitment and 'social control' is needed to encourage sustainable behaviour? Another question is how the theoretical model works outside the context of communities. Can people sustain their worldview and quality of life, and translate it into certain behaviour, without the context of a community? What will be the role of new kinds of communities, like virtual contexts, in the search for sustainability?

A question that remains is whether and to what extent religion can be regarded as a determining factor of behavioural choices with a relatively low impact on the environment. The communities show that their religion helps them to sustain behavioural choices: it gives meaning to daily life and puts it into a broader perspective, it adds to a social context and community, and it contributes to their quality of life, particularly in a spiritual sense. As discussed above, many behavioural choices with a low impact on the environment are motivated by values rooted in their religious worldview, although most communities themselves do not relate these values to environmental care. These behavioural choices are thus not based on environmental reasons and could develop in a direction with a higher impact on the environment. Now that sustainability is more and more becoming a general issue in the broader society, this might bring the issue forward inside the communities as well. It would be interesting to study communities with another or a non-religious worldview, in order to compare their behavioural choices and motivations with the religious communities, and analyse the influence of religious and non-religious worldviews on sustainable behaviour choices.

7.5 Sustainability and quality of life in Western society

The aim of this study, as laid down in the first chapter of this dissertation, is to investigate possible ways of realising a high quality of life combined with a sustainable way of living. An important conclusion is that the four religious communities not only adhere to communally accepted values and ideas about quality of life, but, even more important, they make clear choices in accordance with these values and organise their economy and social community life in such a way that they contribute to this quality of life. Inevitably, these communities are confronted with clashing values, owing to changes in the surrounding society or changes within the community. Instead of taking halfway measures, attempting to meet all desires, these communities make well-considered choices and accept the consequences of their value hierarchy. By making choices and limiting or even excluding other options and possibilities, they are able to attain a profound quality of life that, even if unintentionally, goes along with a positive effect on the environment. In this concluding section, I will highlight three principles we can learn from these communities, in order to enhance sustainability in Western society.

Focus on moderation and quality

In broader Western society, we undeniably need more reflection on values that constitute our quality of life and to make choices in accordance with these values. As argued in chapter 1, additional income and goods usually do not lead to a long-term increase of happiness (Gardner, 2006; Inglehart, 2004; Boersema, 2004). Even more, the four research groups point out that an excess of money and possessions can hinder people from attaining quality of life. The four communities are convinced that they deepen their quality of life and spirituality by limiting their needs to the essential. This is probably true for our Western society as well.⁴⁸⁵ Besides, overconsumption leads to a high impact on the environment as well. An underlying question for reaching a more sustainable consumption pattern is therefore: what do we basically need? Taking into account that many poor in this world need to consume more just to be able to meet basic needs and to overcome poverty, Western countries must focus on quality instead of quantity, to be able to maintain a worldwide quality of life.⁴⁸⁶

What is necessary in order to achieve a more sustainable consumption pattern with a lower impact on the environment, is self-limitation in order to satisfy our essential needs, appreciation of what we have, and handling material goods with respect and care. We need a profound alteration of our consumption pattern towards a less materialistic and more sustainable lifestyle. As this study shows, inspiring examples of values that emphasise quality in life with less matter can be found in Western history and may still fit into modern Western value patterns. In order to encourage sustainability, these values need to be strengthened and prioritised in value hierarchies, and translated into behavioural choices. Less consumption does not mean less satisfaction or less well-being, on the contrary. Voluntary moderation and quality of life go together quite well as the four communities show.

An interesting question is whether churches and Christian communities can play a role in redefining such values and ideas about quality of life and in translating it into actual behaviour. Over the last decades, churches in general have not been leading in the environmental debate. For many Christian communities it will be a challenge as well to dig into their ideas about quality of life, to set priorities, and to translate their salient values to behaviour with a low impact on the environment. Nevertheless, churches do have a basic structure and a rich history to connect with, like an organised community, a tradition of reflection on values

and beliefs, and substantial social capital. Recently, new movements are rising, such as New Monasticism⁴⁸⁷, whose members rediscover old Christian sources, live in communities that fit into the modern world, and are characterised by a clear translation of their convictions and beliefs into practices of justice and environmental care. Another interesting and inspiring example is the movement of Eco-Congregations, an ecumenical environmental project for churches in several countries, which helps those churches considering environmental issues in the context of their Christian life while encouraging positive action.⁴⁸⁸ Community is an important element of these movements, in maintaining their beliefs and bringing them into practice together. This brings us to the second principle.

Community building

As we have seen among the communities, their social context appears to be important for keeping alive their values and maintaining desired behaviour. A second principle for Western society to encourage sustainability is therefore community building, to offer a context and a network for communal reflection and to create opportunities for environmentally sound practices. Communal reflection is important in order to consider values, and to face the effects of behaviour choices on the environment and accept the consequences. Environmental problems are often experienced as a social dilemma, whereby individual choices are perceived as meaningless, as long as others continue their wasteful and polluting behaviour. In the Netherlands, 70% of the population experiences sustainability as a social dilemma (MNP, 2005). Typically, environmental problems are long term problems, affecting the world community, and solutions will inevitably clash with individual concerns and interests. To solve this environmental social dilemma, community in whatever form is necessary, in order to recognise the problem, to generate solutions, to agree on collective actions, to support and encourage community members, and to uphold these actions.

Although communal life is quite rare in our individualistic Western society and ordinary forms of community life are gradually disappearing, new forms of community find their way. These communities are no longer determined by given circumstances, like the village one lives in, or the family one belongs to, but are freely chosen by the participants themselves. Besides real life meetings, virtual communities are becoming increasingly important for stimulating reflection, forming people's identity, sharpening their opinions, as well as encouraging certain behavioural choices. An interesting example is the Northumbria community, which consists of a number of people who live in the community in the UK, as well as an online community in which people participate in a virtual way. The Christian community combines contemplative prayer with "a faith that is active and contagious, lived out in the ordinariness of everyday life."⁴⁸⁹ The community practises a Daily Office that, as the community emphasises, constitutes the essential rhythm of life around which other activities can take their proper place. Any member of the Northumbria Network can follow the daily prayers on the Internet. Such networked communities may provide for a growing need for organising reflection, which is hard to maintain as an individual.

Community building is also needed to create opportunities for environmentally sound practices. Nutrition may be a good starting point, because food traditionally brings people together. Involvement of consumers with their nutrition and the producers of their food may encourage the appreciation of products and establish sustainable agriculture. A very practical example of how that can be realised, is Community Supported Agriculture (CSA)⁴⁹⁰, in which a community of (often organic) growers and consumers provide mutual support and share the

risks and benefits of food production. Typically, the consumers commit themselves to cover the anticipated costs of the operation and in return they receive farm products throughout the growing season. Furthermore, consumers can cooperate in the farm work, offering an opportunity to participate in the production of food. It is a farming system in which farmers can gain some financial security and consumers become co-responsible for the sustainability of their food supply.⁴⁹¹

Another field in which community building may add considerably to a lower environmental impact, is the domain of living. Some newly built areas are set up as complete 'green districts', consisting of sustainably built houses, supplied with locally generated energy, helophyte filters to purify waste water, and communal gardens.⁴⁹² Likewise, an increase in local cooperatives for wind energy, for example, can be observed, in which persons communally own a wind turbine. High tech and community building are innovatively combined. To encourage such practical forms of sustainability, the role of governments and real estate developers is essential, for they can facilitate conditions in which such environmentally sound practices can be realised. A challenge will be to find out what kind of communal living fits in with the individualistic Western society. We have to find new social arrangements in which community orientations and individualistic preoccupations both flourish. An important factor is a shared vision on sustainability, which is translated into policy and practice. That brings us to the last principle, the reflective side in processes of intentional change.

Reflective change

To realise sustainability, long term values should be made explicit and policies need to connect to ideas about quality of life. This is underscored by Giddens, who emphasises the role of values in formulating goals for decision-making, from international politics down to a very personal level (Beck, Giddens and Lash, 1994). As long as progress is defined as economic growth, short term economic profits will overrule long term ecological sustainability, social justice and well-being. The present complex environmental problems require well-considered choices, for policies and practices can involve significant and sometimes even irreversible consequences for nature and people worldwide. We need to approach the question of progress with a new set of priorities, which will tend to reduce stresses on people, communities and the environment, and achieve a deeper sense of life satisfaction (Gardner, 2006).

The principle of reflective change refers to a form of development that contributes to quality of life in the long term. Therefore we need to reflect on salient values and seriously consider whether a certain development or new technology and its expected consequences contribute to these values and quality of life. Even when new technologies are developed with the aim of solving particular ecological problems, reflectiveness remains essential in order to consider the long-term effects on the environment, economy, and the social community, and to prevent irreversible negative consequences in any of these areas. The use of biomass for energy, for example, has generated an interesting ethical discussion, because sources like corn and rapeseed need much arable land that could also be used for food. Values need to be carefully weighed. This is a core element of reflectiveness.

Reflectiveness may be evident, it is not obvious however. Even the present financial crisis did not generate a society-wide fundamental reflection on the aims and structure of our economic system. Our 24/7-economy leaves little space for reflection and therefore processes of reflection on what constitutes quality of life, both communally and personally, need to be consciously organised. In our 'fast' high performance society, a revaluation of 'slow' is needed,

in order to put our economy in the right perspective, to take time for a serious weighing of values, and to opt for quality of life in the long term. The Amish communities can teach us how to apply a reflective process of change, taking salient values as the point of departure and providing the necessary framework to maintain their quality of life.

This study started with the assumption that, to realise sustainability, it must be rooted in a worldview and correspond with values and ideas about quality of life that lead to behaviour with a lower impact on the environment. Research among the four religious communities has brought to light values that might still connect to ideas about quality of life rooted in broader Western society and may stimulate a reflective change towards a sustainable development with a lower impact on the environment. I will recapitulate this study with three plain lessons we can derive from the religious communities. The first is to consume less and choose for quality instead of quantity. Moderation and reduction of consumption both affect the carrying capacity of the earth and spiritual well-being of humans in a positive way. The second is to establish communities that help us to stay focused on quality of life and sustainability and offer the structure which makes it possible to persevere in sustainable behavioural choices. The third is to take time for reflection on values and quality of life and translate it into actual conduct. The promising values as found in the Western religious past offer inspiring steps for a sustainable future.

Samenvatting in het Nederlands

Duurzaamheid en kwaliteit van leven. Een studie naar de religieuze levensbeschouwing, waarden en milieudruk van Amish, Hutterieten, Franciscaanse en Benedictijnse gemeenschappen.

Westerse consumptie- en productiepatronen, die inmiddels ook overgenomen worden in opkomende economieën in niet-westerse landen, brengen een hoge milieudruk met zich mee. Dat het nodig is om deze patronen te verduurzamen is evident. Een belangrijke vraag, die ook ten grondslag ligt aan dit onderzoek, is hoe deze patronen blijvend kunnen veranderen in een duurzame richting. De hypothese in dit onderzoek is dat om duurzaamheid te realiseren, dit moet aansluiten bij ideeën over kwaliteit van leven. Het doel van deze studie is het vinden van manieren waarbij een duurzame manier van leven samengaat met het realiseren van een gewenste kwaliteit van leven.

Deze studie richt zich op waarden die zijn geworteld in het christelijk denken. Hoofdstuk 1 geeft een beknopte analyse van studies naar de relatie tussen westerse christelijke wereldbeelden en het milieu vanuit een theologisch, historisch en sociaalwetenschappelijk perspectief. Het befaamde artikel van Lynn White jr. (1967) over de historische wortels van de 'ecologische crisis' speelde een katalyserende rol in het debat over deze thema's. De historicus White legt een directe relatie tussen het Westerse geloof in vooruitgang en de christelijke visie op mens, natuur en ontwikkeling. Hij benoemt een aantal uitgangspunten in de christelijke theologie die volgens hem een vrijbrief vormden voor uitputting van de natuur met als uiteindelijk resultaat de milieucrisis zoals die in de jaren '60 al zichtbaar werd.

In hoofdstuk 1 concludeer ik dat het christelijke denken de houding tegenover natuur heeft beïnvloed, maar niet op een eenduidige manier. De Bijbelse leer is zowel gebruikt als een motivatie om wilde natuur te onderwerpen, als om de natuur te beschermen. Daarnaast kan worden geconcludeerd dat naast het Christelijk denken, ook het Griekse denken het westerse wereldbeeld heeft gevormd. De relatie tussen de christelijke denken en de ecologische crisis is aanwezig, maar indirect, als onderdeel van een breder wereldbeeld. White benadrukt dat milieuproblemen uiteindelijk niet opgelost zullen worden door het toepassen van meer wetenschap en technologie en ik onderschrijf zijn conclusie dat religie en waarden een essentiële rol moeten spelen in het vinden van een oplossing voor de 'ecologische crisis'.

De zogenaamde 'White-discussie' heeft geleid tot een groot aantal empirische studies over de relatie tussen 'joods-christelijk' denken en milieu-gerelateerd gedrag. Deze studies concluderen dat een directe causale relatie tussen religie, gemeten door de som van individuele scores op items zoals denominatie, kerkbezoek, en opvattingen over Bijbelteksten aan de ene kant, en persoonlijke gedragskeuzes aan de andere kant niet gevonden kan worden. Mijn suggestie in dit onderzoek is dat gedrag gerelateerd is aan een meer omvattend (religieus) wereldbeeld. Daarbij is het belangrijk om niet zozeer conclusies te trekken over

‘milieugedrag’ in het algemeen, maar het onderzoek te richten op clusters van gedragskeuzes, zoals voeding of vervoer, om meer specifiek te kunnen zijn over een relatie tussen religie, waarden en gedrag. Bij het maken van gedragskeuzes is er vaak sprake van een afweging van waarden, waarbij het interessant is te kijken op grond van welke waarden mensen hun keuzes maken en vasthouden.

De discussie over de relatie tussen religie, waarden en milieu-gerelateerd gedrag richt zich vaak op het macroniveau of het microniveau. Een perspectief dat lijkt te ontbreken in deze discussie is het mesoniveau van (religieuze) gemeenschappen met gedeelde waarden en ideeën over kwaliteit van leven. In gemeenschappen kunnen religie, waarden en gedrag worden onderzocht binnen hun maatschappelijke context. Het zogenaamde ‘sociale kapitaal’ speelt een belangrijke rol bij de inbedding van religieuze ideeën en waarden. Gedragskeuzes binnen een gemeenschap zijn vaak gebaseerd op algemene regels, afspraken of traditie en worden onderhouden door mechanismen als sociale controle. Om die reden heb ik ervoor gekozen de relatie tussen religieuze wereldbeelden, duurzaamheid en kwaliteit van het leven te onderzoeken in coherente, religieuze gemeenschappen.

Cruciale aspecten in dit onderzoek zijn de invloed van levensbeschouwing op en de rol van waarden in zowel de interpretatie van kwaliteit van het leven als praktische gedragskeuzes. Deze zijn bestudeerd in de sociale context en culturele omgeving van gemeenschappen, waarbij het onderzoek zich specifiek richtte op de manier waarop deze gemeenschappen omgaan met gemeenschappelijk waarden en gedragskeuzes. De belangrijkste onderzoeksvragen zijn: (1) Welke waarden, die geworteld zijn in een gedeeld religieuze wereldbeeld, leiden tot een relatief lage impact op het milieu en een duurzamer patroon van productie en consumptie? (2) Hoe zijn gedragskeuzes met een relatief lage milieudruk gehandhaafd op de lange termijn?

Theorie en methodiek

Voor dit onderzoek zijn vier gemeenschappen onderzocht, namelijk Amish, Hutterieten, de Franciscaanse Orde en Benedictijnse Orde, inclusief Trappisten. Deze gemeenschappen worden gekenmerkt door een specifiek en coherent wereldbeeld en zijn historisch geworteld in de westerse religieuze cultuur. Ze trachten duidelijke keuzes te maken in overeenstemming met hun waarden en proberen hun economie en sociale leven zodanig te organiseren dat deze bijdragen aan hun gewenste kwaliteit van leven. In veel gevallen, maar niet altijd, leidt hun manier van leven tot een relatieve lage milieudruk, hoewel dat in de meeste gevallen niet gebaseerd is op specifieke milieuwaarden. De gemeenschappen hebben eveneens te maken met botsende waarden, als gevolg van veranderingen in de hen omringende samenleving of veranderingen binnen de gemeenschap. Interessant is hoe zij omgaan met deze botsende waarden. De gemeenschappen maken veelal weloverwogen keuzes en aanvaarden de consequenties van hun waardenhiërarchie, om hun kwaliteit van leven zoveel mogelijk te kunnen waarborgen.

Hoofdstuk 2 definieert de centrale begrippen en licht de gebruikte methodologie in deze studie toe. Ik gebruik het concept wereldbeeld voor een perspectief op de betekenis van het leven, de werkelijkheid, en ervaringen, culminerend in een complex van waarden, antwoorden op existentiële vragen en ideeën over gewenst gedrag. Religie wordt gedefinieerd als een set van overtuigingen, gevoelens en rituele handelingen die de relatie tussen mensen en het goddelijke of God definiëren. Waarden zijn doelstellingen die dienen als leidende principes in het leven van mensen. Ze laten zowel een voorkeur zien voor wat wordt gewenst als wat wenselijk is. Ik definieer kwaliteit van leven als de mate waarin mensen hun ideeën en overtuigingen

over een goed leven kunnen realiseren. Om het religieuze wereldbeeld, de geloofsbeleving, ideeën over kwaliteit van leven en de afweging van waarden te onderzoeken, heb ik gebruik gemaakt van participerende observatie, interviews en literatuurstudie.

Om de milieudruk van de gemeenschappen te duiden, heb ik specifieke indicatoren onderzocht, op het gebied van energiegebruik, vervoer, voeding en landgebruik. Kwantitatieve gegevens zijn voornamelijk gebruikt om aan te geven in hoeverre de levensstijl van deze gemeenschappen gekarakteriseerd kan worden als duurzaam. Daarnaast heb ik gebruik gemaakt van de IPAT-formule ($I = P \times A \times T$), waarbij de milieu-impact (I) wordt gezien als vermenigvuldiging van de bevolkingsgrootte (Population), het totaal aan producten en diensten verbruikt per persoon of het niveau van de welvaart (Affluence), en de totale impact per product of dienst (Technology). Omdat dit onderzoek een kwalitatief karakter heeft en veel kwantitatieve gegevens in de gemeenschappen niet in de juiste vorm beschikbaar waren, is het IPAT-model vooral gebruikt om tendensen van de milieudruk binnen de onderzoeksgroepen te beschrijven.

De dan volgende hoofdstukken beschrijven en analyseren elk een specifieke onderzoeksgroep: hoofdstuk 3 gaat over Amish, hoofdstuk 4 over Hutterieten, hoofdstuk 5 over de Franse Franse orde en hoofdstuk 6 over de Benedictijnse orde.

Amish

De doopsgezinde Amish, die leven in de Verenigde Staten en Canada, worden gekenmerkt door een hechte, gelovige gemeenschap, kleinschaligheid, afzondering van de hen omringende wereld, een sterke traditie, uniformiteit, eenvoudige kleding en huizen, een rustig tempo, eenvoud en bescheidenheid. In veel opzichten hebben hun waarden geleid tot gedragskeuzes met een lage milieudruk, zoals het gebruik van paard en wagen (aangevuld met een beperkt gebruik van taxi's en openbaar vervoer), een inventief gebruik van energie en een laag verbruik van fossiele brandstoffen. Amish volgen geen modetrends en kiezen solide en duurzame consumptiegoederen, die worden gerepareerd en hergebruikt tot ze zijn versleten. De behoefte aan materiële goederen om persoonlijke verlangens te bevredigen is over het algemeen klein, omdat hun identiteit veelal niet is gebouwd op bezittingen, maar is geworteld in de gemeenschap, hun geloof en de ongeschreven regels (de *Ordnung*). Amish hebben niet in alles een lage milieudruk, waarbij hun grote gezinnen en het gebruik van bestrijdingsmiddelen in de landbouw het meest opvallend zijn.

