

Summary

The current threefold ecological, financial-economic and sociological crisis has restarted the discussion about the sustainability of the present societal system. Are the 'limits to growth' as foreseen some 40 years ago becoming a reality, and what about the 'common future' which was outlined as early as 25 years ago in response to those limits? The solely technological approach taken since then apparently has not solved the problem. The real roots of the sustainability crisis can be found in human value orientations and subsequently so must the real solutions. Understanding human values and needs as well as the underlying world views allows the formulation of a new, sustainability oriented ethical framework, the re-definition of human dignity and a practical agenda for sustainability policies.

The present threefold ecological, financial-economical and sociological crisis has a common root. Notwithstanding a few thousand years of civilization, a more or less shared vision on the essential nature of man and society is still lacking. Opinions about what is really relevant to the quality of life still diverge, substantially. In the debate on sustainable development, it remains unclear exactly what would need to be developed. In the absence of a reasonably shared vision, one-sided forces will continue to dominate, and time and again society becomes a caricature of itself. In this process, temporally dominating value orientations representing the world view or 'Zeitgeist' become one-sided and finally degenerate into their own exaggerations, with often catastrophic consequences. Sometimes this comes down to fundamentalist religions or totalitarian states, at other times to materialism, hedonism and equally fundamentalist capitalism.

To preserve civilization, both a new ethical framework and a new interpretation of 'sustainability' are needed, based on values which are seen as essentially human. That framework can be seen as the open space in between the dramatic caricatures which shape history. In between these degenerations of the various value patterns as they evolve over time, it becomes clear which value patterns are more stable and could be sustained over longer periods. This pattern is the 'integral world view', which also can be derived from current societal enquiries, from the insights of philosophy, religions, the great masterworks of literature and music, as well as from myths and fairy tales. All these sources confirm such an overarching, integral world view. Again and again they convey the message that sustainable development and human dignity can only be achieved by balancing the value orientations and world views in between their extreme caricatures. This implies balance between the non-material and material orientations of 'heaven and earth' and, in the human interrelations, between the forces of self and other. One-sided domination of either of these forces results in discontinuity and catastrophe; maintaining dynamic equilibrium is equivalent to sustainable development and civilization.

This 'philosophy of the radical centre' has outspoken consequences for, among other things, the political system and the mutual relationships between the financial, economical and societal system. As soon as a society adopts the democratically debated, but always preliminary world view as the more or less shared common denominator, it will be possible to detect and discourage one-sided societal trends at an early stage. World views no longer would degenerate into their perverted extremes and associated catastrophes as they have so often in the past.

Extended outline by chapter

1 Western civilization in crisis

The threefold crisis

The Western world and with it the world as a whole has run into a threefold crisis. Earth ecosystems are under threat and the climate system already is rapidly changing. At the same time, economic growth in the West has almost come to a complete standstill as a consequence of increasing resource depletion and money creation by the financial system through increasing loans and subsequent debts. The financial system no longer has a position subordinate to the real economy but has become an end in itself. These crises in the ecological, economical and financial system come on top of a globalization process in which capital is globalized and labour is not. This results in an additional social crisis as wages are being driven into a race to the bottom.

No one saw this coming ?

For many, the current threefold crisis in the environment, financial-economic and social systems came as a surprise, notwithstanding the fact that already back in 1972, the Limits to Growth study by Meadows indicated that the system as a whole would run into its limits. Since then, the trends in population size and industrialization, as well as the increasing shortage of raw materials such as oil and food, correspond alarmingly closely with Meadows' 40-year-old gloomy expectations of the future. Over time, the stratospheric ozone layer has become thinner, worldwide biodiversity threatened, the seas' fish stocks depleted and the climate changed. Indeed there appear to be limits to growth. In the baseline 'doom' scenario of Figure 1, the collapse of the exponential growth curve had been expected around 2010. Actual developments rather precisely confirm the expectation that the path of exponential growth cannot be continued after the specific stage at which growth becomes so rapid that the system inevitably will become unstable.