Om hun waarden en identiteit zoveel mogelijk te kunnen behouden, passen Amish een reflectieve vorm van omgang met veranderingen en innovaties toe. De gemeenschap confronteert innovaties en hun effecten met hun waarden, op grond waarvan deze worden geaccepteerd, afgewezen, of aangepast tot een aanvaardbaar compromis. De leden beslissen gezamenlijk over economische en technologische veranderingen, al wordt veelal de mening van de leiders gevolgd. De Amish manier van omgaan met technologie en moderniteit is verfijnd, waarbij innovaties worden toegestaan zolang ze bijdragen aan hun religieuze en sociaal-culturele waarden en sociale cohesie. De gemeenschap, de *Ordnung* en de patriarchale-democratische besluitvormingsprocessen bieden kaders die helpen om deze waarden en sociale structuur te handhaven.

Amish hebben een religieuze, sociaal-culturele en traditionele motivatie voor hun eenvoudige levensstijl en economische keuzes. Deze keuzes zijn geworteld in een gemeenschappelijk gedragen levensbeschouwing en waardensysteem en zullen naar verwachting niet snel veranderen, ook nu steeds meer Amish in andere sectoren werkzaam zijn dan de landbouw.

Zolang de Amish vasthouden aan de waarden van gemeenschap, bescheidenheid en eenvoud, zal naar verwachting de milieu-impact relatief laag blijven. Ze kunnen, in sommige opzichten, worden gezien als modern in hun vermogen om ontwikkelingen en technologieën die hun kwaliteit van hun leven negatief beïnvloeden, af te wijzen of aan te passen.

Hutterites

De Hutterites zijn doopsgezinden die leven in zogenaamde 'kolonies' in Canada en de Verenigde Staten. Belangrijke waarden zijn de overgave van het individu tot gemeenschappelijk leven, gedeeld bezit, orde, discipline, gehoorzaamheid en matigheid. Deze waarden worden gezien als Bijbels gefundeerde, religieuze voorschriften. De focus op de gemeenschap (de lokale kolonie), het principe van gedeeld bezit en de waarde van matiging vormen de belangrijkste basis voor gedragskeuzes die leiden tot duurzaamheid. De gemeenschappelijke manier van leven zorgt voor een groot sociaal kapitaal, veiligheid en structuur. Individuele Hutterites hebben weinig geld te besteden. De gemeenschap voorziet in de basisvoorzieningen en alle leden ontvangen wat zij in materiële zin nodig hebben. Spirituele rijkdom wordt hoger gewaardeerd dan materiële rijkdom. Echter, een toenemend verschil tussen persoonlijke sobere consumptie en collectieve rijkdom leidt in sommige kolonies tot spanning.

De Hutterites worden gekenmerkt door een dualistisch wereldbeeld, waarin het spirituele en materiële sterk gescheiden zijn. Het gemeenschappelijke leven valt onder het spirituele, het eeuwige, en de economische kant van de gemeenschap valt onder het materiële, en dus tijdelijke. Het economische bedrijf heeft als belangrijkste doel winst maken om de gemeenschap te kunnen onderhouden. Dagelijks komt de gemeenschap bijeen voor een gezamenlijke viering, waarbij eeuwenoude Bijbelse verhandelingen van Hutterite voorgangers centraal staan. Doordat het gemeenschappelijke leven zeer traditioneel en weinig veranderlijk is, terwijl het economische leven gekenmerkt wordt door schaalvergroting en zeer moderne technologie, ontstaan steeds meer spanningsvelden tussen beide werelden. De ideeënwereld van de vroegere Hutterieten, die sterk wordt vastgehouden, sluit steeds minder aan bij vraagstukken waar de huidige Hutterieten mee worden geconfronteerd.

Het dagelijkse leven in het huishoudelijke domein wordt gekenmerkt door een relatief laag gebruik van energie en materialen per persoon als gevolg van hun keuze voor gemeenschappelijk leven en een sobere levensstijl. De economie draait voornamelijk op grootschalige intensieve agrarische bedrijven. Duurzame keuzes worden doorgaans alleen gemaakt om financiële redenen (energiebesparing), vanuit praktische overwegingen (braakliggende hoeken van het terrein als gevolg van irrigatie-cirkels), of de wens om onafhankelijk te zijn van de buitenwereld (windenergie en zonne-energie). Door de schaal van de gemeenschap wordt het rendabel om energie-efficiënte technologie toe te passen.

Hoewel sommige Hutterite kolonies op dit moment milieuvriendelijke keuzes maken, zijn deze keuzes ook kwetsbaar, omdat ze niet diep verankerd zijn in Hutterite waarden en hun religieuze wereldbeeld. De waarden van gematigd leven, gedeeld bezit en de gemeenschappelijke levensstijl bieden een veelbelovende basis voor keuzes die zowel goed zijn voor de economie en het milieu. Wanneer de Hutterites deze vertaling van hun religieuze wereldbeeld naar hun dagelijkse praktijk maken, vinden duurzame gedragskeuzes naar verwachting een vruchtbare bodem.

Franciscaanse orde

In de Franciscaanse traditie spelen het leven en de persoon van Franciscus een belangrijke

rol. Franciscus benadrukte dat rijkdom en kwaliteit van leven voornamelijk te vinden zijn in de geestelijke en niet-materialistische aspecten van het leven: een leven dicht bij Christus en beperking van bezit. Deze ideeën over armoede en gematigdheid, gebaseerd op een diepgevoortelde dankbaarheid aan God, hebben velen geïnspireerd. Dit heeft geleid tot de stichting van de orde van de Minderbroeders, de orde van de Clarissen en de lekenorde. Belangrijke waarden die gedeeld worden en die ook aanknopingspunten bieden voor duurzaamheid zijn de keuze voor armoede, die leidt tot matiging, en dankbaarheid. Alle dingen worden beschouwd als gaven van God: het leven zelf, de leden in de gemeenschap, voedsel en onderdak, en zelfs de armen die kloppen op de deur. Waarden die hier nauw mee samenhangen zijn nederigheid, tevredenheid en respect.

Hoewel deze orde vanouds gericht is geweest op missie en zorg voor de armen, zien we sinds de jaren 1970 een groeiende aandacht voor ideeën over respect voor dieren en de natuur. Deze ideeën zijn relatief nieuw en nog niet diep geworteld in de van oudsher op de stad georiënteerde Franciscaner orde. De Clarissen daarentegen waren gebonden aan hun kloosters en hebben altijd landbouw beoefend in hun kloosters. Vanuit de houding van dankbaarheid en respect zijn de Nederlandse zusters dertig jaar geleden overgeschakeld naar biologische tuinbouw. In dit hoofdstuk wordt geconcludeerd dat wat betreft de omgang met natuur niet zozeer ideeën over gelijkheid van mens en natuur, maar waarden van dankbaarheid, nederigheid en respect, die diep geworteld zijn in de franciscaanse traditie, de meest voor de hand liggende motivaties zijn voor zorgvuldige omgang met de natuur.

De belangrijkste Franciscaanse bijdrage aan de discussie over duurzaamheid is te vinden in hun ideeën over armoede en eenvoud, omdat er een hoge correlatie is tussen het Westerse consumptiepatroon en de milieu-impact. Een vereenvoudiging en vermindering van behoeften zal uiteindelijk leiden tot een lagere druk op het milieu. Hoewel armoede zoals gepraktiseerd door Franciscus niet realistisch is, kan het wel inspireren tot matiging en een zorgvuldiger en verstandiger gebruik van zowel materiële dingen als de natuur. Daarbij helpen een ondersteunende gemeenschap en de afwisseling van werk en bezinning om deze keuzes vol te houden.

Benedictijnse orde

De Benedictijnen hebben een belangrijke rol gespeeld in de cultivering en ontwikkeling van het middeleeuwse Europa en hebben hier ook de eerste kloosterordes gesticht. Ze beoefenden natuurkunde, wiskunde en geneeskunde, ontwikkelden architectuur en produceerden onschatbare manuscripten en kunst. Na meer dan vijftien eeuwen leven nu zo'n 25.000 Benedictijnen en Benedictinessen over de hele wereld. De Trappisten, in de 17^e eeuw ontstaan na een vernieuwingsbeweging binnen de orde, praktiseren landbouw als belangrijke bron van inkomsten en zijn daarom als specifieke groep binnen de Benedictijnse orde meegenomen in dit onderzoek.

Binnen de Benedictijnse orde speelt de Regel van Sint Benedictus een belangrijke rol. Deze regel richt zich op een monastieke, gemeenschappelijke manier van leven, gericht op een stabiele en respectvolle omgang met tijd, plaatsen, mensen en materiële goederen. Naast de vele religieuze instructies, geeft het een visie op werk en een dagelijks schema met afwisselende tijden voor werk, gebed en bezinning. De meest relevante elementen in de zoektocht naar duurzaamheid en keuzes met een lage milieudruk zijn de gelofte van stabiliteit, de visie op eigendom en gematigdheid, de waarde van nederigheid en de rol van tijd.

De gelofte van stabiliteit impliceert een commitment aan een bepaalde plaats, wat leidt tot zorg voor de gebouwen en landerijen in het nu en de wens tot behoud ervan voor de komende

generaties monniken. Negatieve consequenties van activiteiten kunnen niet zomaar worden afgeschoven naar de toekomst. Vertaald naar de bredere samenleving, kan de waarde van stabiliteit stimuleren om verantwoordelijkheid te nemen voor de milieu-impact van onze consumptie- en productiepatronen, in plaats van problemen af te wentelen op de natuur, andere mensen, of de toekomst. De gelofte van stabiliteit stimuleert de Trappisten in dit onderzoek tot duurzame vormen van landbouw en natuurbeheer. De kleinschalige, gemengde bedrijven bieden ook veel mogelijkheden voor individuele monniken om persoonlijk en geestelijk te groeien.

Verder benadrukken Benedictijnen matiging in materiële zin en bezinning op essentiële behoeften. Materiële goederen dienen te worden behandeld met dankbaarheid en verantwoordelijkheid. Benedictijns leven draait om het vinden van de juiste balans tussen werk en reflectie, tussen individualiteit en gemeenschap, en tussen het spirituele en materiële. Het Benedictijnse wereldbeeld en de dagelijkse structuur bieden een kader dat niet alleen werkbaar is voor kloosterlingen, maar ook behulpzaam kan zijn aan de bredere samenleving, om gefocust te blijven op de kwaliteit van leven en duurzaamheid.

Waarden en milieu-impact

Hoofdstuk 7 reflecteert op de voorgaande hoofdstukken en concludeert welke waarden van de bestudeerde gemeenschappen leiden tot een lagere impact op het milieu en duurzamer vormen van productie en consumptie. Ecologische waarden als zodanig spelen nauwelijks een rol in de waarde-hiërarchieën van de gemeenschappen en worden zelden genoemd als belangrijkste motivatie voor hun keuzegedrag. Dit kan worden verklaard door het feit dat de meeste van hun waarden eeuwen geleden werden vastgesteld, toen het begrip 'duurzaamheid' in de ecologische zin nog geen issue was. Een andere reden zou kunnen dat de 'schepping' niet als problematisch wordt ervaren en dat de zorg voor natuur en milieu al (indirect en vaak onbewust) deel is van hun dagelijkse praktijk.

De gemeenschappen baseren hun keuzegedrag meestal op andere waarden, zoals gemeenschap, stabiliteit en matiging of eenvoud. Deze waarden en principes zijn diep geworteld in hun religieuze wereldbeeld en cultuur en zullen daarom waarschijnlijk niet snel veranderen. De meest belovende waarden in de onderzochte gemeenschappen zijn de gemeenschap als samenlevingsvorm, stabiliteit, matiging, nederigheid of bescheidenheid, het ritme van het leven, en reflectie. De gemeenschap blijkt belangrijk te zijn om gedeelde waarden te behouden. Gemeenschappelijk leven zelf biedt veel mogelijkheden voor het verlagen van de impact op het milieu, omdat materiële zaken kunnen worden gedeeld en de schaalgrootte bepaalde investeringen rendabel maakt. De waarde van de stabiliteit benadrukt commitment voor een bepaalde plaats en stimuleert daarmee om er op een duurzame manier mee om te gaan. De waarde van matiging legt het accent op een andere manier van consumeren, gebaseerd op werkelijke behoeften. De waarde van nederigheid of bescheidenheid verschuift de aandacht van het individu naar de bredere gemeenschap. Een evenwichtig levensritme biedt een kader voor reflectie en een manier om een gewenste manier van leven vol te houden. Reflectie zelf helpt mensen om zich steeds weer te richten op belangrijke waarden en kwaliteit van leven.

In de vier religieuze gemeenschappen leiden deze waarden in veel gevallen tot een lagere impact op het milieu, terwijl ze tevens in belangrijke mate bijdragen aan de gewenste kwaliteit van leven. Een lage milieu-impact en een goede kwaliteit van het leven kunnen dus heel goed samengaan.

Behoud van kwaliteit van leven

De gemeenschappen richten zich op het behoud van de kwaliteit van hun leven en scheppen daar, voor zover mogelijk, de voorwaarden voor. Vier punten in het bijzonder spelen daarbij een rol. Ten eerste zijn ideeën over kwaliteit van het leven geworteld in een samenhangend religieus wereldbeeld en vertaald in duidelijke waarden en daaruit volgende gedragskeuzes. Dit wereldbeeld is transparant, door alle leden onderschreven en wordt op regelmatige basis gevierd. Samenhang tussen religieuze overtuigingen en praktische keuzes vereist een voortdurende reflectie op religieuze principes en gedrag. Ten tweede kennen de gemeenschappen een sterk sociaal kapitaal. Ze hebben een sociaal systeem georganiseerd waarmee waarden en gedrag kunnen worden gerealiseerd. Daarbij zijn tussen de gemeenschappen grote verschillen waar te nemen in de balans tussen conformiteit aan de gemeenschap en ruimte voor persoonlijke identiteit. Een derde punt is het toepassen van reflectie in veranderingsprocessen, waarbij belangrijke waarden als uitgangspunt dienen. Ontwikkelingen die hun kwaliteit van leven op een negatieve manier beïnvloeden wijzen ze, voor zover mogelijk, af. Vaak zoeken ze een compromis waarbij de gemeenschappen ruimte scheppen voor ontwikkeling, maar daarbij geen concessies doen aan wat ze van wezenlijk belang vinden. Ze brengen in praktijk wat ze geloven en creëren het kader dat nodig is om hun kwaliteit van leven te behouden. Als laatste blijken goed leiderschap en een adequate besluitvorming de aanvaarding van de gemeenschappelijke beslissingen te versterken.

Waarden en duurzaamheid in de Westerse samenleving

Een belangrijke vraag is nu hoe deze waarden die kunnen leiden tot een lagere milieudruk en principes om kwaliteit van leven te behouden aansluiten bij de bredere Westerse samenleving en waar knelpunten liggen. We hebben gezien dat de onderzochte gemeenschappen een coherente levensbeschouwing hebben, hun waarden serieus nemen en praktiseren wat ze geloven. In onze samenleving is een zekere discrepantie waar te nemen tussen wat mensen zien als kwaliteit van leven en praktische keuzes. Daarbij zijn geloofssystemen gefragmenteerd geraakt, wat is versneld door het proces van secularisatie sinds het midden van de 20e eeuw. De gemeenschappen daarentegen volharden in hun waarden en accepteren de consequenties van hun overtuigingen. Dit daagt uit tot bezinning over de betekenis van kwaliteit van leven en hoe dit te realiseren, en dit ook te vertalen naar de dagelijkse praktijk.

Binnen de 24-uurs economie die steeds meer druk legt op de samenleving, is het belangrijk te zoeken naar een goede balans tussen enerzijds werk en anderzijds tijd voor ontspanning en reflectie. In een wereld die steeds rijker wordt, lijkt geluk meer een kwestie te zijn van keuzes ten aanzien van tijd dan van geld. De waarden van eenvoud en matiging botsen met de groeiende consumptie in de Westerse samenleving en zullen alleen worden gerealiseerd wanneer keuzes aansluiten op ideeën over kwaliteit op de lange termijn. Eenvoud daagt uit tot een alternatieve visie op consumptie, die niet is gebaseerd op oneindige behoeften, maar op wat werkelijk nodig is.

Een goed functionerende sociale context kan een kader bieden om waarden te onderzoeken en te behouden en ook om bepaalde gedragskeuzes te blijven realiseren. Dit is een uitdaging voor onze maatschappij, waarin duidelijke sociale contexten en sociaal kapitaal aan inflatie en erosie onderhevig zijn en opnieuw moeten worden gedefinieerd. In de Westerse samenleving zien we terughoudendheid in het opgeven van persoonlijke vrijheid en autonomie en het aangaan van lange termijn verplichtingen. De gemeenschappen daarentegen maken persoonlijke verlangens ondergeschikt aan de gemeenschap, wat in veel gevallen leidt tot een gedeelde welvaart en het ervaren van kwaliteit van leven.

Drie lessen voor duurzaamheid en kwaliteit

Het proefschrift sluit af met drie concrete lessen die we kunnen leren van de gemeenschappen als het gaat om het realiseren van duurzaamheid en kwaliteit van leven.

1. Focus op kwaliteit in consumptie, niet op kwantiteit. De vier gemeenschappen verdiepen hun spiritualiteit en kwaliteit van leven door hun behoeften te beperken tot het essentiële. Gegeven het feit dat veel armen in deze wereld niet eens kunnen voorzien in hun basisbehoeften, moeten we onze consumptie laten leiden door kwaliteit in plaats van kwantiteit, om wereldwijd kwaliteit van leven mogelijk te kunnen maken. Wat nodig is, is een grondige wijziging van ons consumptiepatroon naar een minder materialistische en meer kwalitatieve levensstijl. Dit zal ook een positief effect hebben op het milieu op de lange termijn.
2. Zoek nieuwe vormen van gemeenschap. Milieuproblemen worden vaak ervaren als een sociaal dilemma, waarbij individuele keuzes als zinloos worden gezien zolang anderen doorgaan met hun verspillend en vervuilend gedrag. Om dit sociale dilemma op te lossen, is gemeenschap in welke vorm dan ook nodig, om het probleem te herkennen, oplossingen te formuleren en elkaar te stimuleren gewenst gedrag te handhaven.
3. Kies voor reflectieve ontwikkeling. Om duurzaamheid te realiseren, moeten waarden op lange termijn expliciet worden gemaakt en dient beleid aan te sluiten bij ideeën over kwaliteit van het leven. Zolang vooruitgang wordt gedefinieerd als economische groei, zal korte termijn winst het winnen van duurzaamheid, sociale rechtvaardigheid en algemeen welzijn. De huidige complexe milieuproblemen vereisen weloverwogen keuzes, omdat keuzes onomkeerbare gevolgen kunnen hebben voor natuur en mensen wereldwijd.

We moeten vooruitgang benaderen met een nieuwe set van prioriteiten, die de druk op mensen, gemeenschappen en het milieu verminderen, en leiden tot tevredenheid en kwaliteit van leven. De veelbelovende waarden van de vier religieuze gemeenschappen bieden inspirerende stappen naar een duurzame toekomst.

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Endnotes

- 1 The Millennium Ecosystem Assessment is an international work program studying the consequences of ecosystem change for human well-being and options for responding to those changes. The MEA was launched by U.N. Secretary-General Kofi Annan in June 2001 and was completed in March 2005.
- 2 R. Inglehart and H.D. Klingemann, 2000 and R. Inglehart, 2004 'Subjective well-being rankings of 82 societies' on www.worldvaluessurvey.org (viewed December 7, 2010).
- 3 R. Layard, 2005; R. Veenhoven, 2004; E. Diener, E. Sandvik, L. Seidlitz and M. Diener, 1993. R. Veenhoven (2004) concludes that effects of income change are modest at best.
- 4 See for example J.E. Stiglitz, A. Sen and J-P Fitoussi, 2008; R. Layard, 2005 and W.R. Swinyard et al, 2001. The only household good that seems to affect life satisfaction is the car. B.C.M. Gatersleben, 2000, chapter 4.
- 5 G. Gardner, 'Engaging Religion in the Quest for a Sustainable World', State of the World 2003 and G. Gardner and L. Mastny, 'Rethinking the Good Life', State of the World 2004.
- 6 The Netherlands Environmental Assessment Agency published The Sustainability Outlook, in which it presents a picture of societal values in the Dutch population, including a preferred quality of life, the way it should be realised and on what scale, and it distinguishes four worldviews. For each of these worldviews the agency estimated long-term effects on Gross World Product, population growth, mobility, energy-use and food supply. These sustainability issues were addressed differently in each worldview.
- 7 Before Europe was Christianised, the inhabitants were heathens (the word refers to people working on the heath land). I do not deny the pagan roots of the Western world, and the recent recovery of these roots confirms that our pagan culture never completely disappeared. But since it was the Greek and Christian culture that influenced and changed Europe substantially during the last ages, I will focus on these.
- 8 Science, 1967, 1203-1207.
- 9 The term 'Judeo-Christian' might cause some confusion. Lynn White used the term in his article and many surveys that are discussed in section 1.3 used 'Judeo-Christian' as well. In most cases it is used for a combination of Jews and Christians, to address both religions for which the texts of Genesis are part of their religious writings. This is however not always the case. Although Christian faith is grafted onto Jewish texts and culture, both religions developed in another direction and I am aware that for Jews it might be uncomfortable to be lumped together with Christian faith. Because this study is based on research among four Christian communities, I will only use the term Judeo-Christian when it is used in the literature that is discussed.
- 10 Sociologist Pierre Bourdieu used the term 'social capital' in contrast to cultural capital, economic capital and symbolic capital. J.S. Coleman was among the sociologists who further conceptualised the term. With his book 'Bowling alone. The Collapse and Revival of American Community', 2000, R.D. Putnam brought the concept to a broader public.
- 11 The classification of Anabaptists as Protestants is not unambiguous. For both historical and theological reasons some authors describe Anabaptism as a third option, besides Protestantism and Catholicism. See for example W. Klaassen, Anabaptism: Neither Catholic nor Protestant, 2001.
- 12 White suggests including the blessing 'O, all ye works of the Lord, bless ye the Lord' (Daniel 3:57-90) in the protestant Bible, because it would contradict the historically dominant Judeo-Christian anthropocentrism. This text belongs to the deuterocanonical texts. It has been used in the Anglican liturgy from early on.
- 13 L.W. Moncrief, 1970; G. Fackre, 1973; G. Liedke, 1988; J. Hodges, 1990; H.J. van Soest, 1996.
- 14 Toynbee emphasises the rise of monotheism as a cause of many problems. Remarkably, he states that "Christ has dissolved monolithic Jewish monotheism into the Christian Trinity", and mentions him in line with Buddha, Confucianism, and Shinto, suggesting that belief in the Christian Trinity can be a remedy for the

- ecological crisis. A. Toynbee, 1972, 148-149. However, he does not make clear what difference belief in the Trinity would make for the interpretation of the Genesis texts.
- 15 (26) Then God said, "Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground. (27) So God created man in his own image, in the image of God he created him; male and female he created them. (28) God blessed them and said to them, "Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground." Bible, New International Version (N.I.V.).
 - 16 Related texts can be found in, for example, Genesis 2:15, Genesis 9 and Psalms 8:6-9. The term *dominium terrae* will not be found in old Bible translations though and it did not appear in Bible comments until the Middle Ages.
 - 17 Barr even talks about a "sort of primary liturgical place" for man on earth: man is man when he is in his place within nature. Man's dominion should increasingly be applied to the conserving and caring for natural resources, by using man's own scientific, technical and planning powers to limit and control what these same powers, if left unlimited, would perpetrate. J. Barr, 1972, 61, 74.
 - 18 See for example J.J. Boersema, 2001, 74, 217.
 - 19 Genesis 1:29, 30. See also J. Barr, 1972; J.J. Boersema, 2001; D.K. Jobling, 1972; J. Passmore, 1974.
 - 20 Genesis 2:23. H.J. van Soest, 1996, 202, 206.
 - 21 Van Soest mentions several examples in the Old Testament of naming without having dominion, for example Genesis 16:13-14, Genesis 26:17-21 and Genesis 41:45. H.J. van Soest, 1996, 205-206.
 - 22 See also P. Harrison, 1998.
 - 23 "The scriptures reveal to us the will of God; and the book of the creatures expresses the divine power; whereof the latter is a key unto the former: not only opening our understanding to conceive the true sense of the scriptures, by the general notions of reason and rules of speech; but chiefly opening our belief, in drawing us into a due meditation of the omnipotency of God, which is chiefly signed and engraven upon his works." Bacon, Preface to the *Instauratio Magna*.
 - 24 This is one of the conclusions of J.J. Boersema in his dissertation on the Torah and the Stoics. He studied the cultural and philosophical dimensions of the relation between man and nature in a Western context (1997/2001).
 - 25 See also C. Ponting, 1991. Xenophon ascribes to Socrates the opinion that the gods created everything, including the animals, for the benefit of mankind, Ponting, 1991, chapter 8.
 - 26 Thomas emphasises the role and influence on this issue of poets, who were often cited in Parliament. Several laws were enacted: against mistreatment of horses and cattle (1822), against mistreatment of dogs (1839 and 1854) and against cock fights (1835 and 1849). The more humane feelings towards 'lower animals' were even mentioned by Queen Victoria in her jubilee speech of 1887.
 - 27 "The end of man's creation was, that he should be the viceroy of the great God of heaven and earth in this inferior world; his steward, villicus (overseer, MV), bailiff or farmer of his goodly farm of the lower world". Therefore, mankind was "invested with power, authority, right, dominion, trust and care, to correct and abridge the excesses and cruelties of the fiercer animals, to give protection and defence to the mansuete (tame) and useful, to preserve the species of divers vegetables (growing things), to improve them and others, to correct the redundancy of unprofitable vegetables, to preserve the face of the earth in beauty, usefulness and fruitfulness". Sir Matthew Hale, 1677, *The Primitive Originations of Mankind*. Godbid, London. Cited in: J.J. Boersema, 1997, p 224; J.J. Boersema 2001, p. 234.
 - 28 Since the end of the 1960s many books have appeared on this subject. To mention some: F.A. Schaeffer, 1970, *Pollution and the death of man: the Christian view of ecology*; J. Moltmann, 1985, *God in Creation: An Ecological Doctrine of Creation*; C.B. DeWitt (Ed.) 1996, *The Just Stewardship of Land and Creation*; M.S. Northcott, 1996, *The Environment and Christian Ethics*; B.R. Hill, 1998, *Christian Faith and the Environment*. Within the World Council of Churches the JPSS-concept (the Just, Participatory and Sustainable Society) was launched in 1977, and later on, in 1984, the Conciliar Process for Mutual Commitment for Justice, Peace and the Integrity of Creation took place.
 - 29 M. Stoll, 1997. Peter Harrison emphasises not only that modern science had its origins in the 17th century, but that modern religion, too, emerged at this time. "The mainspring of religion thus ceased to be the performance of ritual acts presided over by an ecclesiastical hierarchy (...). Instead, religion came to be identified with systems of belief." P. Harrison, 1998, 273.
 - 30 However, as early as the 17th century a growing number of scientists started to stress the idea that the Book

- of Nature needed to be explained not in terms of the written Book, but on the basis of independent, scientific and rational insights. H.G.M. Jorink, 2004, 75-76.
- 31 For this reason Hodges argues that science itself, and not religion, is at the root of our environmental ills. This would explain how and why western exploitative attitudes were accepted by countries without a history of monotheistic belief, such as Japan. J. Hodges, 1990, 39-40. Harrison concludes that the "secularization of the scientific impulse which is increasingly evident from the beginning of the 18th century deprived Protestant religion, and arguably Catholicism too, of its active component, leaving it with only a body of doctrines with which to concern itself. (...) Scientific activity became an increasingly material means of obtaining secular salvation." P. Harrison, 1998, 273.
 - 32 On the other hand, Stoll writes, nature was seen as a nurturing, sustaining mother, and Creation untouched by man was a temple built by the hand of God.
 - 33 'Qui laborat orat' means 'who works prays'.
 - 34 'Ora et Labora' means 'pray and work'.
 - 35 In AD 1000 approximately 36 million people lived in Europe. In 1300 it had 80 million inhabitants, but during the 14th century the number decreased because of famines and epidemics, which occurred regularly till the end of the 19th century. Around 1600 the population numbered 90 million people again. The population increased enormously to 250 million people in 1845 and 450 million in 1914. See C. Ponting, 1991, chapters 6 and 12.
 - 36 Until 1800 at most 2.5% of the world population lived in cities. As the result of the use of fossil fuels and the advance of industrialisation, urbanised societies arose in Europe and North America. At the end of the 20th century half the world population lived in cities. See C. Ponting, 1991, chapter 14.
 - 37 To mention some: J. Barr, 1972; W. Leiss, 1972; R. Dubos, 1973, 1974; R. Attfield, 1983; J. Hodges, 1990.
 - 38 Leiss states that with the diminution of Christianity, due to secularisation, the ethical-religious framework disappeared and with that man's responsibility to nature. W. Leiss, 1974, 33-35. Krolzik, 1979, underlines that the attitude towards nature has actually changed because of the estrangement from Christianity since the start of industrialisation, which finally led to the environmental crisis. See also J. Barr, 1972.
 - 39 The New Environmental Paradigm was developed by R.E. Dunlap and K.D. Van Liere, 1978. Items used were: 'Mankind was created to rule over nature' and 'Plants and animals exist primarily to be used by humans.'
 - 40 Conservative denominations include Baptists, Sects, and Mormons. Classification of C.M. Hand and K.D. Van Liere, 1984.
 - 41 Liberal denominations include Episcopalians and Methodists. Classification of C.M. Hand and K.D. Van Liere, 1984.
 - 42 Measured by the statement: 'The story of creation as reported in Genesis is true.'
 - 43 Measured by the statement: 'According to the Bible humans are supposed to use nature to their own advantage.'
 - 44 B.C. Hayes and M. Marangudakis, 2001.
 - 45 J.L. Guth et al., 1995.
 - 46 A. Greeley, 1993.
 - 47 Eschatology means beliefs about the 'ultimate things', the end of the world and within Christian religion the expectation of Christ's return on earth.
 - 48 D.L. Eckberg and T.J. Blocker, 1996.
 - 49 H.H. Boyd, 1999.
 - 50 This has been shown by P. Ester, 1979. See also E. Woodrum and M. Wolkomir, 1997, who concluded that reported environmental concern did not necessarily result in corresponding environmental behaviours.
 - 51 David Hockman-Wert concluded the same in his thesis "The role of religion in motivating sustainability: the case of the Old Order Amish in Kishacoquillas Valley, PA". He observed that the Amish affirmed the statements that appeared to be biblical references, because they were considered as statements of religious belief. Hockman-Wert suggested open-ended questions to measure the Amish attitude towards environment. D.P. Hockman-Wert, 1998, 116-118.
 - 52 P. Ester and B. Seuren, 1992; C.L. Kanagy and F.K. Willits, 1993; C.L. Kanagy and H.M. Nelsen, 1995; J.W. Becker, A. van den Broek, P. Dekker and M. Nas, 1996; E. Woodrum and M.J. Wolkomir, 1997.
 - 53 E. Woodrum and M.J. Wolkomir, 1997.
 - 54 A. Greeley, 1993, and J.L. Guth & L.A. Kellstedt, 1993, came to the same conclusion.
 - 55 This model builds on a hypothesis that was first introduced by J.J. Boersema and C.J. Klop, 2001, in:

Achtergronddocument project Cultuur. FORUM, Netherlands Ministry of Housing, Spatial Planning and the Environment.

- 56 WCED is an abbreviation of World Commission on Environment and Development.
- 57 U. Beck, A. Giddens and S. Lash, 1994; U. Beck, W. Bonss and C. Lau, 2003.
- 58 Jewish Kibbutzim, Ecovillages, and Anthroposophic communities were considered as research group as well. Besides lack of time, one of the reasons for not studying these communities was that they only started in the 20th century and therefore have a much shorter history than the present research groups. Other reasons to waive Jewish Kibbutzim as research group were the turbulence in Israel at the time of the field studies and the fact that a lot of Kibbutzim originate more from a socialistic than a Jewish religious perspective. It would have been interesting to compare the Kibbutzim practises with those of the Hutterite communities. A first comparative study on Kibbutzim and Hutterites was done by D. Barkin and J.W. Bennett, 1972, with a focus on the reactions on the world outside the community. A complicating factor in Ecovillages, and to a lesser extent in Kibbutzim, was the diversity in spiritualities and worldviews, which made it hard to conclude anything in general about the relation between worldview and sustainability in a community setting, as found out during a pilot study preceding this study.
- 59 The Young Center for Anabaptist & Pietist Studies, Elizabethtown College, Elizabethtown 2011. See http://www2.etown.edu/amishstudies/Population_Growth_2010.asp. Last visited April 8, 2011.
- 60 This number depends on the level of orthodoxy of the church district. More detailed data can be found in chapter 3.
- 61 The Hutterian Brethren Schmiedeleut Conference, 2006, www.hutterianbrethren.com, last visited December 7, 2010.
- 62 See also P. Dekker and J. de Hart, 2001, 9, who describe religion as a particularisation of the more common term philosophy of life, in which the meaning system is based on a transcendent, supernatural reality.
- 63 G.F. De Jong, J.E. Faulkner and R.H. Warland, 1976, divided the last dimension into 'individual moral consequences' and 'social consequences' to distinguish between the individual and society.
- 64 R. Inglehart & W.E. Baker, 2000; J.W. Becker et al, 1997; W. Burkert, 1996, and J. Goudsblom, 1985.
- 65 Classical philosophy used the term 'cosmology', which can be understood as "cognitive and mental constructs by means of which individual human beings (and societies) manage, to varying degree, both to survive and to give their lives purpose and significance" (Boersema, 2001, 26).
- 66 See D.K. Naugle (2002). See also the work of Annick de Witt who explores the relationship between worldviews and the ways these relate to goals and issues of sustainable development (A. de Witt, 2009).
- 67 When a specific worldview consists of normative ideas to legitimise or change existing situations without considering a transcendent reality, the term ideology is used.
- 68 This definition is based on a quotation of Kluckhohn (1951).
- 69 Rokeach made a fundamental distinction between terminal and instrumental values. Terminal values are beliefs about desired end-states, such as equality, inner harmony, and freedom. Instrumental values consist of beliefs about desired modes of action, such as being ambitious, helpful or loyal. The 'Rokeach Value Survey' is popular in marketing settings.
- 70 Schwartz distinguishes between value types and value dimensions. A value type consists of a set of values that can be combined into one meaningful description. Schwartz identified ten value types, each characterised by a specific motivational goal: 'power', 'achievement', 'hedonism', 'stimulation', 'self-direction', 'universalism', 'benevolence', 'tradition', 'conformity', and 'security'. These value types can be organised in a circle, based on an analysis of compatibilities and conflicts between their motivational goals. Value dimensions are created by values in opposing value types, for example the value of egalitarian commitment, which forms the value dimension of 'egalitarian commitment' versus 'hierarchy'. The 'Schwartz Values Inventory' has been used in many other studies, see for example S.C. Grunert and H.J. Juhl, 1995; N.T. Feather, 1995; P.W. Schulz and L.C. Zelezny, 1998; and C. Hoogland, 2006.
- 71 See also B. Verplanken and R.W. Holland (2002), 'Motivated Decision Making: Effects of Activation and Self-Centrality of Values on Choices and Behavior', *Journal of Personality and Social Psychology*, 82, 3, 434-447; and N.T. Feather (1995) 'Values, Valences, and Choice: The Influence of Values on the Perceived Attractiveness and Choice of Alternatives', *Journal of Personality and Social Psychology*, 68, 6, 1135-1151.
- 72 The value dimensions of Hofstede are: (1) Power Distance Index, the degree of equality, or inequality, of power and wealth between people and the level of acceptance of that, (2) Individualism, the degree the society reinforces individual or collective achievement and interpersonal relationships, (3) Masculinity, the degree the society reinforces, or does not reinforce, the traditional masculine work role model of male

- achievement, control, and power, (4) Uncertainty Avoidance Index, the level of tolerance for uncertainty and ambiguity within the society, and (5) Long-Term Orientation, the degree the society embraces, or does not embrace, long-term devotion to traditional values.
- 73 This is concluded by a number of authors. To mention some: P.C. Stern, T. Dietz and L. Kalof, 1993; P.W. Schultz & L.C. Zelezny, 1998; J.A. Corraliza & J. Berenguer, 2000; P. Ester, H. Vinken, S. Simões and M. Aoyagi-Usui, 2003; W. Poortinga, L. Steg and C. Vlek, 2004.
 - 74 D. Prensky and C. Wright-Isak, 1997, argue that to get information about consumer behaviour, merely studying values is not sufficient. They emphasise the importance of studying the community individuals belong to as well.
 - 75 The concept of a 'good life' was introduced by Aristotle, who described it as a life that is satisfying and morally worthy.
 - 76 M.R. Hagerty et al., 2001, reviewed 22 of the most used Quality of Life indexes and give a good overview of methods used to measure quality of life.
 - 77 The Quality of Life Research Unit of Toronto identifies three major quality of life domains: 'being', 'belonging', and 'becoming'. The 'being' domain includes the basic aspects of who one is, his or her identity. 'Belonging' includes the person's fit with his or her environments, coming close to social capital. 'Becoming' refers to the purposeful activities carried out to achieve personal goals, hopes, and wishes. They explain the concepts of their 'Quality of Life Model' on their website: www.utoronto.ca/qol/concepts.htm (retrieved on December 14, 2010).
 - 78 Besides objective and subjective quality of life, S. Ventegodt, J. Merrick and N.J. Andersen, 2003, distinguish a third quality: the 'existential quality of life', which means how one's life is at a deeper level, regarding aspects like growth or living in accordance with certain spiritual and religious ideals. In most studies, however, this is included in the 'subjective quality of life'.
 - 79 Veenhoven distinguishes therefore four 'qualities of life': (1) 'liveability of the environment', (2) 'life-ability of the person', (3) 'utility of life for the environment' and (4) 'appreciation of life by the person'. R. Veenhoven, 2000.
 - 80 This overlap between values and quality of life can also be noticed in 'Values and the Quality of Life', where A.C. Michalos sees 'quality' as synonymous with 'value of life', 1976.
 - 81 Although the concept of 'sustainability' has established itself mainly since the 1980's, the concept has been used for nearly three centuries. As far as we know it was used for the first time in 1713, by the German Hannß Carl von Carlowitz in his *Sylvicultura Oeconomica*, a publication on forestry. Carlowitz wrote about sustainable use of the forests as opposed to the common practice of clear cutting. He stated that man ought to treat forests with care, because continuous exploitation would cause troubles for the next generations. In 1757, another German forestry expert, Wilhelm Gottfried Moser, used the term as well, when he wrote about "Nachhaltige Wirtshaft mit unserem Wäldern" in his *Grundsätze der Forst-Oekonomie* (Basics of Forest Economy). The Dutch term "duurzaam" and the French word "durable" were used in the Middle Ages and the 18th century. H. van Zon, 2002, 4.
 - 82 International Union for the Conservation of Nature and Natural Resources (IUCN), World Wildlife Fund (WWF) and United Nations Environment Programme (UNEP), 1980, Introduction. Many definitions follow a subdivision between economic, ecological and socio-cultural dimensions of sustainable development and describe it in a way comparable to the Commission on Sustainable Development (CSD): "Sustainable development may be regarded as the progressive and balanced achievement of sustained economic development, improved social equity and environmental sustainability" (M. Luxem and B. Bryld, 1997, 6). Taking all three aspects into account, especially the economic and ecological aspects, risks ending up with a compromise that is not sustainable at all. For a development to be sustainable, it should take ecological sustainability as starting point.
 - 83 See also J.H. Spangenberg, 2002, 297 and J.H. Spangenberg, 1995, chapter 43. 'Towards a Sustainable Europe' is a study initiated by Friends of the Earth Europe and carried out by the Wuppertal Institut, to calculate Europe's environmental space, defining interim targets and discussing political and societal strategies for reaching sustainability within one generation.
 - 84 This is clearly expounded by W. Achterberg, 1994 in chapter II on 'Sustainability. History and analysis of an idea'.
 - 85 The Special Report on Emissions Scenarios (SRES) is edited by N. Nakicenovic and R. Swart, 2000.
 - 86 Milieu- en Natuurplanbureau, 2004. The English summary was published in 2005. See also footnote 6.
 - 87 An overview of methods for measuring the human impact in the environment can be found in J.J. Boersema

and L. Reijnders (2009) Principles of Environmental Sciences.