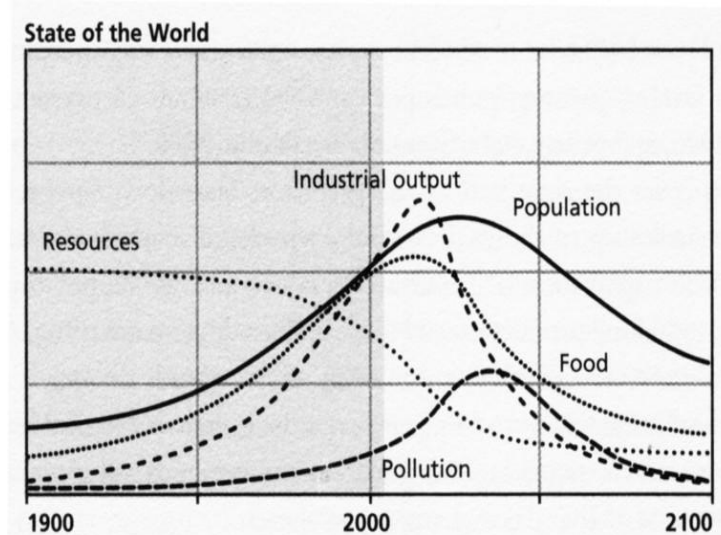


Figure 1

The same holds for the financial system. For the majority of economists, the financial crisis came as a surprise; 'no one saw this coming'. However, already in the 1990s, Minsky warned about the instability of the financial system, which would be triggered at the moment when over-indebted investors would be forced to sell assets in order to pay back their loans. The huge increase in loans and subsequent money creation was the result of the earlier liberalization of the banking sector during the 1990s. Since that time, interest rates have come down to the present, low levels. This level is such that the economy cannot be stimulated anymore by a further reduction in interest rate.

Overshoot and collapse

These developments, apparently, have become one-sided and overshoot the natural boundaries of the ecological and economic systems of which they are a part. As predicted, such developments inevitably result in collapse. Since 2010, the world has started to experience the mounting stresses forecasted for the early decades of the 21st century if the mechanisms behind exponentially growing demands on the planet would not be stabilized. As any system approach would indicate, the crisis does not show up in a clear and visible way – instead, it slowly erodes the capabilities for adequate management of an ever more complex and interdependent reality. It presents itself as a manifold of ecological, financial-economic and social crises. In some African countries, there may be a mix of resource related wars, mass migration, poverty, starvation and climate-change-related droughts. In other regions, the eye of the storm may be the collapse of the financial system with subsequent unemployment, protectionism, ethnic strife and the breakdown of public services. In yet other regions, the failure to provide adequate health and education thwarts attempts at slowing down population growth and large-scale poverty, with unending social conflict as a result.

It is rather disquieting that this ‘overshoot and collapse’ scenario has happened many times before. Time and again, societies have run into this type of problems, finally resulting in decline. Apparently, no lessons have been learned considering that solutions so far have proven ineffective. In the meanwhile, global interdependence is strongly increasing and the impact of instabilities and collapse is increasing accordingly. Human suffering and wars become manifest on much wider scales, now reaching the global level. In the end, civilization will be lost, at least for a long time to come.

Our Common Future

The political answer to these threats to the global system was the 1987 report ‘Our Common Future’ by the United Nations’ Brundtland Commission. The commission proposed a ‘sustainable development’ that would simultaneously meet the needs of present and future generations. However, the proposed discussion on a quality of life that would be both desirable and feasible for present as well as future generations has not or only scarcely taken place. To date, it has remained unclear exactly what it is that should be ‘developed’ within the framework of sustainable development. The initial expectation was that the democratic system and the scientific foundation of government administrations would be adequate to prevent these kinds of crisis situations. The disasters of the past, therefore, would no longer repeat themselves in the future. But democracy and rationality have not been able to prevent present developments and have not steered the world into a more sustainable direction. Nearly all upcoming problems, including those of sustainability, were solved by means of technology, initially with large success. Later, however, these problems were found to come back and on a larger scale than before; for example, the smog problem could be solved but climate change came back with a vengeance.