- 88 The idea of ipat is introduced by P.R. Ehrlich and J.P. Holdren (1971) in *Science*, 171, 3977, 1212-1217.
- 89 Questions about the focus of reducing environmental impact worldwide have raised much discussion: should we focus on reducing population growth, changing life styles or technological solutions? R. Goodland and H. Daly, 1996, 1011, concluded that "overconsumption by the OECD countries contributes more to some forms of global unsustainability than does population growth in low-income countries". The same is argued by Desmond McNeill (2000), who states that it is affluence of the rich rather than poverty which is the greater threat to the environment, as a reaction to the view that 'it is the poor that cause environmental damage', in: K. Lee, A. Holland and D. McNeill, 2000, 27. In poor countries, however, growth in affluence is urgently needed to meet the basics for living. Besides, when poor countries get richer, often population growth decreases as well.
- 90 A comparable index is the 'Ecological Rucksack', calculating the environmental impact by means of the amount of material needed. This model is based on MIPS, the 'Material Input Per unit of Service', developed by Schmidt-Bleek and Klütting (1993).
- 91 This set of indicators was developed by S. Lorek and J.H. Spangenberg, 2001. Other programs for measuring sustainability and environmental impact of households we considered are, amongst others, the Global Environmental Survey (GOES) of Tilburg University, the SusHouse Methodology of TU Delft, studies of RIVM, and the IVEM Groningen program 'Household Metabolism Effectively Sustainable' (HOMES). The latter program was a serious candidate, for it focused on environmental impact of households, caused by heating, transport and the consumption of water, gas and electricity. It calculated both the direct and indirect energy use of goods and services. However, during the pilot study the computer program appeared to be unusable for communities.
- 92 The ten consumption clusters are: clothing, education, food, health care, housing/construction, hygiene, laundry/cleaning, recreation, social life and transport. Because direct household influence on health care, education and social life is limited, these clusters were left aside in the Wuppertal study.
- 93 The role of 'observer-as-participant' is more prevalent in the study of institutions, where the researcher is not a member of the group.
- 94 See J. Friedrichs and H. Lüdtkke, 1975, chapter 3.
- 95 These branches will be further described in section 4.2.2.
- 96 The field study took place from January 13 to 22, 2003. At the time of the study Stoutenburg consisted of seven adults, two teenagers and two adult asylum seekers. One was a professed Franciscan friar, the others were lay people. Some of them had part-time jobs outside, but most of them worked at the community, in the sizable garden, in the conference centre, and doing housekeeping. The community has two periods of communal meditation and one period of silent meditation on a daily basis.
- 97 The field study took place in Enschede, from June 16 to 23, 2003. At that time De Wonne consisted of an ecumenical group of seven permanent residents and about 28 temporary guests who live there for a year on average. At the time of the field study, the permanent group consisted of a brother Capuchin, a Franciscan sister, a professed member of the Order of Julie Postel, a brother of the Third Order and three Protestants.
- 98 The first host family consists of a couple and four young children. The grandfather, a bishop, and his wife live next door. They have a homegrown vegetable shop and a tree trimming business. The second host family consists of a couple, five children (the sixth was born during my field study period) and two grandparents. They have a dairy farm and a quilt shop. The third family consists of an elderly couple, living under the same roof as their grandson and his family. The Ohio couple lives on the same farmyard as their daughter with her husband and (adopted) son. This boy was not born in an Amish family.
- 99 This is a Timon Community. For more information, see M. Vonk, 2005.
- 100 ofm is the abbreviation of 'Ordo Fratrum Minorum', which means 'Order of Lesser Brothers'.
- 101 osc is the abbreviation of 'Ordo Sanctae Clarae', which means 'Order of Saint Clare'.
- 102 Leemker, K. 2002, Een mens te zijn op aarde in deze wereldtijd. Een bijdrage van de franciscaanse spiritualiteit aan de oplossing van de hedendaagse milieucrisis (To be a human on earth at the present time. A contribution from Franciscan spirituality to solving the present environmental crisis), KU Nijmegen.
- 103 Gualbert's monks had to be pure contemplatives and therefore he introduced the system of lay brothers who were to attend to the secular business. The congregation had a long period of expansion, but after the 16th century it began to decline. Besides many famous popes and cardinals, the monastery was visited by Milton, the author of *Paradise Lost*, and Galileo was for a time a novice at Vallombrosa and received part of his education there.

- 104 osb is the abbreviation of 'Ordo Sancti Benedicti, which means 'Order of Saint Benedict'.
- 105 The Luddite movement began in 1811 in Britain as a social movement of textile artisans who protested against the changes produced by the Industrial Revolution, which they felt threatened their livelihood. Later, the term Luddite has been used to describe anyone opposed to technological progress and technological change.
- 106 The Young Center for Anabaptist & Pietist Studies, Elizabethtown College, Elizabethtown, 2011. See http://www2.etown.edu/amishstudies/Population_Growth_2010.asp. Last visited April 8, 2011.
- 107 The history of the Amish is described comprehensively by S.M. Nolt, 1992. See also Hostetler, 1993, Kraybill and Bowman, 2001, and Baecher, 2000.
- 108 The first baptisers were Georg Blaurock, Conrad Grebel, and Felix Manz.
- 109 In the first century of their existence, thousands of Anabaptists were persecuted, imprisoned, tortured, beheaded, burned or sold as galley slave. In some places people were employed as 'Anabaptist hunters' and were paid per head.
- 110 The first Anabaptists had already been baptised in the Roman Catholic Church as children and thus were baptised for the second time.
- 111 Menno Simons was ordained as a Roman Catholic priest in ± 1516 at Utrecht, Netherlands. It was not until ± 1527 that he began an in-depth study of the Bible. When Simons heard about the beheading of a person for being rebaptised, he started to search the scriptures again, leading to the belief that infant baptism was not biblical. After the Münster rebellion in 1534-35, which violence was rejected by Simons, and the martyrdom of his brother who had become Anabaptist, Menno Simons converted to Anabaptism and soon became an influential man in the northern Anabaptist movement. By 1544, the term Mennonite (Mennist) was used to refer to the Dutch Anabaptists. Because Menno Simons was continually forced to flee, he consequently had followers in many places in Northern Germany and the Netherlands.
- 112 It describes the Anabaptist view on Christian community and deals with adult baptism, ban, communion, separation from evil, non-violence, role of church leaders, attitude towards the government and prohibition of swearing oaths.
- 113 This Dordrecht Confession must not be confused with the Protestant Synod of Dordrecht, held at the same Dutch city from 1618-1619, which drafted the 'Three Forms of Unity'.
- 114 Amann (sometimes written as Ammann or Amman) was probably born on February 12th 1644, as the son of Michael Amann and Anna Rupp (Baecher, 2000). Around 1680 Amann became Anabaptist, went into exile and moved to Alsace. Later he returned to Switzerland, and was probably arrested in 1693 because of the rise of the 'new sect'. He escaped prison in 1694. His name is on the 1708 list that Anabaptists were required to sign by Alsace authorities. Amann's date of death is unknown, though it occurred before 1730, since a record of his daughter's baptism in 1730 mentions that Jacob Amann had died.
- 115 Some years later, Amann and other Amish leaders expressed regret and wanted to rejoin the Swiss Brethren. Swiss leader Hans Reist and his adherents refused and again the counsel split on the issue of Meidung. The Amish schism was a fact (Nolt, 1992, chapter 2).
- 116 My host family's bishop, for example, explained to me that Jacob Amann had a conflict with Menno Simons. This could never have been the case, for Amann and Simons lived in different centuries.
- 117 William Penn established a settlement in what later became Pennsylvania, functioning as a safe haven for religious minorities. Penn was a Quaker, and thus belonged to one of the many persecuted religious groups in Europe himself.
- 118 The Amish belonged to the first colonists. As pacifists they did not choose between the fighting parties and in fact became victims of both the British, the French, and the Indians. Frequently their property was plundered. Besides, many evangelical groups made converts among the Amish. Having signed the 'declaration of loyalty to the British crown' on their arrival, Amish were seen as 'Tories', lost their suffrage and were highly taxed. Less than 40% of the first generation stayed Amish (Nolt, 1992).
- 119 This deepened after World War I. Amish boys had to go to training camps, despite the fact that they were conscientious objectors. Many Anabaptists underwent physical and psychological humiliations. Amish were viewed as sympathisers with the Germans, because of their German dialect and because they refused to pay for the war. See S.M. Nolt, 1992, 222-228. The Hutterites faced the same hardships, see chapter 4, section 2, on Hutterite history.
- 120 The first Amish school was established in 1925 in Delaware. Difficulties began in many states when officials replaced one-room schools with consolidated elementary schools. In many states Amish ended up in jail for not sending their children to elementary schools, leading to several lawsuits (among which Commonwealth

- versus King, 1937; Commonwealth versus Petersheim, 1949; Commonwealth versus Beiler, 1951; Ohio State versus Hershberger, 1958; Kansas State versus Garber, 1967). The final showdown between Amish and school authorities was in Wisconsin, where the case ultimately ended up at US Supreme Court (Wisconsin versus Yoder, 1972). The Amish were supported by the National Committee for Amish Religious Freedom (T.J. Meyers, 2003).
- 121 Small-scale tourism to the Amish has existed for a century now. As early as in 1915 postcards with pictures of Amish were sold in Pennsylvania and in 1946 the first bus trip took place through Amish country. The scale at which tourism takes place has drastically increased over the last 30 years though.
 - 122 Quite often such groups are made up of people who disagree with Amish beliefs and practices. In several cases in Lancaster County Bible studies conducted by non-Amish people have been started and have drawn away a lot of people from the Amish church. (Written correspondence with S. Scott, June, 24, 2008).
 - 123 These texts focus on God as loving, caring and forgiving: 'For God so loved the world, that he gave his only begotten Son, that whosoever believeth in him should not perish, but have everlasting life' (John 3:16). Psalm 23 describes the Lord as shepherd. Psalm 103 says: "Bless the LORD, o my soul, and forget not all his benefits: who forgiveth all thine iniquities; who healeth all thy diseases; who redeemeth thy life from destruction" (King James Bible).
 - 124 This baby had a genetic disease. Rebecca had also lost a brother as a result of a gas explosion in the barn. Her husband's little brother died after a horse had hit him. I noticed that many families had lost a family member because of diseases or accidents. A 2002 survey of the main Amish magazines, *The Budget*, *Die Botschaft*, and *The Diary*, found over 1,200 mentions of accidents in one year, ranging from minor injuries treated at home to multi-fatalities (S.E. Scott, 2004). Between 1999 and 2002, a total of 271 buggy-related accidents were reported by *The Diary*, an *Old Order* magazine (A.L. Piacentini, 2004).
 - 125 An elaborate study on the history of the Ausbund has been written by Amish bishop Benuel Blank, 2001.
 - 126 In most Amish communities, the sermons are in Deutsch. The songs and Bible readings are in High German, a language not understood well by all Amish. Still, in church the traditional Luther Bible will not easily be replaced by an English version. In the houses, however, many read the *Kind James Version*.
 - 127 This does not mean that the service was completely static. When necessary, a child could go to the toilet and when a baby was crying, the mother walked to the father to hand over the baby, or the other way round.
 - 128 The bishop of my host church district told me a story that once a bishop appointed the 'wrong' person, because he found another note that was in a different Bible by accident. When the bishop found out later, he did not set it right, for it was still seen as God's direction.
 - 129 The Amish literally follow the teaching of Jesus in Matthew 18:15-17 (King James Version): "Moreover if thy brother shall trespass against thee, go and tell him his fault between thee and him alone: if he shall hear thee, thou hast gained thy brother. But if he will not hear thee, then take with thee one or two more, that in the mouth of two or three witnesses every word may be established. And if he shall neglect to hear them, tell it unto the church: but if he neglect to hear the church, let him be unto thee as an heathen man and a publican." In cases of adultery, divorce or breaking of baptismal vows, however, the church often decides on immediate excommunication.
 - 130 See for example R.I. Garrett and D. Morse-Kahn, 2004, *Born Amish*.
 - 131 See for an extensive description of Amish values: D. B. Kraybill, 2001; P. Ester, 1997; J.A. Hostetler, 1993.
 - 132 One example is the life of Dirk Willems from Asperen, the Netherlands, who was captured because of his Anabaptist faith. In the winter of 1569 Willems escaped prison and fled over the ice. When he saw his pursuer falling through the ice, he returned and saved the man. However, notwithstanding this the pursuer arrested him again and Willems died at the stake (T. J. van Braght, 1660, 741-742).
 - 133 See also D.B. Kraybill, S.M. Nolt and D. Weaver-Zercher, *Amish Grace: How Forgiveness Transcended Tragedy*, 2007.
 - 134 An older, but very remarkable example is the story about Cleo Eugene Peters, who in 1957 was sentenced to death for killing an Amish man. The Amish could not accept the sentence, for they stated that life is too valuable and he should be given time to repent. They wrote letters to tell Peters they had forgiven him; Amish families invited his parents into their homes for meals and church leaders visited him in prison. Seven hours before the execution was to take place, the death sentence was withdrawn (S.M. Nolt, 1992, 252-253).
 - 135 Exodus 20:3. However, my Lancaster hosts had pictures of their children, because they thought they were too young to experience taking pictures as an expression of pride and they were not baptised yet. My host family in Ohio had no pictures at all, since they saw photographs as an example of images, forbidden in

- the Bible.
- 136 Deitsch, also called 'Pennsylvania Dutch' or 'Pennsylvania German', has its origin in the Swiss and South German language of the Amish immigrants.
 - 137 To keep informed, Amish mainly read local papers and in some houses magazines on farming, trade, hunting, and gardening can be found. In addition, they read the Amish journals, which are the 'Budget', 'Die Botschaft', and the 'Diary', on daily affairs in various Amish settlements; 'Family Life', also containing religious articles; 'Young Companion' for youth; and 'Blackboard Bulletin' for teachers.
 - 138 Interview with David Kline, Amish minister, Holmes County, June 2004.
 - 139 The absence of musical instruments is a historically- and culturally-based practice, as a reaction to the 'worldly' way of dancing. In fact, the Bible encourages the use of instruments, as demonstrated in Psalm 150.
 - 140 My host had a tree trimming business and hired a non-Amish employee with a truck, which had a car radio.
 - 141 Interview with Professor Kraybill, Elizabethtown, April 17, 2004.
 - 142 See section 3.2.
 - 143 It begins at about the age of 16 and ends with marriage, or for those who do not marry, in their late twenties.
 - 144 L.P. Greksa and J.E. Korbin, 2002, found in a study in the Geauga settlement, Ohio, that for adult children born between 1928 and 1967 the rate of leaving the church decreased from about 30% to 5%. Meyers, 1994, found in Elkhart-LaGrange, Ohio, that the percentage of persons leaving decreased from 21% among individuals born in the 1930s to 5% in the 1960 cohort.
 - 145 For an elaborate study on reasons why Amish youth stay or leave the church, see T. Shachtman, 2006.
 - 146 Interview with David Kline, Amish bishop and organic farmer, Holmes County, Ohio, June 2004.
 - 147 In Lancaster the average prices rose from \$350 per acre in 1940 to \$4,500 in the 1980s. At the beginning of the 21st century land was sold for \$10,000 per acre. D.B. Kraybill, 2004.
 - 148 This is the case for the moderate majority of Old Order Amish. The ultra-conservative minority however tries to maintain a pre-electrification way of life typical of rural Americans in the early 1900s (S. Scott and K. Pellman, 1999).
 - 149 For a discussion on the terms of reflexive modernisation, as introduced by Ulrich Beck, and reflective modernisation, see chapter 1, section 1.4.1.
 - 150 See for further study on this topic: D.B. Kraybill and M.A. Olshan, 1994, 38-47; D.B. Kraybill, 2001, chapter 8; and P. Ester, 2001, chapter 4.
 - 151 During the field research I visited Sunline Solar in Gordonville, an Amish enterprise that converts electric devices to solar energy and develops LED powered buggy headlights. Examples of new horse-drawn machinery are modernised hay bailers, staplers and machines for no-till farming. See further on this topic section 3.4.
 - 152 An elaborate study on Amish and the telephone issue was made by D. Zimmerman Umble, 2000.
 - 153 School ends at the end of April, so that the children can help during the busy summer season.
 - 154 Because of persecution in Europe, Amish were forced to cultivate marginal lands, which might be the reason for their good farming capabilities (Coşgel, M.M., 1993).
 - 155 In extreme situations, exceptions are made. After hurricane Isabel, for example, non-Amish workers were hired to help harvesting with tractors and machines. Trouw, October 8, 2003.
 - 156 Total mean purchase price for all major machinery on Amish farms was less than \$24,000. Conventional agriculture corn budget, based on 1,000 acres, estimates a machinery charge of \$59 per acre. Amish corn budget, based on 7.5 acres, estimates a machinery charge of \$19 plus draft horse charge of \$17, totalling \$36 per acre (James, R.E. 2004). M.H. Bender, 2001, also found that the small-scale traditional Amish farming contributes substantially to the agricultural economies of Holmes and Wayne Counties.
 - 157 Actually, there are very few Lancaster-related Amish who prohibit smoking. Parke County in Indiana is one exception. Written correspondence with S. Scott, June 24, 2008.
 - 158 Tobacco acreage in Lancaster County has plummeted to fewer than 9,000 acres in 1997 from 35,000 acres in the late 1950s.
 - 159 In the Amish magazine 'Family Life' nature is often used as metaphor, like this example: "As my little feathered friends sing praise, so may I too bring songs of praise to our Creator. Dear little birds, how many lessons you teach me as you brighten my days." Interestingly, this comes very close to the attitude of Saint Francis towards nature, as described in chapter 5.

- 160 Kline quotes this bishop in Moore, Stinner, and Kline, 1999, 305.
- 161 Interview with an Indiana Amish minister, cited in Meyers, 1994b, 169.
- 162 In the more densely populated areas, like Lancaster County, with smaller farms, the room for ecological edges and corridors is decreasing. See for lists of birds, butterflies, and plant species on Amish farms Moore et al., 2001.
- 163 Moore et al., 2001, and information from an interview with David Kline, who wrote two books on Amish farming and nature conservation, June 2004.
- 164 The Amish Delights' Policy on Puppy Mills, Animal Abuse and Animal Cruelty can be read at <http://amish-delights.com/puppypolicy.html>. Last visited on December 21, 2010.
- 165 On the other hand, growing tourism has become a new source of income. As described in section 3.2, an average of 7 million tourists visit Lancaster County yearly, spending \$1.3 billion, which gives the Amish a profit from their products.
- 166 Personal correspondence with professor Donald Kraybill, September 2005.
- 167 In Holmes County only 10% of the Amish are full-time farmers (Milicia, 2004). In Pennsylvania, in the late 1970s nearly 70% of Amish men worked the land, while now, in many communities, fewer than half do. See also Kraybill and Nolt, 2004 and Donnermeyer, 2004.
- 168 An Amish farm is usually continued by one of the children. Depending on the situation or family this can be the oldest, the youngest or another child. Amish retire from being the responsible farmer around their fifties, after which they will look for another occupation, like carpentry or working at the market. Usually they continue assisting on the farm.
- 169 Interview with Cooperative Extension Agent L. Ressler, September 15, 2004. No-till means no ploughing. Seeds are dropped in a small slot, crop residues are left on the surface and weed control is accomplished by using herbicides.
- 170 See also section 3.5.1 on energy use in the Amish community.
- 171 These farmers are converting used frying oil from local pizza shops into fuel. P. Buchnowski, 2005.
- 172 In Pennsylvania, non-Amish farmers needed 83% more energy than Amish to produce a pound of milk. Remarkably, the yield per hectare was slightly higher among the Old Order Amish than among the non-Amish, while they used 20% less energy for an average yield. In Illinois, where many farmers cultivate grain and raise pigs, Amish used considerably less fertilizer than non-Amish, but also had a lower yield per hectare. Johnson et al. 1977.
- 173 Interviews with Leon Ressler, September 15, 2004, and Donald B. Kraybill, April 17, 2004.
- 174 Lancaster Farm Fresh started in 2006 with a group of 15 Amish and Mennonite organic farmers and has grown to 64 farmers in 2010. More information can be read at the website www.lancasterfarmfresh.com are heard on http://www.youtube.com/watch?v=gxejQ_BWRgg (last visited December 21, 2010). Green Field Farms started in 2003 and has over 110 members in 2008. Interestingly, the co-op is overseen by a board of 20 Amish members, but has hired non-Amish staff, including sales representative Rhonda Troyer, to find shelves for their products (Abraham, 2008).
- 175 For many Amish this is a hard decision, for it might be very difficult to maintain family interaction, and it is not easy to find land of the quality and climate needed for Amish farming. E.P. Erickson, J.A. Erickson and J.A. Hostetler, 1980. For interviews with Amish who moved, see C.E. Feather, 2004.
- 176 Interview with Amish farmer Stolfus, Lancaster County, May 15, 2004.
- 177 In the 1990s 21% had yearly sales under \$ 10,000; 41% had sales of \$10,000 - \$100,000, 24% of \$100,000 - \$500,000, 7% \$500,000 - \$1,000,000 and 7% over a million dollars (Kraybill and Nolt, 2004, 42).
- 178 Until the 1970s only farmers could be proposed for minister. Nowadays also entrepreneurs can be chosen.
- 179 The use of electricity will be further explained in section 3.5.1.
- 180 This section on factory work is mainly based on the study of T.J. Meyers, 1994b. Factory work is hardly an issue in the areas of my fieldwork, Lancaster County, Pa, and Holmes County, Oh, and therefore it was not part of my field study work. Still I think it is an important issue for the larger Amish society and I particularly focus on its impact on Amish culture and social structure.
- 181 This principle can also be recognised among the Hutterites, as I shall elaborate in chapter 4.
- 182 Amish do not work on Sundays. Amish holidays are Good Friday, Easter Monday, Pentecost Monday, Second Christmas day and Ascension Day. They work on the 4th of July, Independence Day and Labour Day.
- 183 Cited by T.J. Meyers (1994b), 177.
- 184 More and more Amish travel to an Amish-Mennonite community called Pinecraft in Sarasota, Florida.

- Pioneer Trails organises transport by buses. A number of Amish have made Pinecraft their temporary home during the winter months. The Pinecraft community numbers an average of about 3,000 Amish and Old Order Mennonites.
- 185 In some businesses, like groceries or non-food shops, husbands and wives can work together, but in most cases men work in carpentry shops or do construction work, which is a man's world.
- 186 Although in Indiana the rate of defection has decreased, data from the Indiana Amish Directory show that the percentage of males leaving the Amish church is considerably higher than the percentage of women leaving (Meyers, 1994b, 175).
- 187 Sorts of timber used by Amish carpenters are American black cherry, oak (red and white), walnut, maple (regular and hard), pine, poplar, hickory, butternut, willow, and aspen.
- 188 IPAT: Environmental Impact = Population x Affluence x Technology; see section 2.5.3.
- 189 The most conservative Amish have no refrigerator, but cool their food in the basement, cold water springs, or ice blocks during summer and outside during winter (Scott and Pellman, 1999).
- 190 Some of these spinners are manufactured by outside companies but increasingly the Amish are creating their own version of the spinner by taking used Maytag washers, stripping off the electric motor, replacing it with pneumatic air, and using the recycled washer as a high-speed spinner to dry clothing. Written correspondence with D. Kraybill, February, 2011.
- 191 Written correspondence with D. Kraybill, February, 2011.
- 192 Some of the cheese plants are owned by Amish, like 'Golden Ridge Cheese Co-operative', owned by 40 Old Order Amish farmers in northern Iowa and southern Minnesota, producing blue cheese. It was established to keep family farms going. As one of the Amish owners said: "We needed something like this so our children won't have to live on one or two acres and become factory workers. On the one hand, it might be a modern concept, but on the other hand, we needed to have something like the cheese plant to keep our way of life going." (Des Moines Register, October 3, 2004).
- 193 This brings along another danger for the Amish culture, namely the use of the radio. Together with his non-Amish employee, my host listened to the radio all the way long.
- 194 It was even mentioned in 'Het Showpaard', a Dutch magazine for draft horses, Van Vulpen, 2006.
- 195 Between 1999 and 2002, a total of 271 buggy-related accidents were reported by The Diary, an Old Order magazine (Piacentini, 2004).
- 196 The issue of special requirements for slow-moving vehicles has been elaborated by L.J. Zook, 2003.
- 197 During my fieldwork, my host families and their relatives quite often asked for a lift for visits and shops that were further away. This was accepted by the community, because it was only for a limited period.
- 198 Personal conversations with Amish in Lancaster County, 2004.
- 199 Kauffman's uses an Integrated Pest Management program: pest levels are monitored closely and trees are sprayed only at the time and in the amount needed to control an emerging pest outbreak.
- 200 The name 'shoo-fly' probably dates back to the time that pies were left in the open window to cool. The sweet pie attracted many flies, which had to be shooed.
- 201 'Church spread' is a mixture of peanut butter and marshmallow. 'Snitz' is a pie made from dried apples.
- 202 The US average consumption of meat is 221 pounds per year, which means 0.6 pounds per day per person (United States Department of Agriculture, 2006).
- 203 Doubling time for the US is 140 years and for Canada 233 years (Donnermeyer and Cooksey, 2004).
- 204 Interview with an Amish farmer, Lancaster, June 3, 2004.
- 205 The farmer replied that not selling raw milk would violate his religious beliefs because it prohibits him from sharing the milk he produces with others, but this was not accepted by the judge.
- 206 The daughter of my Ohio host, however, had lost two babies because of a genetic disease and had decided not to have any more children. She and her husband adopted a non-Amish baby.
- 207 The Hutterian Brethren Schmiedeleut Conference, 2006, www.hutterianbrethren.com, retrieved December 21, 2010. The Japanese and Nigerian colonies were started by local people and later received the support of the ethnic Hutterites. The Japanese colony is described by J. Hofer, 1985. Palm Grove mission in Nigeria was founded by Schmiedeleut Hutterites. These Hutterites even have a blog documenting their missionary activities: <http://bridge.hutterites.org> (retrieved June 05, 2008) Another group, the Arnoldleut, joined the Hutterites in the 1950s for four years and later again in the 1980s, but were excommunicated in 1990 because they had differing views on fundamental beliefs. In the 1950s, many of these Arnoldleut lived at Forest River Colony, the colony of my field research. This period is still very painful for the older generation of FRC. For more on the Arnoldleut, see also R. Janzen, 2005, and U. Eggers, 1988.

- 208 IPAT: Environmental Impact = Population x Affluence x Technology; see section 2.5.3.
- 209 Forest River is not in all respects representative of Hutterite colony life, for it is unique in its history and is somewhat isolated from other Hutterite colonies. The sources of income of the colony might also not be representative of all colonies. I am aware that the data I found at Forest River do not apply to all Hutterites; they do not even apply to all Schmiedeleut. Therefore, the field research is supplemented with short visits to other colonies, interviews, and literature.
- 210 For a description of the start of Anabaptism, I refer to chapter 3. This chapter is mainly based on the writings of J.A. Hostetler, 1997; W.O. Packull, 1995; J.W. Bennett, 1993; J. Hofer, 2004, and W. Harrison, 1997. See for the specific period of 1578-1619 A. Von Schlachta, 2003.
- 211 These Austrian Anabaptists mainly originated from South Tyrol, which is now part of Italy.
- 212 J.A. Hostetler (1997); D.B. Kraybill and C.F. Bowman (eds.) (2001); J.W. Bennett (1967). The religious basis of the sharing of possessions is described in section 4.3.1.
- 213 The Tyrolean Hutter was not highly educated, but had good leadership qualities. He was a hat maker by profession. He had succeeded George Blaurock, one of the first Anabaptists, after the latter's execution as pastor in the Puster Valley.
- 214 One group was imprisoned in the castle of Passau, where they composed many songs, of which 47 are recorded in the *Ausbund*, the songbook still in use by the Amish.
- 215 Peter Riedemann's Hutterite Confession of Faith, Part 1, 'Buying and Selling', in the edition that is translated and edited by J.J. Friesen, 1999, 149.
- 216 Hutterite pottery is known as Habaner art. Descendants of Hutterites in Slovakia are still called 'Habaner'. The origin of this name is unclear; it might come from the word Haushaben, another name for Bruderhof.
- 217 Peter Walpot, later bishop of the brotherhood, wrote two Hutterite books on education which are still preserved. The first was '*Address to Schoolmasters*' in 1568, and the second '*A Hutterite School Discipline*', in 1578. They were remarkably modern for the 16th century (Friedmann, 1959).
- 218 Andreas Ehrenpreis was an important leader in Sabatisch from 1611-1662. The Ehrenpreis Community Discipline of 1651 is still read every year in Hutterite Colonies.
- 219 Wurz and Waldner belonged to a renewal movement within the Lutheran church, that was active in Carinthia (in present Austria) during the 18th century. Maria Theresa deported 270 of these 'heretics' to Transylvania in 1755 and ironically these heretics renewed the Hutterite community she had persecuted so severely.
- 220 Some Amish Mennonite families from Volhynia joined the Hutterite community for a year, but the differences appeared to be too big and they left.
- 221 To mention some of these internal problems: Matthias Hofer became very extreme about the way people should pray. The Hutterites could not find evidence for this in the old writings and eventually Hofer left the community. In 1780 the community designated Christian Wurz to train as a doctor. He left the community, adopted many 'worldly' things and was excommunicated (Hostetler, 1997).
- 222 Nowadays, Hutterites do not drink much alcohol. Wine may be taken in moderation. The Amish practically prohibit drinking alcohol and only permit a sip in case of a soar throat.
- 223 The Molotschna Mennonites had a Dutch and Prussian background and had arrived in Molotschna in 1803.
- 224 They even had a discussion with President Ulysses Grant. They asked for freedom of religion, exemption from military service and participation in juries, and the right to have their own schools. Back in Russia they received a letter from the President in which he wrote that most requests were state-level issues, but he promised exemption from military service (Hostetler, 1997).
- 225 For a detailed study on the Prairieleut, see R.A. Janzen, 1999.
- 226 United States Census of 1880, Hostetler, 1997, 116.
- 227 Alberta announced a Land Sales Prohibition Act in 1942, banning the sale of land to 'enemy aliens, Hutterites and Doukhobours' (Hofer, 2004). The Doukhobours form a Christian sect of Russian origin. Hostetler remarks that this reference to Doukhobours was no longer relevant since no such colonies existed in Alberta. Hostetler, 1997, 134.
- 228 An example is the Manitoba rule of 1957, which restricts the amount of land Hutterites can hold to 5,120 acres per colony and colonies have to be located at least ten miles from each other.
- 229 In 1992, the Schmiedeleut split into two groups, because of disagreements about Elder Jacob Kleinsasser and about the level of modernity. Both groups are still named Schmiedeleut. The Kleinsasser-Schmiedeleut or the 'Committee Schmiedeleut' (the Oilers, but that is a term of abuse) are much more liberal and are

- moving rapidly in new directions. This is very upsetting for the other group of Schmiedeleut, as well as the Lehrerleut and Dariusleut.
- 230 Although this is the traditional Hutterite conviction, not all members in the colony of my field research would agree with this anymore. They see communal living as important, but not as a necessary condition for being a real Christian.
- 231 Friedmann analyses whether and in what ways the doctrine of the two worlds represents the deepest layer of the Anabaptist outlook. Friedmann, 1961, 92-102.
- 232 The FRC youth held a weekly Bible study, which was tolerated by the minister. In other colonies this would not have been permitted. The youth felt they had little room to share their faith and study fundamental religious questions. In their eyes many Hutterites were "not believers".
- 233 In many colonies the minister still lines the words to the song for the community, a practice originating from the past when Hutterites had no songbooks. Lining means that the minister reads out one sentence, after which the sentence is sung. Hutterites now say that it helps them to sing by ear and functions as practice for huge gatherings like funerals, when there are not enough songbooks.
- 234 Ministers usually have a collection of hundreds of sermons that are carefully hand copied.
- 235 According to the minister, this is not due to a theological reason, but a practical one: "Many ministers work during the day and when they are finished just before Gebet, they have no time left to write a prayer."
- 236 Others are welcome as well, but baptised adults seldom make use of it. Besides the daily Gebet and the Sunday services, adults have no religious education.
- 237 A person not born as a Hutterite who wishes to be baptised also needs confirmation of elders from other colonies.
- 238 J.W. Bennett, 1977, 296, argues that this is in fact a monastic attitude.
- 239 An example of this is the fact that in most colonies the two preachers do not participate in the common meals, but eat in their private homes. This habit goes back to 1537 and contradicts the emphasis on communal living. In FRC, the preacher disagrees with the habit and participates in the communal meal.
- 240 In FRC the men had nominated one of the women as head cook, not because she was a good cook, but because she was the oldest unmarried woman. Eventually an older woman rejoined the colony and she was appointed. The women accepted the procedure and told me: "That's being a Hutterite woman".
- 241 During my field research I asked the German teacher about the role of fathers. He answered that in the first place that is one of providing income. In a Hutterite colony a father should be with his family in the evening. In FRC however, many fathers are 'outgoing', working outside the colony, and come home very late in the evening. When I ask him what is done about it, he replies: "First it has to be recognised as problem."
- 242 A teacher-training program, Brandon University Hutterian Education Program (BUHEP), was set up in 1995. Over 60 Hutterite teachers have now completed their training at Brandon University in Manitoba, Canada.
- 243 Many Hutterite students follow high school by correspondence courses, but in Hutterville Colony, South Dakota, the first Hutterite High School was built at the colony in 1999. Both boys and girls attend this high school.
- 244 Usually birthdays are not celebrated, except for the fifth and fifteenth birthday.
- 245 This can be compared to the practice of 'Rumspringa' as practised by the Amish.
- 246 An overview of the buildings and the plan of my host colony can be found in appendix 3.
- 247 The Hutterite women of FRC thought this was quite practical. In church men, women and children are separated to prevent distraction: when children are seated apart, the mother can direct her attention to the preaching and men are less distracted by female beauty. One of the Hutterite women told me that the meal used to be seen as a spiritual matter and therefore separation of sexes was introduced for the meals as well.
- 248 As an exception, the Japanese Hutterite colony runs an organic chicken farm and organic eggs are a primary source of their colony income. Interview with Patrick Murphy, a Hutterite convert, James Valley Colony, Elie, Manitoba, on February 28, 2005. See also Shimazaki, Hiroshi Tanaka, 2000.
- 249 Hutterites of the Huron Colony even boasted that since their foundation they had destroyed much native wildlife. P. Simpson-Housley, 1978, 148. This is comparable to the classic protestant vision on cultivating wildlife as was common before 1900.
- 250 K. Cobb, 2006, and Western Area Power Administration, 1997. The pump is now developed under the name 'Hydron Module', Colony Series Plus, www.hydronmodule.com (last visited on December 21, 2010).
- 251 Among others, FRC uses Steadfast, Clarify, and Liberty.
- 252 Liberty consists of glyphosate isopropylamine salt and is comparable to Roundup.

- 253 Many Hutterites in this colony were also interested in the history of the area. The Sioux Indians called the valley near the Forest River 'Death valley', since they used to chase bison over the hill into the valley, where they could slaughter them. On FRC property also an old Sioux cemetery has been found. The Sioux exhumed the skeletons and reburied them somewhere else.
- 254 In Forest River Colony adults received \$ 3 per month as pocket money, which was paid twice a year. Thus they received \$ 18 per half year.
- 255 Personal correspondence with professor Rod Janzen, writer on the Hutterites, April 16, 2004.
- 256 The same can be observed regarding the division of the group, when the colony branches out. In the past, division aimed for obtaining an equal balance of males with the necessary job skills to maintain a successful colony. Now, divisions focus more and more on keeping families together. B.B. Ingoldsby, 2001, 389.
- 257 See footnote 250.
- 258 See <http://goosecreek.ca/news/sustainableenergy.pdf>, page 2. Visited December 22, 2010.
- 259 Radio interview with Grant Meikle, Vice President of Marketing and Sales, BioGem Power Systems. Listen or read the transcript at www.innovationalberta.com/article.php?articleid=247, retrieved February 5, 2011.
- 260 This woman has been living at the colony for several years and intends to become Hutterite.
- 261 I have met two persons who have been to Europe. One of them is author and the other is very interested in history. Both had permission from their elders.
- 262 Since FRC men eat considerably more meat than women, the numbers would be higher if this amount were taken into account as well.
- 263 The 1978 Hutterite Cookbook 'Pots of Gold', advises a weekly quantity of meat, fish and poultry of 4-4.5 pounds for women and 5-5.5 pounds for men. This means a yearly 221 pounds of meat for women and 273 pounds for men.
- 264 J.H. Brunt, B. Reeder, P. Stephenson, E. Love, and Y. Chen, 1994; E.H. Schlenker, R.R. Parry, and M.J. McMillin, 1989. Schlenker et al. found that particularly Hutterites of 50 years and older on average weighted significantly more than the control group: Hutterite males 50-59 years averaged 92.1 kg and the control males weighted 82.8 kg. Hutterite males 60+ weighted 89.0 kg, control males 79.2 kg. Hutterite females 50-59 years weighted 78.0 kg, control females 65.7 kg. Hutterite females 60+ weighted 77.7 kg, control females 65.4 kg.
- 265 My hostess even took vitamin B12 pills, which is absolutely unnecessary with a diet containing the amount of meat as calculated in this section.
- 266 The 'in between years' is the period between being a teenager and being an adult, see section 4.3.3.
- 267 B.B. Ingoldsby (2001) states that, to compensate for the decline in population growth, colonies are now splitting when they reach about 100 persons, instead of the previously established 150. Because of the use of technology, fewer people are needed to keep a colony running.
- 268 Because Hutterites do not attend university, doctors are always non-Hutterite.
- 269 Many Hutterites left the Schmiedeleut after the 4 years affiliation of the Arnoldleut or Bruderhof with the Hutterites. Owing to differences in beliefs and conceptions, the Arnoldleut were excommunicated in 1957. After joining the Hutterites for the second time in the 1980s, they were excommunicated again in 1990. In the 1950s, many Arnoldleut lived at FRC and when they left, a number of FRC joined the Bruderhof as well. Also after the conflict within the affiliation of Schmiedeleut in 1992, many families left the Hutterite community (see note 23).
- 270 It seems that because they have been reared in a colony, the outside world presents too many pressures and problems. Many prefer the communal living in a colony after all.
- 271 I did not find data to verify whether this percentage is correct. It certainly reflects a fear and warning expressed by this Hutterite elder and the fact that, indeed, women are not stimulated to say 'no'.
- 272 Interview with Rae, an American lady who considers becoming a Hutterite, March 7, 2005.
- 273 Some of the young Hutterites who joined the bible study group, mentioned in note 232, have now left the colony and joined an evangelical church.
- 274 The canonisation of Francis of Assisi as patron saint of ecologists took place on November 13, 1979. He was already patron saint of merchants and one of the patron saints of Italy. http://en.wikipedia.org/wiki/Francis_of_Assisi (Last visited December 24, 2010).
- 275 The Order of the Friars Minor is called the First Order, the sisters Clare belong to the Second Order and laymen can commit themselves to the Third Order. Members of the First Order use the abbreviation OFM (*Ordo Fratrum Minorum*). *The Poor Clares use the abbreviation OSC (Ordo Sanctae Clarae)*. The different branches of the Franciscan family and their abbreviations are further explained in section 5.2.4.