The Brundtland Commission nevertheless identified the real underlying issue: what needs should be satisfied and what ‘quality of life’ would be both desirable and feasible. The question is enigmatic as well as paradoxical. How are we to know and judge the needs of future generations, and how much of the natural resources would present generations have to conserve for these future generations? Is there some way of defining ‘human needs’ in a more universal sense, so that they would be equally relevant and meaningful for both present and future generations? To answer these questions, an inquiry into ‘human values’ must be made. What do people value and would it be possible to find a more or less common denominator for human value orientations? Could such a common denominator contribute to more explicit societal objectives that, in turn, could prevent short-sighted – overshoot and collapse – mechanisms?

2 Human value orientations; world views

Needs apply to the human being as a whole, and they express the constant tension between what people would like to realize and what they can actually achieve. What they would like to realize depends on their experiences and ideas about ‘the good life’. A good quality of life is associated with

the extent to which people are able to function according to their value orientation. It depends on subjective considerations about ‘what matters’ and this consequently refers to people’s image of themselves and the world that surrounds them. In the search for a more or less shared conception of the ‘quality of life’ to be pursued, an ‘integral world view’ was constructed that represents the most relevant human value orientations. This world view can be seen as an overall value orientation. It is the fundamental freedom of the individual to place certain values above others, and value orientations thus vary widely both within and between societies. In the attempt to find a common denominator, four sources of human value orientations, or world views, were studied and mutually compared.

Social surveys

The most direct way of obtaining an idea of what people value in life and how they think the world functions is to ask them, such as by means of a survey. The results of such a survey can be condensed in a statistically meaningful way into two main dimensions: the contrast of *giving* (upper) versus *taking* (lower) and the contrast of *small world* (right) versus *big world* (left). The first component, along the vertical axis, is very close to the contrast of *religious* versus *worldly* and *non-material* versus *material*. The second component, on the horizontal axis, can be associated with an orientation on the own *local community* versus the *world* as a whole or, from a more individual stance, as the contrast between *self* and *other* and between *individual* and *collective*