- 276 At the time of the field study, June 2003, the permanent residents consisted of a brother Capuchin, a Franciscan sister, a professed member of the Order of Julie Postel, a brother of the Third Order and three Protestants.
- 277 Poverello means 'little poor man'.
- 278 Possibly, Celano was ordered to write a biography after Francis' canonisation in 1228.
- 279 Bonaventura was Minister General of the Friars Minor from 1257 till 1274 and is often regarded as second founder of the order. As Minister General, Bonaventure decreed at the chapter in 1266 that all the 'legends' of Saint Francis written before the *Legenda Maior* of Bonaventure should immediately be destroyed. When after his death in 1274 this edict was reversed, much material had been lost. It was not until 1768 that the first copy of the *Thomas Vitae* was discovered. P. Robinson, 1907; H. Nolthenius, 1992.
- 280 The most frequently told story about Francis' name is that his mother named him Giovanni (John) at his baptism, but his father, who returned from France later, changed it into Francesco (Francis). Others state that Francis got this name later, because he often travelled to France for the cloth business.
- 281 "Thus did the Lord grant to me, Friar Francis, to begin to do penance: that when I was exceedingly in (my) sins, to see the lepers seemed a bitter thing to me. And the Lord Himself led me among them and I worked mercy with them. And when I was fleeing from them, because that seemed to me a bitter thing, it was changed for me into sweetness of soul and body; and afterwards I stayed for a little while and (then) I went forth from the world." (Test 1-3).
- 282 The narratives tell that after his conversion, Francis' companions twitted him on his absent-mindedness and asked if he were minded to be married. Francis replied that he was about to take a wife of surpassing fairness, Lady Poverty. This wedding has been beautifully painted by Giotto in the Assisi Basilica.
- 283 This first Rule, the '*Regula Primitiva*,' written in 1209, has been lost, but it is assumed that this Rule was used to write the later Rule of 1221.
- 284 During this crusade, Francis made his famous attempt to convert the Sultan al-Kamil.
- 285 Francis was not the first who objected to the wealth of the church, but he was different in his choice to remain an order under church authority. Church authorities were not comfortable with Francis' radical poverty and feared he might set up a rival and heretical institution.
- 286 Francis was averse to complicated language. However, many brothers within the community searched for a more skilled way of preaching. Francis was aware that he could not forbid all forms of study and granted permission to Anthony of Padua (1195-1231) to study, if he maintained his simplicity. Other famous early Franciscan scholars are Roger Bacon (1214-1294), Bonaventura (1221-1274) and William of Ockham (1288-1347).
- 287 During this period Francis sensed the Passion of Christ deeply inside. Brother Leo described that on the 14th of September, while Francis was praying, he saw a vision of a seraph, after which the five stigmata appeared on his body. In 1224 stigmata were unprecedented and Saint Francis is the first known stigmatised person in Western church history.
- 288 Francis also punished animals for their immoral behaviour. When a sow had killed a lamb, Francis exclaimed: "Alas, brother lamb, innocent animal, you represent what is useful to all mankind! Cursed be that evil beast that killed you; let no man eat of it, or any beast either" (2 Cel. 111). A greedy robin who already had his fill, but still drove his brothers away from the food, was predicted a bad end by Francis. The robin perished by drowning (2 Cel. 47). About a year before his death, Francis was living in a small cell at San Damiano. In this cell mice were annoying him night and day, preventing him from taking a rest and even hindering him in his prayer. Francis seemed powerless against them.
- 289 This is the only story about which Celano remarks that he has heard it from Francis himself and the brothers who accompanied Francis. It was written in 1228. The narrative is also recorded in the Fioretti (14th century) and by the Benedictine Roger of Wendover, with added picturesque and imaginary details. S. Verhey, 1978, 17-18. See also R.D. Sorrell (1988), Appendix III 'The Sermon to the Birds in the Early Sources'.
- 290 Interview with Loek Bosch OFM, San Damiano, May 7, 2006.
- 291 Although only 2 pieces of parchment with Francis's handwriting have been preserved, it is presumed that the other 29 texts were written by Francis himself, often with the help of others, or dictated by him. Some texts form a composition of bible verses. Appendix 4 not only sums up the texts, but also the abbreviations as used in this chapter.
- 292 Papal approval concludes the development of the Rule, which is hereafter no longer to be improved, but to be explained. The Rule of 1223 has always been treated with honour, which changed under influence of Paul Sabatier, biographer of Saint Francis in 1894, who sharply distinguished the Rules of 1221 and 1223.

- According to him, the first has a spiritual character carrying the original charisma of the Saint, while the latter has a legal character and would have been imposed by the Pope. Freeman argues that this distinction in valuation cannot be confirmed by the old sources and Francis' testament. G.P. Freeman, 2004, 75-76.
- 293 The abbreviation EpFid refers to a specific writing of Saint Francis. The writings, as well as their abbreviations, can be found in appendix 4.
- 294 The verse on pardon and peace was probably added later, in response to a conflict in Assisi, while the verse on Sister Death is thought to have been added just before his death. H. Nolthenius, 1992, 184 and 193.
- 295 For an extensive description of biblical links and traditional attitudes that can be found in the poem I refer to R.D. Sorrell (1988).
- 296 To mention some authors: Doyle calls the Canticum "a prime example of mystic poetry which reveals his experience of the fundamental unity and coherence of reality." (Doyle, 2002, 156). Leclerc emphasises a reconciliation of mankind with all of his being and with Being itself in all its fullness (Leclerc, 1974, chapter 14). Rotzetter recognises a Christogram in the Canticum, by drawing lines from the first to the last sentence, forming the letter I and X, indicating Jesus Christ. The first sentence contains five times the letter O, and the last sentence five times the letter A. The number five refers to the five wounds of Christ and the letters O and A indicate the Alpha and Omega as mentioned in Revelation. The ideas of A. Rotzetter are further elaborated in E. van den Goorbergh and T. Zweerman, 2002, 216-218.
- 297 See for example the stories as described in 1 Cel 80, 81 and 2 Cel 165.
- 298 In the Celano biographies we can find many examples of such stories, like the story that Francis always walked over stones very carefully, because of Jesus who is called the 'Cornerstone'. Nolthenius emphasised that Francis had special love for gentle animals and in the first place for lambs, because Jesus is called the Lamb of God. H. Nolthenius, 1992, 167.
- 299 This is laid down in the bull 'Quo elongati'.
- 300 The Conventuals were approved as an official branch by papal bull in 1322.
- 301 The Spirituals mainly lived in Provence (south of France) and in Central and North Italy.
- 302 In 1323, a papal bull was accepted stating that anyone who claimed that Jesus and the apostles had had no common property, a view held by the Spirituals, would be convicted as a heretic, and this was followed by other controversies on the issue of poverty.
- 303 In 1334 Giovanni de Valle asked for permission to live in complete poverty in the hermitage Brogliano. His congregation was suppressed by the Franciscan general chapter in 1354, but reestablished in 1368 by Paolo dei Trinci. Usually this latter date is seen as the start of the Observant movement.
- 304 The performance of Luther at first impressed the Franciscan Brothers. They hoped he would reform the church. However, when Luther turned against papal authority and wanted to abolish some sacraments, they became fierce opponents of Luther.
- 305 Data on OFM: <http://www.catholic-hierarchy.org/diocese/dqofm.html>, data on OFM Conv: <http://www.catholic-hierarchy.org/diocese/dqofc.html>, and data on OFM Cap: <http://www.catholic-hierarchy.org/diocese/dqfmc.html>. Last visited on May 7, 2011.
- 306 The Poor Clares later divided into two branches: the Colettines and the Urbanists. Besides the Poor Clares, the congregations of the Franciscan Sisters, the Capuchin Sisters and the Penitents-Recollectines developed as part of the Second Order of Saint Francis.
- 307 Data from Poor Clare Sisters, <http://poorclare.org/>. Last visited on February 10, 2011.
- 308 This Third Order was officially approved by Pope Nicholas IV in 1289.
- 309 Elzinga, who studied the foundations of Stoutenburg, talks about "certain alienation with regard to the Franciscan family" (Elzinga 2002, 20). In Stoutenburg Franciscan spirituality functions as an umbrella under which they create room to experiment with many other sources of inspiration. In doing so, the community finds itself at the edge of the Dutch Franciscan Order.
- 310 Interview with Professor G.P. Freeman of the Dutch Franciscan Studies Centre, November 10, 2005.
- 311 Idem.
- 312 Interview with Arnulf Sibbing OFM Cap, Enschede, June 17, 2003.
- 313 The incarnation and suffering of Jesus were significant examples for Francis, and he had a deep love for the celebration of the Eucharist as encounter with the suffering Christ. In this Francis was a man of his time, for gradually the emphasis on Christ as unimpeachable victor was substituted by the image of a suffering and human Christ. This was particularly visible in the arts. The cross of San Damiano (1100) still portrayed Christ as ruler on the cross, not hindered by any pain. The art of Francis' time more and more depicted a suffering Christ.

- 314 He wished to be the least among the brothers, as expressed in his letter headings: "Friar Francis, a vile and fallen man, your tiny little servant" (EpOrd), "Friar Francis, your tiny and despised servant in the Lord God" (EpRect), "Friar Francis, the least of the servants of God" (EpCust II).
- 315 Guidelines of the Dutch Franciscan Movement, chapter 2. http://www.franciscaansebeweging.nl/fb_leidraad.htm. Last visited on February 10, 2011.
- 316 In his writings, Francis also advocates a daily call or sign to stimulate people to pray, as in EpRect: "And to confer upon the people committed to you by the Lord such an honor, that every evening there be announced by a messenger, or by another sign, at which praises and thanks are to be returned to the Omnipotent Lord God by all the people." Presumably Saint Francis, who had been to the Holy Land, copied this from the practice of the Islamic muezzin, calling people to prayer.
- 317 See section 6.3.1 on Benedictine religious worldview, religion and rituals.
- 318 *Lectio divina* is an activity of careful, attentive, and contemplative reading of and reflecting on the bible or other Christian writings. See also section 6.3.1.
- 319 Interview with Loek Bosch OFM, San Damiano, May 7, 2006.
- 320 See the stories on the life of Saint Francis written by Celano, Bonaventura and the Fioretti.
- 321 Interview with Loek Bosch OFM, San Damiano, May 7, 2006.
- 322 Interview with Sister Imme OSC, Megen, July 8, 2009.
- 323 Interview with Elles Nap, Stoutenburg, January 14, 2003.
- 324 Guidelines of the Dutch Franciscan Movement, chapter 2. http://www.franciscaansebeweging.nl/fb_leidraad.htm. Last visited on February 10, 2011.
- 325 "O sublime humility! O humble sublimity, that the Lord of the universe, God and the Son of God, so humbles Himself, to hide Himself on behalf of our salvation under the limited, little form of bread! See, friars, the humility of God and "pour out your hearts before Him" (Ps 61:9); humble also yourselves, so that you may be exalted by Him (cf. 1 Pt 5:6; Jm 4:10). Therefore keep nothing of yourselves for yourselves, so that He may receive you whole, He who manifests Himself wholly to you." (EpOrd).
- 326 Interview with Sjoerd Hertog OFM, Megen, November 22, 2005.
- 327 Interview with Sister Imme OSC, Megen, July 8, 2009.
- 328 See also Elzinga (2002).
- 329 The word 'habit' comes from *habitus*, which means dwelling and refers to a dwelling in yourself. See also note 435.
- 330 Interview with Wim Pot OFM, Megen, November 24, 2005. See also Wim Pot, 2005.
- 331 The Blessing of Brother Leo says: "May the Lord bless you and keep you! May the Lord show His face to you and be merciful to you! May the Lord lift up His countenance upon you and give you peace! God bless you Brother Leo!"
- 332 Interview with Sjoerd Hertog OFM, Megen, November 22, 2005.
- 333 *Stabilitas loci* means stability of place and is further elaborated in section 6.3.2.
- 334 Interview with Sjoerd Hertog OFM, Megen, November 22, 2005.
- 335 Interview with Dick Smeijers, resident of De Wonne, Enschede, June 20, 2003.
- 336 Sister Agatha, cited in Chiara Bots OSC, 2008, 38.
- 337 Sister Paula, cited in Chiara Bots OSC, 2008, 81.
- 338 Interview with Bette Westera, Stoutenburg, January 20, 2003.
- 339 Ida, a mother living in De Wonne, described the dilemma that sometimes she had to choose between her family and the community. An example is the celebration of Christmas, when the children, who are grown up, like to spend time with their parents, while the community has organised an activity as well.
- 340 Conversations during the field study in Megen, 2005.
- 341 "Since a large part of mankind is still in bondage to need, injustice and oppression, the friars, along with all people of good will, are to devote themselves to establishing a society of justice, liberation and peace in the Risen Christ. They are to investigate carefully the causes of each situation, and take part in undertakings of charity, justice and international solidarity. They are also to work humbly and staunchly in the bosom of the Church and of the Order, so that the rights and human dignity of all may be promoted and respected. After the example of Saint Francis, whom the Lord led among lepers, each and every friar is to give preference to the "marginalised", to the poor and oppressed, to the afflicted and infirm; rejoicing when they live among them, they are to show them mercy (Articles 96 and 97, OFM, 2010).
- 342 AOW stands for *Algemene Ouderdomswet* (General Retirement Pensions Act).
- 343 Interview with Bette Westera, inhabitant of Stoutenburg, January 20, 2003.

- 344 “And let the friars, who know how to work, work and exercise the same art, which they know, if it has not been contrary to the salvation of (their) soul and one will be able to work at it honestly. For the prophet said: “Laborers, you shall eat of your own fruits; blessed are you and well it shall be for you (Ps 127,2) and the Apostle: “Let him who does not want to work,” not “eat” (cf. 2 Th 3,10) (...). And for (their) work let them be able to receive every necessary thing besides money. (And when the necessity has arisen, let them go about for alms as the other poor (do).” (RegNB 73v.v).
- 345 Interview with Arnulf Sibbing OFM Cap, Enschede, June 17, 2003.
- 346 Idem. See also: A. Sibbing, 1995.
- 347 Interview with Wim Pot OFM, Megen, November 24, 2005. See also Wim Pot, 2005.
- 348 “Indeed concerning the wages of labor, let them receive on their (own) behalf and that of their brothers the things necessary for the body, excepting coins or money, and this humbly, · as befits the servants of God and the followers of most holy poverty.” RegB 5.
- 349 Interview with Marco Ganzeman, inhabitant of Stoutenburg, January 14, 2003.
- 350 See also Rene Dubos, 1974 and Koos Leemker, 2002, 58. The Benedictine vision on nature and agriculture will be discussed in section 6.4.2.
- 351 Hans van Asseldonk, 1989
- 352 Interview with Sister Ancilla OSC, Megen. Cited in: Chiara Bots OSC, 2008, 104.
- 353 Interview with Sister Imme OSC, Megen, July 8, 2009.
- 354 Interview with Sister Ancilla OSC, Megen. Cited in: Chiara Bots OSC, 2008, 104.
- 355 Interview with sister Johanna, OSC. Cited in: Chiara Bots OSC, 2008, 69.
- 356 She refers to the story of 2 Cel 165, in which Saint Francis prevents the total cutting of a tree, for it needs to be able to bud again. Further, he encouraged the gardener to grow bushes and flowers, colourful and fragrant, to remind people of the Creator and paradise. Interview with Tini Brugge, Almen, December 28, 2005. See also T. Brugge, 2006.
- 357 Although most possessions were not allowed, RegNB 7,9 provides for tools: “And let it be licit for them to have iron tools and instruments suitable for their art.”
- 358 <http://www.stoutenburg.nl/engels.htm>. Last visited on October 1, 2009.
- 359 IPAT: Environmental Impact = Population x Affluence x Technology; see section 2.5.3.
- 360 Raw vegetables, for example, did not appear on the menu for a long time. In the 1980s these gradually entered the monasteries.
- 361 Interview with Sister Imme OSC, Megen, July 8, 2009.
- 362 Communication with Sjoerd Hertog OFM, December 11, 2005.
- 363 These numbers date from 2002.
- 364 This number dates from 2002.
- 365 Interview with Loek Bosch OFM, San Damiano, May 7, 2006.
- 366 During my stay, my car has been used for the community as well.
- 367 Interview with Cocky van Leeuwen, Stoutenburg, January 22, 2003.
- 368 Interview with Bette Westera, Stoutenburg, January 20, 2003.
- 369 Christmas was very important for Francis. Both 1 Cel 30 and Bonaventure tell the story of Saint Francis making presumably the first ‘living’ nativity scene in order to help the local villagers to commemorate the nativity of Jesus. People were dressed in biblical robes and real animals positioned outside a cave on the outskirts of Greccio. Jesus was represented by a life- sized wax figure.
- 370 Chiara Bots OSC, 2008, 13-17.
- 371 Interview with Loek Bosch OFM, San Damiano, May 7, 2006.
- 372 Interview with Arnulf Sibbing OFM Cap, Enschede, June 17, 2003. See also A. Sibbing, 1995.
- 373 Interview with Cocky van Leeuwen, Stoutenburg, January 22, 2003.
- 374 Interview with Carolien Looman, Stoutenburg, January 16, 2003.
- 375 Van Zuthem, C. De ommkeer. ‘Ik heb opnieuw leren genieten’ in: Tubantia, 27 maart 1999
- 376 Interview with Loek Bosch OFM, San Damiano, May 7, 2006.
- 377 Interview met Koos Leemker, Wijchen, September 15, 2005.
- 378 Interview with Sjoerd Hertog OFM, Megen, November 22, 2005.
- 379 Interview with Tini Brugge, Almen, December 28, 2005.
- 380 This has also been suggested by R. Dubos, 1973 and Van Asseldonk, 1988.
- 381 These three orders are usually abbreviated as follows: OSB (Order of Saint Benedict), Ocist (Order of Cistercians), and OCSO (Order of Cistercians of the Strict Observance, also known as Trappists).

- 382 Conversation with Brother Paolo OSB, Vallombrosa, April 27, 2006.
- 383 A more detailed description of the fieldwork among Benedictine and Trappist monasteries can be found in section 2.6.2. One of the reasons for going to Italy was to investigate whether there were many differences among Benedictine monasteries in different countries. Like Dutch Benedictines, abbot Louis of Vallombrosa assured me that differences in Benedictine life were marginal and not related to the country, but to local circumstances and choices.
- 384 Both Lioba Monastery and the Benedictine Saint Adelbert Abbey are located in Egmond. In order to prevent confusion, I will write about Lioba when I mean the Benedictine Sisters and mention Egmond when I mean the Benedictine Brothers.
- 385 Interestingly, this monastery was built on the same plan as the monastery of San Damiano, where the Christ at the cross spoke to Saint Francis. See section 5.2.1.
- 386 Agriculture and nature conservation are still important elements of many Trappist communities worldwide and will be further discussed in section 6.4.2.
- 387 Gregory the Great, chapter 1.
- 388 In Enfide Benedict's first described miracle took place, restoring an earthenware wheat-sifter belonging to his old nurse. The reputation that resulted from the miracle made Benedict escape social life. Gregory the Great, chapter 1.
- 389 Idem, chapter 3. Gregory narrates that when the poisoned wine was given to Benedict, he made the sign of the cross in order to bless the wine, and the glass broke in pieces. In reference to this story, Saint Benedict is often depicted with wine or a broken glass.
- 390 For his Rule, Saint Benedict probably made use of an anonymous Rule, the 'Regula Magistri'. He might also have been influenced by earlier monastic regulations given by Saints Pachomius, Basil and Augustine. See also section 6.2.2.
- 391 Saint Anthony, who lived in the 3rd and 4th centuries, is presumed to be the founder of Christian monasticism. Following the Desert Fathers, he withdrew from the world and lived in the Egyptian desert ('monk' originates from the Greek word 'monachus', meaning 'alone' or 'wandering'). He instructed monks for five years, but spent the last 45 years of his life in seclusion. Besides the hermitical monasticism, the more communal monasticism arose during this period as well.
- 392 These synods were held in 802, 816, 817 and 818. S. Hilpisch, 1960.
- 393 In addition, Benedictine monks frequently acted as counsellors of kings during the early Middle Ages, influencing the political history of many European countries. Especially during the 11th and 12th centuries, Benedictine abbots of Germany, France and Britain became important political leaders in their country.
- 394 The Cistercians were founded by a group of Benedictine monks from the French Abbey of Molesme in 1098, but the new monastery barely survived. This changed in 1113, when Bernard of Fontaines joined the community. He is often regarded as the second founder of the Cistercians and became known as abbot Bernard of Clairvaux. He left a huge spiritual legacy, many sermons, and mediaeval mystical treatises.
- 395 The main centres were the monasteries of Beuron (Germany) and Solesmes (France).
- 396 Later Saint Benedict became 'Co-Patron' and shared the title with the saints Cyril and Methodius, who represented the eastern part of Europe.
- 397 See for example the Rule of Saint Benedict, chapters 35, 40 and 48.
- 398 See for the number per country www.benedictine-oblates.org/mondo-en.php. Last visited on May 7, 2011.
- 399 Milroy OSB states that the increased lay involvement in Benedictine life need not be surprising. Benedict was a layman himself, and only later in monastic tradition was it customary for monks to become priests. "The Rule represents an attitude to the search for God which is, in all its basic features, lay rather than clerical." D. Milroy, 2004, 324.
- 400 To give some examples of books on Benedictine management and leadership: A. Grün, 2006, *Menschen führen - Leben wecken: Anregungen aus der Regel Benedikts von Nursia*; Q.R. Skrabec, 2003, *St. Benedict's Rule for Business Success*; D. Longenecker, 2002, *What St. Benedict Can Teach You About Business Success*.
- 401 As characteristic values of Benedictine management Anselm Grün OSB (2006) mentions wisdom, maturity, modesty, humility, steadiness, justice, decisiveness, frugality, fear for God, and paternal authority.
- 402 Sister Germana OSB. Cited in E. Bollen, 1985, pag. 63.
- 403 Interview with Abbot Louis OSB, Vallombrosa, April, 25, 2006.
- 404 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 405 Abbot Gerard Mathijssen OSB of Egmond, cited in E. Bollen, 1985, pag. 94.

- 406 'RB 48' means Rule of Benedict, chapter 48. All citations from the Rule of Saint Benedict come from Patrick Barry OSB, 'Saint Benedict's Rule. A New Translation for Today', 2004.
- 407 Monastery of Saint Lioba, *Chronicles of the Benedictine Sisters*, Egmond. No date of publication.
- 408 Brother Frans Berkelmans OSB of Egmond, cited in E. Bollen, 1985, pag. 99.
- 409 Brother Frans Melkert OSB of Egmond, cited in E. Bollen, 1985, pag. 134.
- 410 This originates (RB16) in the words of psalm 118 (119): 62 and 164: "In the middle of the night I arose to praise you" and "I have uttered your praises seven times during the day." Vigils are often experienced as a special hour, for the nightly silence and darkness confront people with the depths of their existence. Lauds is held at twilight, symbolising the battle between dusk and light. Prime, Terce, Sext, and None are called 'little hours' for their short liturgy. Sext is related to Christ's crucifixion and salvation. Vespers is celebrated at the end of the day, when the chapel is lighted, symbolising the 'infinite light' of God. Compline marks the completion of the day, after which the monastery remains silent until Lauds.
- 411 The time schedules of five monasteries from the field study can be found in appendix 6.
- 412 Besides this mainstream Benedictine view on nature, other views can be found in the Benedictine family as well, as for example shown by the contemplative Trappist monk Thomas Merton in his book 'When the Trees Say Nothing, Writings on Nature'. To Merton God has never been separate from the natural world. A dualistic separation between the spiritual and the material world will not be found in his writings.
- 413 Bron Taylor and Jeffery Kaplan, 2004. *The Encyclopedia of Religion and Nature – The Benedictine Tradition*.
- 414 Interview with Sister Zoë OSC, Egmond, December 21, 2005.
- 415 Interview with Father Malachias ocsso, Echt, January 4, 2007. See also Malachias (1997).
- 416 Interview with Father Malachias ocsso, Echt, January 4, 2007.
- 417 During the 12th and 13th centuries, the mendicant orders like the Franciscans commenced, emphasising mobility and flexibility. These orders dropped the vow of stability and introduced the three 'Evangelical counsels' of poverty, obedience, and chastity, which have become the vows for many orders and religious congregations since.
- 418 Andrew Peers ocsso, weekend on agriculture and spirituality, Zundert, September 10-12, 2004.
- 419 In his Rule, Benedict is also considerate: "What we mean to establish is a school for the Lord's service. In the guidance we lay down to achieve this we hope to impose nothing harsh or burdensome. If, however, you find in it anything which seems rather strict, (...) do not let that frighten you into fleeing from the way of salvation" (Prologue).
- 420 See chapter 4 on the Hutterite worldview and Communal Living.
- 421 Interview with Sister Zoë osb, Egmond, December 21, 2005.
- 422 Interview with Brother Johan, in: Abdij Maria Toevlucht, 2000, 175.
- 423 The other steps are respectively: (5) confessing all evil thoughts and deeds; (6) accepting wretched and inadequate conditions; (7) seeing oneself as of less importance than others; (8) following the monastic rule and example of seniors; (9) refraining from unnecessary speech and guarding silence; (10) avoiding empty laughter; (11) speaking gently, seriously, briefly, and reasonably, for "the wise are to be recognised in words that are few"; and (12) showing bodily movements free of any hint of arrogance or pride.
- 424 RB 31 prescribes that a cellarer "should be wise and mature in behaviour, sober and not an excessive eater, not proud nor apt to give offence or inclined to cause trouble, not unpunctual, nor wasteful but living in the fear of God and ready to show the community all the love a father or mother would show to their family."
- 425 Interview with Sister Zoë OSC, Egmond, December 21, 2005.
- 426 Although Saint Benedict demands a radical hospitality from the monks and nuns, he also provides some precautions to safeguard the rest in the monastery. A specific member of the community must be assigned to look after the guests and the guests should have a separate kitchen, to prevent disturbance of monastic daily life. All the monasteries I visited had a specific guest brother or sister and a separate kitchen and dining room for guests.
- 427 By doing manual labour, monks find themselves "in the best monastic tradition if the community is supported by the work of their own hands. It is just what our fathers did and the apostles themselves" (RB 48, 7-8).
- 428 RB 48, 24-25 also underline moderation in the demands made on the community to protect those with a weaker constitution: "As for those who are sick or too frail for demanding work, they should be given the sort of work or craft which will save them from idleness but not burden them with physical work that is beyond their strength."

- 429 In his book *The Rule of Benedict for Beginners: Benedictine Spirituality for Daily Life*, oblate Wil Derkse describes how this bell has influenced his experience of time and writes about the 'art of starting' and the 'art of stopping', even when the work has not been finished. The bell helps people to make a new focus.
- 430 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 431 The word 'abbot' comes from the Hebrew word 'Abba', meaning 'Father'.
- 432 Anselm Grün, 2006.
- 433 Interview with Brother Cornelis OCSO, Zundert, March 21, 2007. See also Abdij Maria Toevlucht, 2000.
- 434 Brother Ruys OSB of Egmond, cited in E. Bollen, 1985, pag. 127.
- 435 The word 'habit' comes from habitus, which means dwelling and refers to a dwelling in yourself, in silence, in your inner cell. Abdij Maria Toevlucht, Zundert, 2000, 93. Usually Benedictine monks wear a black habit, Cistercians wear a white habit and Trappists wear a black with white habit. Nonetheless, the Benedictine nuns in Citerna and the Lioba Monastery, as well as the Trappists in Zundert, wear a grey habit.
- 436 Abdij Maria Toevlucht, Zundert, 2000, 147.
- 437 There are many tasks in a monastery, such as librarian, cantor, porter, driver, guest brother, warden, farmer, baker, cook, prior, gardener, laundryman, male nurse, electrician, plumber, painter, tailor, organist, novice teacher, cellarer, undertaker, smith and secretary. Abdij Maria Toevlucht, Zundert, 2000.
- 438 In the 11th and 12th centuries especially the number of lay brothers increased. Owing to population growth, many families did not have the opportunity to find work for all their sons. Becoming a lay brother was a way to escape dependence on the landlords. Saint John Gualbert of the Abbey of Vallombrosa was among the first to systematise the institution of lay brothers for secular businesses, and it is assumed that it was largely popularised by the Vallombrosans. The term *conversi* occurs for the first time in Abbot Andrew of Strumi's *Life of St. John*, written at the beginning of the 12th century. R. Webster, 1912.
- 439 The abbey of Ter Duinen in Flanders probably had the biggest number of *conversi*. Around the year 1300, about 350 *conversi* and 180 *monachi* could be found here (Abdij Onze Lieve Vrouw van Sion, 2002, 19).
- 440 One of the reasons was the decline in population owing to disease. Also, the flourishing cities offered new opportunities for men who might have become *conversi*. Another reason was the attraction of the new mendicant orders.
- 441 In 1953 the male Cistercians of the Strict Observance counted 4,312 monks, among which 1,746 *conversi*. *Conversi* were particularly prominent in monasteries in Asia, the United States and Ireland. Abdij Onze Lieve Vrouw van Sion, 2002, 71.
- 442 Abbot Gerard Mathijsen, cited in E. Bolen, 1985.
- 443 Bernard of Clairvaux was an important abbot within the Order of the Cistercians in the 12th century. See also footnote 394.
- 444 The survey mentions the Trappist Monastery at Conyers, Georgia, which converted 700 acres of land from swamp into wetlands. A Trappist Monastery in Indonesia dedicates a quarter of its land as a nature reserve. A monastery in Australia has been replanting five kilometres of river frontage damaged by overgrazing since 1840. The Trappistine monastery at Whitethorn, California, has preserved 1200 acres of old-growth redwoods. Monasteries in Ireland, New Zealand, Hong Kong, Canada, Iowa, Oregon, Nigeria and Eritrea have undertaken reforestation projects. Trappists in Utah have preserved 120 acres of rangeland. Thomas Splain, 2005.
- 445 www.abtei-fulda.de/garten/gartenbau.php. Last visited on February 12, 2011.
- 446 P. Evers et al., 2006; I.C.J.M. Janssen, 2000.
- 447 See also their website <http://www.livarvarken.nl/english/>, last visited on February 12, 2011. Owing to a growing demand for Livar-meat, pigs are now kept in other locations as well. Since 2007 the Abbey has been the official supervisor for Livar regarding the ethical, moral and social aspects of Livar pig farming.
- 448 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 449 The Dutch word for stewardship, 'rentmeesterschap', has the word for interest, 'rente', in it.
- 450 Abdij Maria Toevlucht, Zundert, 2000.
- 451 The monastery of Zundert is located in the Dutch EHS, meaning 'Ecological Main Structure'. In 1990, the Dutch government presented a Nature Policy Plan in which it indicated several areas in the Netherlands which together should form a structure of connected natural areas. In these EHS-areas farmers can choose either nature conservation or a combination of agriculture with nature conservation.
- 452 IPAT: Environmental Impact = Population x Affluence x Technology; see section 2.5.3.
- 453 Oomen Architecten BV / Havermans, Joosten, Van Sambeek, 2004.
- 454 Interview with Brother Cornelis OCSO, Zundert, March 21, 2007.

- 455 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 456 Interview with Sister Zoë OSC, Egmond, December 21, 2005.
- 457 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 458 Interview with Sister Zoë OSC, Egmond, December 21, 2005.
- 459 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 460 In 1476 Pope Sixtus IV authorised the General Chapter and the abbot of Cîteaux to adjust the prohibition on eating meat. Soon the abbeys got so many concessions, that just a few decades later a complete abstinence from meat belonged to the past. In the 17th century the ban on eating meat was brought back again at the rise of the Trappist movement. Abdij Maria Toevlucht, 2000, 170.
- 461 See for the number per country www.benedictine-oblates.org/mondo-en.php. Last visited on February 12, 2011.
- 462 Interview with Sister Mathilde OSB, Cîteaux, May 2, 2006.
- 463 Conversation with Sister Oeachsi, Egmond, December 2005.
- 464 It need not be surprising that the clock was invented in a Benedictine monastery, because the separate hours for prayer, study and work are of great importance. Before the invention of the clock, the community estimated the hours and used a 'timetable' based on the length of the day. Therefore, during winter the monastics had shorter hours than during the summer.
- 465 The general website on Benedictine Life, www.osb.org, is hosted by Saint John's Abbey, Minnesota, which can be found at www.saintjohnsabbey.org. Saint John's Abbey is very up to date on internet and even added 'The Abbey Webcam'. Last visited on February 12, 2011.
- 466 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 467 Idem.
- 468 Interview with Brother Cornelis OCSO, Zundert, March 21, 2007.
- 469 Interview with Father Malachias OCSO, Echt, January 4, 2007.
- 470 Science, 1967, 1203-1207.
- 471 However, in the last decades the average family size has been gradually decreasing, which appears to be more a consequence of changes within the community, like the change of occupations and increase of technology, than a deliberate policy.
- 472 This is based on the distinction made by social psychologist Rokeach (1973) in his 'Rokeach Value Survey'.
- 473 Hutterites base the idea of community of goods on the Bible book of Acts 2:44-47 and 4:32-35, describing the early Christians who held all things in common, and on John 12, saying that Jesus and the disciples shared everything. See section 4.3.1.
- 474 Where birth rates are going down, it usually coheres with a growing openness to the outside world, leading to an increase of emancipation among Amish and Hutterite women. Still, the number of children remains relatively high.
- 475 My Amish host for example gave up farming and became a tree trimmer. The farm next to his parents was thought to be sold and when he would be asked, my host would agree to buy it, although he preferred to stay in his present house and to continue his tree business. He would do it, out of respect to his parents and tradition. In the end, the house appeared not to be for sale and my host could remain in his place.
- 476 This brand is Livar, see section 6.4.2.
- 477 FSC is an abbreviation of 'Forest Stewardship Council', which is a non-profit organisation that sets standards to make sure that forestry is practised in an environmentally responsible and socially beneficial manner.
- 478 Gyrovagues were monks who kept on travelling, never committed themselves to an order, and were mainly oriented to their own desires. Saint Benedict describes the sarabaites and gyrovagues in the first chapter of his Rule, to contrast them with monks who choose stability. See also section 6.3.2.
- 479 This idea is also subscribed to by Peter Harris, founder of A Rocha, an international Christian organisation for nature conservation: "We became convinced that it was local belonging and involvement that led to the best ideas for the conservation of the area and the benefit of the community. So as A Rocha began to take root in other parts of the world, we determined that each person who became involved internationally should be based in a local community for his or her work." (Harris, 2008, 129).
- 480 De Waal, in 'The Benedictine Handbook', 2003, page 305. She is a scholar in Benedictine traditions.
- 481 Interestingly, Hutterites retire after turning 50, after which age they can choose how much and what kind of work they prefer to do in the colony. See section 4.3.3.
- 482 The foundations and development of this movement are laid down by Juliet B. Schor in her two books: *The*

Overworked American' (1992), and *'The Overspent American'* (1998).

483 The Millennium Ecosystem Assessment, 2005.

484 MNP is the Dutch abbreviation of Netherlands Environmental Assessment Agency.

485 This is also expressed in the Earth Charter, a declaration of fundamental principles for building a just, sustainable, and peaceful global society for the 21st century, which states: "We must realize that when basic needs have been met, human development is primarily about being more, not having more". The Earth Charter is created by a global civil society and endorsed by thousands of organisations and institutions. The full text, as well as further information, can be found at the website www.earthcharter.org (viewed December 15, 2010).

486 Besides, much edible food in the Western World is wasted. In the United States, food waste has progressively increased to almost 40% (Hall et al. 2009). Food is wasted during the processes of production, processing and retail, but about 14% of food purchases are thrown away by households. Worldwide about 25% of food produced is wasted, while it is often still eatable. Besides the social and economic impact, food waste also contributes to excess consumption of freshwater and fossil fuels which, along with methane and carbon dioxide emissions from decomposing food, impacts global climate change (Hall et al. 2009).

487 The notion and terminology of 'New Monasticism' has been developed by Jonathan Wilson in this book *Living Faithfully in a Fragmented World* (1998), in which he built on the ideas of the philosopher Alasdair MacIntyre who ended his book *After Virtue* (1981) with the call for a new Saint Benedict. The publication of a cover story about the movement in *Christianity Today* by Rob Moll in 2005 and the book *The Irresistible Revolution: living as an ordinary radical* (2006), written by Shane Claiborne, made the movement widely known. See also www.newmonasticism.org (viewed May 1, 2010).

488 Eco-Congregation is a project of A Rocha. See also <http://ecocongregation.org> (Retrieved December 11, 2010).

489 See <http://www.northumbriacommunity.org> (Viewed December 3, 2010). This community is related to the movement of New Monasticism and adheres to values such as community, hospitality and moderation.

490 CSA consists of a community of individuals supporting a farm operation. See for further information on the CSA concept: Lizio, W. and D.A. Lass, (2005).

491 In the field of nutrition, an interest in locally produced food is growing. In the US, farmers' markets increased from 1,755 markets in 1994 to 4,385 in 2006. (US National Directory of Farmers Markets, <http://www.ams.usda.gov> (viewed January, 2008). Furthermore, (peri-) urban agriculture is becoming more popular in Canada, the United States and Europe (Van Veenhuizen, 2007, ETC-Urban Agriculture, FAO). Carolyn Steel's book *'Hungry City'* (2008) also added to the movement for urban agriculture and the development of food policies.

492 In the Netherlands, examples of such green districts can be found in Utrecht (De Kersentuin), Culemborg (EVA-Lanxmeer) and Apeldoorn (Groot Zonnehoeve).

Appendix 1 Overview of surveys on religion and environmental behaviour

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern (EC)	Env. behaviour (EB)	Conclusions
Ester (1979)	N = 1460. Dutch adults from a random sample survey.	Church membership, frequency of attendance, participation in activities and giving money.	Religious values and the importance of several religious ideas.	Many questions about EA, EC, willingness to pay and willingness to take action.	Participation env. action, households, economical action, nature-oriented behaviour and transport.	Church involvement and theological beliefs seem to be not related to EB. No significant relation between denomination and behaviour. Incongruence between attitude and behaviour.
Hand & Van Liere (1984)	N = 806. Mail survey of Washington State residents, 1976.	2 items: religious preference and church attendance.	2 items from the NEP-scale: 'man-kind was created to rule over nature' and 'plants and animals exist primarily to be used by humans'	Five multi-item measures of environmental concern and importance of 11 state programs and government regulation.	No items on EB.	The results indicate support for the view that Judeo-Christians are generally more committed to the mastery-over-nature orientation than non-Judeo-Christians, but that this commitment varies considerably among denominations.
Shaiko (1987)	N = 3128. Members of environmental groups, 1978.	1 item: affiliation with an organized Judeo-Christian religion (Protestant, Catholic, Jewish).	1 item from the NEP-scale: 'I believe that plants and animals exist primarily for man's use.'	Response to four statements about nuclear power, runaway technology, industrial pollution and wilderness protection.	No items on EB.	Judeo-Christian environmentalists are found to be opposed to mastery-over-nature orientations, though not as strongly as non-Judeo-Christians. Adherents of both perspectives are able to coexist within the environmental movement.

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern(EC)	Env. behaviour (EB)	Conclusions
Eckberg & Blocker (1989)	N = 300. Telephone survey of Tulsa residents, Oklahoma, 1985.	2 items: religious affiliation and importance of religion.	1 item: beliefs about the Bible: 'actual word of God, inspired word of God or book with legends'.	Twelve items to measure concern with environmental issues. Eight were general environmental issues and four specific for Tulsa area.	No items on EB.	Only belief in the Bible predicted scores on all indexes of environmental concern and did so in the direction expected by White's thesis; this occurred independently of the effects of background items.
Ester & Seuren (1992)	Data from the European Values Survey (EVS), 1990.	Religious self definition, membership, Church involvement, voluntary work, attendance, prayer, etc.	Basic beliefs about the existence of God and religious orthodoxy: Christian dogma's as belief in life after death, hell, heaven, sin, etc.	3 items on EC: feelings about pollution, unemployment versus environmental problems and urgency of env. problems. 2 Items on willingness to pay for the environment.	No items on EB.	The results highly question direct relationships between religious beliefs and EA. EC is much more influenced by demographic characteristics than by religious values. The relationship between Christianity and env. deterioration is far less direct than assumed in White's theory.
Kanagy & Willits (1993)	N = 3632. Statewide survey of Pennsylvania residents, 1989.	2 items: religious affiliation and frequency of attendance worship services.	Items from the NEP scale, measuring acceptance of the notion that humans are part of, rather than the rulers of, nature.	Items from the NEP scale, measuring acceptance of (1) the need to preserve the balance of nature and (2) the belief that growth should be limited in order to sustain the environment.	EB was assessed using items for measuring the extent to which respondents expressed their concern through social/political action and consumption behaviors.	Frequency of attendance was negatively associated with EA. After controlling attitudes, there was a positive relationship between attendance and EB. This positive effect is not conditioned by acceptance of ideas contained in the NEP, but by other ideas, plausibly the notion of stewardship.

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern(EC)	Env. behaviour (EB)	Conclusions
Greeley (1993)	Data from the General Social Survey, 1988.	2 items: religious affiliation and attendance.	Literal Bible interpretation, belief in God, image of God and ethical liberalism, measured by opinions on what is religiously important.	1 item: respondents were asked whether they thought that too much, too little or the right amount of money is spent on 15 items. One of these was improvement and protection of the environment.	No items on EB.	Low levels of EC correlate with biblical literalism, being Christian and confidence in God's existence. Support for env. spending correlates positively with a 'gracious' image of God and with being Catholic. It is not biblical literalism as such that relates to lack of EC, but rather a rigid political and religious 'story'.
Guth & Kellstedt (1993)	N = 4995. Survey of American religious activists, 1990-91.	Church membership, attendance, activity level and number of friends in the congregation.	Theological labels to describe beliefs. Biblical literalism, importance of religion, religious separatism, End Times thinking, etc.	Most important problems in the country, ranking of six national concerns (one was protecting the environment) and 1 item about urgency and costs of environmental protection.	No items on EB.	Theological liberalism is strongly linked with a more enthusiastic embrace of environmentalism. Views on environmental policy are part of a more comprehensive religion and political worldviews among these religious activists.
Woodrum & Hoban (1994)	N = 332 Telephone interviews North Carolina, 1988	2 items: Salience ('how important is religion in your daily life?') and worship frequencies.	3 items: Biblical literalism, teaching of creation or theory of evolution in public schools and dominion item.	Exposure to information, items on concern (nuclear power plants and their radioactive discharges) and EA about willingness to pay and the government spending money on env. protection.	No items on EB.	Dominion beliefs are not significantly associated with conventional religiosity on the individual level. The findings contradict the assumption that dominion belief is closely related to belief in the validity of Genesis. No empirical basis is found for culpability of churches for env. problems.

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern(EC)	Env. behaviour (EB)	Conclusions
Kanagy & Nelsen (1995)	N = 2379. National survey by Gallup Organization, 1987.	3 items: attendance, self-discipline ('born again' or evangelical Christian) and religious experience.	See religion.	3 items: federal spending for improving and protecting the env.; env. control vs economic growth and self definition of being 'an environmentalist'.	No items on EB.	Indicators of EC need to measure the complexity of env. issue – no one indicator alone is sufficient. Relation religiousness and EC is less clear than often portrayed. Religious individuals are no less likely than others to identify themselves as environmentalists. The effect of the region of residence was also important.
Guth, Green, Kellstedt & Smidt (1995)	Data from religious interest groups, political donors and American Nat. Election Study (ANES).	Denomination, religious salience, attendance, frequency of Bible reading, 'born-again' item and religious self-identification.	Items about Biblical authority and End Times thinking.	Env. protection and priority of env. issues. Party surveys: questions on env. spending and proximity to the Sierra Club. ANES study: env. spending and a thermometer rating for environmentalists.	No items on EB.	Many variations among Judeo-Christian traditions are found. White's mastery thesis is too simplistic to explain religion-environmental nexus. Conservative eschatology is strongest religious predictor of environmental perspectives, though other measures exert occasional influence.
Eckberg & Blocker (1996)	N = 1046. Data from the General Social Survey, 1993.	Membership in church related organizations, attendance, salience and faith in organized religion.	Sectarianism: prayer in public schools, fundamentalism, belief in evolution, etc. Common religiosity: belief in afterlife, belief in God, frequency of prayer, etc.	7 items: willingness to pay for env. protection, improvement regulation for env. protection, belief all human actions hurt nature, belief humans take precedence over the env., worry about pollution, animal rights, sacredness of nature.	(1) personal 'green' activities, (2) participation in organized 'green' activities, (3) food and driving.	Findings give some support to thesis that Christian theology has anti-environmental effect. However, religious participation has pro-environmental effect. Negative effect of theology might be effect of fundamentalism or a conflict between religious conservatives and liberals.

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern (EC)	Env. behaviour (EB)	Conclusions
Becker, vd Broek, Dekker & Nas (1996)	N = 1700. Dutch survey + International Survey Programme (ISSP), 1993.	3 items: church attendance, denomination, and one's opinion of being religious.	No items.	Lots of items on concern, awareness of risks, knowledge, technology, nuclear energy, etc.	Lots of items on the use of energy, transport, garbage, support for environmental action, etc.	Religious characteristics hardly influence opinions about environment. Neither frequency of attendance, nor one's opinion of being religious are predictors of EA or EB. Behaviour appears to be effected by political orientation.
Wolkomir, Futreal, Woordum & Hoban (1997)	N = 850. National telephone survey, 1992.	Items on religious salience and denomination. Also an item on political ideology.	2 dominion items: 'Humans were created to rule over the rest of nature' and 'Plants and animals exist primarily to be used by humans.' One item on biblical literalism.	3 items on EA: 'Modifying the env. for human use seldom causes serious problems,' 'The env. crisis has been greatly exaggerated' and 'Economic growth is more important than env. protection.'	Several questions about buying products, contributing money and changing in lifestyles.	Neither biblical literalism nor salience show any negative impact on EB. Religious salience has a positive effect on EB after controlling for dominion belief, which may indicate a religiously based environmental ethic. Religious salience and dominion did not significantly affect EC.
Wolkomir, Futreal, Woordum & Hoban (1997)	N = 1228. National survey, 1992.	Religious salience. One item on respondents' political self-identification.	2 dominion items: 'Humans were created to rule over the rest of nature' and 'Plants and animals exist primarily to be used by humans.' One item on biblical literalism.	3 items: 'Modifying the environment for human use seldom causes serious problems'; 'The env. crisis has been greatly exaggerated'; 'Economic growth is more important than environmental protection.'	5 items: buying a product, contribution of money or time to env. cause, lifestyle changes, buying 'pesticide free' food and not buying food out of safety concerns.	They found no support for the White thesis. Denominational differences in dominion belief do not translate into differences in denominational environmentalism. Religious salience is found to have a positive effect on EC and EB when dominion belief is controlled.

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern(EC)	Env. behaviour (EB)	Conclusions
Woodrum & Wolkomir (1997)	Data from the General Social Survey (GSS), 1993.	3 items: attendance, affiliation strength * fundamentalism (preferences: liberal, moderate or fundamentalist).	No items.	Concern to specific env. risks. Willingness to pay more taxes to protect the environment.	Items on recycling, chemical-free fruits, meat, driving, standard of living and pay higher prices. Political behavior: signing of petitions, giving money to or joining an env. group, participation in an env. oriented demonstration.	They emphasize political bias: association of fundamentalism with political conservatism compounds interpretation of religion because political conservatives are antagonistic to environmentalism. Affiliation has positive effects on EC, attendance has positive effects on EB. Age and gender also affect EC and EB.
Boyd (1999)	N = 1046. Data from the General Social Survey (GSS), 1993.	Items on religious service attendance and frequency of prayer.	Items on belief in God, biblical literalism, fundamentalist tradition and graceful image of God.	Willingness to pay for the env. and perceptions about how dangerous a number of hazards are to the environment.	Env. behaviors: how often the respondent recycles, buys 'green' fruits and vegetables, cuts back driving a car etc.	Religion variables appear to be weak predictors of EA and EB. Only membership in a fundamentalist tradition was associated with (weak) support for the environment. Prayer was associated with stronger support for the environment.
Dekker, Ester & Nas (1999)	International Social Survey Project (ISSP), 1993.	2 items: attendance and denomination.	2 items: 'Human beings should respect nature because it was created by God' and conception of sacredness of nature.	6 items on EC: air pollution by cars, nuclear power, air pollution by industry, pesticides, pollution of rivers and lakes and the rise in the world's temperature; 3 Items on one's willingness to pay.	No items on EB.	No empirical evidence that Christians are less concerned about environmental problems nor that they are less willing to make sacrifices for the environment. The assumed direct link between religion and EC is too simple. Spiritual meanings of nature are more frequent among Christians than among non-Christians.

Study	Research group	Religion	Religious beliefs	Environmental attitude (EA) and env. concern(EC)	Env. behaviour (EB)	Conclusions
Kalbheim (2000)	N = 602. Data from a Dutch survey, 1997.	Membership of a church.	Statements about the nature-God relation.	Statements about EA.	Items on property and use of cars.	Church members do not have a less environmentally sound lifestyle than others, they however act from different motives.
Schulz (2000)	N=2160. University students in 14 countries.		Anthropocentrism vs. Ecocentrism. Biblical literalism and measure of religious importance.	NEP-items.	12-item env. behaviour scale	Respondents with higher literal beliefs in the Bible scored lower on the NEP, lower on ecocentric EC and higher on anthropocentric EC. Their concerns are rooted in the effects of degradation for humans. No relation was found between biblical literalism and self-reported EB.
Hayes & Marangoudakis (2001)	British Social Attitudes Survey, 1993.	Religious self-identification and denomination.	Level of belief in a personal God.	Items on influence humans on nature and environment and animal rights.	No items on EB.	There is no significant difference between Christians and non-Christians concerning EA. Catholics are the most sceptic toward nature among Chr. denominations. Both the better educated and the scientifically more knowledgeable are significantly more likely to express a pro-dominion stance concerning the natural world.

Appendix 2 Checklist for observation, interviews and literature study

The main research questions are:

1. Which values that are rooted in a shared religious worldview, lead to a relatively low impact on the environment and a more sustainable pattern of consumption and production?
2. How are behaviour choices with a relatively low impact on the environment maintained in the long term?

Underlying sub questions are:

- a. What are the most relevant elements of the religious worldviews of the separate communities in relation to sustainability?
- b. Which values are most relevant in relation to sustainability?
- c. In what way do values of the communities lead to a lower impact on the environment?
- d. What kind of value-hierarchy can be distinguished?
- e. To what extent can we characterise the lifestyle of these communities as sustainable?
- f. Which aspects of the social organisation are important for maintaining sustainability?
- g. Which inspiring examples of sustainable choices, motivated by values and the wish to preserve a certain experienced quality of life, are offered by those communities?

In order to answer the research questions and the sub questions, I developed a checklist that I used during the field studies for observation, interviews and literature study.

Community

- General description of the community.
- What can be said about development of the community?
- What are the main sources of income and what are the future expectations?
- What can be said about the social cohesion and durability of the community?
- What can be said about the process of decision making in the community?
- How does 'living as individual' relate to 'living in community'?
- What is the role of gender and age?
- How does the community relate to the 'outside'?

Religious worldview

- General description of the religious worldview in the community.
- In what ways is religion experienced – communally and individually?
- What are important religious rituals and symbols, relevant for this study?
- What are important beliefs in the community?
- What are the religious sources: religious books, songs, stories, history, etc.?
- What are the consequences of the religious worldview for individual and communal behaviour?

Values

- Which values are important for the community?
- Which values are most relevant in relation to sustainability?
- In what way do values of the communities lead to a lower impact on the environment?
- Can we distinguish a certain value-hierarchy?
- Is there a tension between certain values or a value and the outside rules or expectations?
- How are important values maintained?
- In what way do people describe quality of life?

Sustainability

- To what extent can we characterise the lifestyle of these communities as sustainable?
- If the community makes environmentally sound choices, how are these motivated?
- What are limits to practice environmentally sound choices?

Cluster	Items per cluster
Energy use	<ul style="list-style-type: none">- The sources of energy that are used in the community: fossil and 'green' energy.- The direct energy use within the community.- Specific choices that are made concerning the property and use of electrical appliances.- Possible 'energy leakages', indirect energy use by boarding out activities.
Transport	<ul style="list-style-type: none">- The modes of transport used in the community.- The means of transport owned by the community.- Travel distances by car.
Nutrition	<ul style="list-style-type: none">- Choices regarding the amounts and kinds of meat that are generally consumed.- The amount of organic products consumed by the community.- Choices regarding the purchase of food.
Land use	<ul style="list-style-type: none">- Choices regarding: land use, nature conservation, use of pesticides, manure, equipment and animals are studied.

IPAT:

- Population growth and average number of children.
- Ideas and behaviour choices regarding affluence and property.
- Use of technology and technology-change.

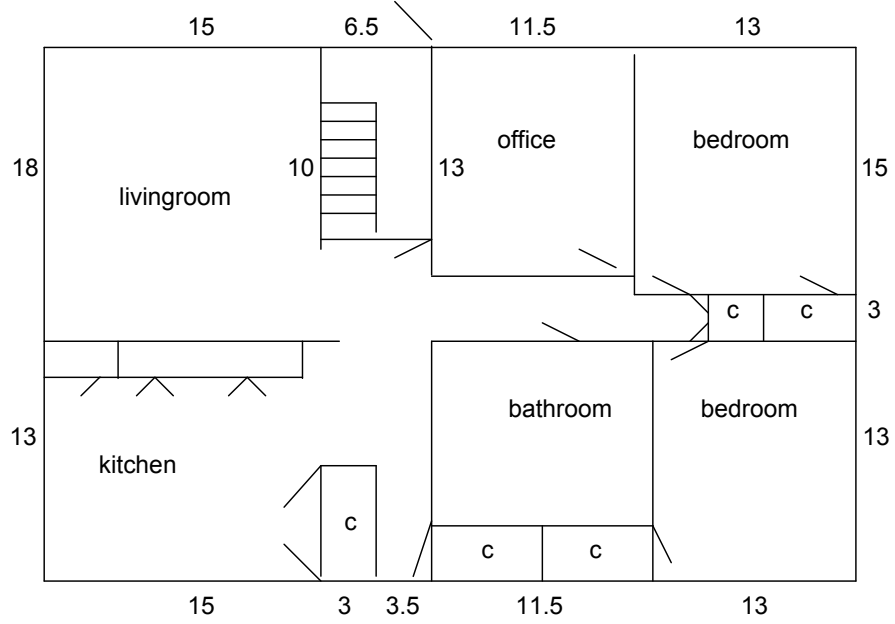
Additional items regarding sustainability, for observation:

- Use of wood: non-use of tropical wood, sustainable wood (FSC-wood).
- Financial choices like 'green stocks and shares' and 'green bank accounts'.

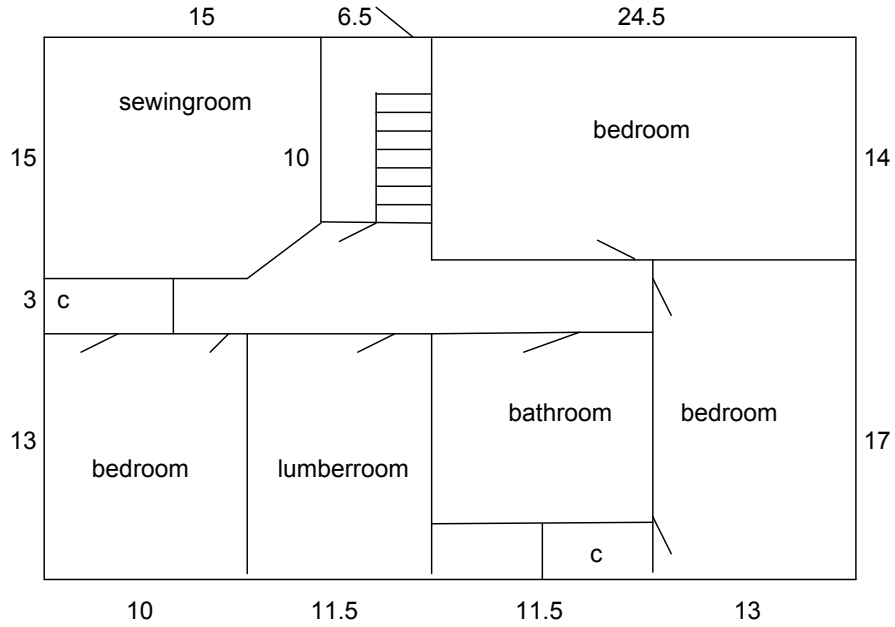
Appendix 3 **Ground plan of a Hutterite dwelling**

Ground plan Hutterite dwelling (46 feet by 31 feet at the inside)

First Floor: (c = cupboard)



Basement:



Plan of Forest River Colony

From the air, picture from satellite:



From the air, picture taken by colony member:



Appendix 4 The writings of Saint Francis

According to the classification of Freeman et al., 2004

A. Rules and regulations		Abbreviation	Year
Rules:	The <i>Regula non-Bullata</i>	RegNB	1221
	The <i>Regula Bullata</i>	RegB	1223
	The Rule given for those in hermitages	RegEr	1217-21?
	The Form of Living given to Saint Clare	FormViv	1212-13
Testaments:	St. Francis' last Will for Saint Clare	UltVol	1226
	The Blessing given Friar Bernard	BenBern	1226
	The Testament given at Siena	TestSen	1226
	The Testament of Saint Francis	Test	1225-26
Wisdom of Saint Francis:	The Admonitions	Adm	variable
	On true and perfect gladness	VPLaet	± 1220
B. Letters			
To groups of people:	A Letter to the Faithful, first recension	EpFid I	1220
	A Letter to the Faithful, later recension	EpFid II	1224-26
	A Letter to Clerics	EpCler	1220
	A Letter to the Rulers of the Nations	EpRect	1220
To brothers:	The First Letter to the Custodes	EpCust I	1220
	The Second Letter to the Custodes	EpCust II	1220
	The Letter sent to the whole Order	EpOrd	1221-26
To individuals:	A Letter to a certain Minister provincial	EpMin	1218-21?
	The Letter to Saint Anthony	EpAnt	1224
	The Letter to Friar Leo	EpLeo	?
C. Prayers and praises			
Prayers:	A Prayer before the Crucifix	OrCruc	1206
	An Exhortation to Praise God	ExhLD	1213-23
	A Salutation to the Virtues	SalVirt	?
	A Salutation to the Blessed Virgin Mary	SalBVM	?
	The Praises of God Most High	LaudDei	1224
	The Blessing given to Friar Leo	BanLeo	1224
Around the Office:	The Exposition of the Our Father	ExpPat	1220-21?
	The Praises to be said at every hour	LaudHor	1220-24?
	The Office of the Passion of the Lord	OffPass	12??-26
Songs:	Encouragement of the Poor Sisters	VerbExh	1224-25
	The Canticle of the Creatures	CantSol	1224-25

Appendix 5 The daily schedule in four visited Franciscan communities

Hours	OFM Megen (NI)	Clares Megen (NI)	De Wonne (NI)	Stoutenburg (NI)
Morning prayer	07.30	06.30 (reading) 07.45 prayer	08.15	07.30 (meditation)
Breakfast	08.00	08.15	until 09.00	08.00
Labour	08.30	08.45	09.00	09.00
Coffee/tea break	10.30	10.30	10.15	10.30
Labour	10.45	10.45	10.45	11.00
Afternoon prayer	12.15	12.00		
Diner / lunch	12.30	12.30	12.30	13.00
Afternoon prayer			13.00	
Labour	13.15	13.15	14.00	13.45 (free)
Coffee/tea break	15.30	15.00	15.30	15.00
Labour	16.00	15.15	16.00	15.15
Recreation		16.30		
Evening prayer	18.00	17.45	17.30 (lectio divina)	17.30 (personal silent time)
Supper	18.30	18.15	18.00	18.00
Coffee/tea break	20.30	19.30	20.00	
Compline	21.50	20.30	22.30	21.45 (meditation)
Silence	23.00		23.30	

Appendix 6 The daily schedule in five of the visited Benedictine and Cistercian monasteries

Hours	Vallombrosa osb (I)	Cîteña osb (I)	Lioba osb (NI)	Echt ocso (NI)	Zundert ocso (NI)
Vigils		05.30	06.30	04.30	04.30
Lectio divina			07.30		07.25
Breakfast		06.00	08.30		07.00-09.15
Lauds	06.30	06.30	09.00	07.15	08.00
Breakfast	07.45			08.00	
Lectio divina	08.30	07.30			09.00
Labour	10.30	09.00	10.00		09.00
Sext	12.30	12.40	12.15	12.00	12.35
Diner	13.00	13.00	13.00	13.00	13.00
Labour	14.30		14.30		14.30
None		15.30			
Lectio divina		17.40			14.30
Vespers	17.25	18.40	17.30	17.30	17.45
Meditation					18.15
Supper	20.00	19.30	18.30	18.30	18.45
Compline	21.10	21.00	19.45	20.30	20.00

About the author

Martine Vonk (1974) graduated in environmental sciences at the faculty of social sciences of the Catholic University Nijmegen (now the Radboud Universiteit) in 1997. She worked six years as initiator and coordinator of Time to Turn, a youth project on environment and justice issues. Furthermore, she worked at projects for the NJMO (National Youth Council for Environment and Development), TEARfund and for the Christian Study Centre ICS. After that she started her PhD research at the Institute for Environmental Studies (IVM) at the Vrije Universiteit.

From 2007 until 2010 she worked as researcher and consultant for the Centre for Agriculture and Environment (CLM). Martine gave several courses on sustainability at the colleges in Ede (CHE) en Zeist (Wittenberg). She co-edited the book *Duurzaamheid* (Sustainability) for the Scientific Institute of the political party ChristenUnie (2011). Currently she works as freelance researcher and project leader on sustainability projects for, among others, the Dutch broadcasting organisation EO and she leads a Community of Practice on sustainable food policies. Martine is married and has a daughter.