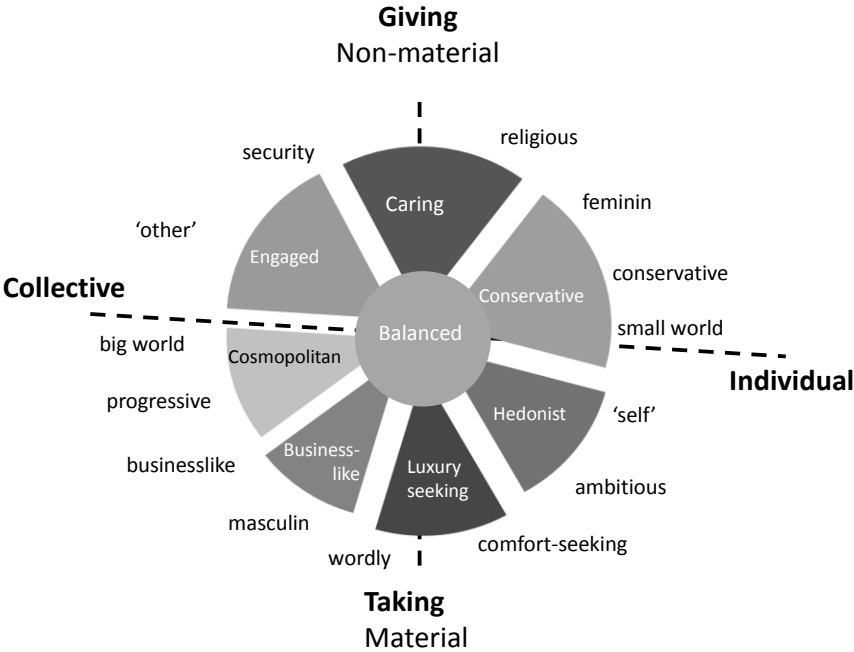


Figure 2. Value orientations in the population

Within this framework, eight clusters are identified, the main characteristics of which followed by the percentage of people in this category are: Caring (14%), Conservative (15%), Hedonist (10%), Luxury Seeking (10%), Businesslike (8%), Cosmopolitan (9%), Engaged (13%) and the middle group containing those who are Balanced (21%). Caring people value non-material aspects of life, whereas the Luxury Seekers value the material ones. Conservatives may share a non-material-oriented lifestyle with the Caring people, but tend to focus more on their own ‘local’ situation. On the opposite side there are the Cosmopolitan and Businesslike people, for whom the money and material aspects of the ‘big world’ are making up quality of life. On the lower right hand side of Figure 2, Hedonists are small-scale and ego-oriented, in combination with a material, worldly attitude. The Engaged people are their opposites, on the upper left, with a focus on large, global issues and non-material aspects. The group of Balanced people in the centre award more or less equal weight to matters along the two axes or represent indifferent attitudes.

The characteristics of the individual segments of the diagram represent the value orientations of individual people. The eight clusters are groups of people with more or less homogeneous value orientations who, therefore, largely share a 'world view'. Together these world views constitute the '*integral world view*', which thus is defined as the totality of human value orientations and related understanding of the world. As such, Figure 2, which represents the eight clusters of shared world views, is the first approximation of this 'integral' world view. Herein, the most important orientations are formed by the vertical relation (axis) that describes the contrast between a more non-material/idealistic attitude and a more materialistic one, and the horizontal relation (axis) that describes the contrast between the 'part' and the 'whole', between the individual and the collective.

Psychological and philosophical understanding

Subsequently, these initial world views are enhanced with the relevant insights of psychology and philosophy. The presentation in Figure 2 of the clusters or 'individual' world views arranged as opposites in opposing quadrants, is in keeping with findings by psychologist Jung. He stated that the human psyche consists of processes of which the energy is generated by reconciliation of several kinds of opposites. Indeed, there is ample evidence that the human mind tends to operate by thinking in opposites. Many religions and myths describe creation as the separation of primordial substance into opposites, such as light and darkness, heaven and earth, or male and female.

The horizontal axis in the integral world view represents the mutual relation between people. Based on the philosophical insights of Kant, Levinas, Jung and Pauli, these relations are interpreted as the contrast between the individual and the collective, between 'self' and 'other'. On a higher level, in the world view, the contrast on the horizontal axis represents the relation between specific groups of people and humankind as whole, reflecting the contrast between regionalization and globalization. In both cases, the contrast on the horizontal axis goes back to the more fundamental contrast between the separate parts and the whole. Emphasis on the separated parts leads to diversity while emphasis on the whole will lead to uniformity. On the level of knowledge ('beliefs'), this contrast works out as the subjective versus the objective. Consequently, on the left-hand side of the proposed integral world view it is assumed that there is one uniform, universal truth. However on the right, universal truth does not exist; here, truth is multiform and highly subjective in nature. During the past millennia the West focused on uniformity, such as presented on the left-hand side of the figure, on the supposition of one universal truth, whereas the East developed the values of multiformity that are shown on the right-hand side, on the supposition that multiple 'truths' can exist at the same time and next to each other.

Furthermore, the contrast on the vertical axis between idealistic and material values – between mind and matter – initially had been determined on the basis of the social survey (Figure 2). This contrast has been described and confirmed by many philosophers and sociologists, such as Plato, Hegel, Steiner, Fromm and Sorokin. Over the centuries, it has fuelled the ongoing debate between religion (upper left) and science (lower left), both claiming the 'one truth' as is typical for the values on the left-hand side of the figure. This debate, despite repeated prolongations, still remains undecided and will continue to do so as long as both science and religion maintain their dogmatic positions. Both argue against each other from their very one-sided positions. In the end, the relevance of the vertical relation is independent of the question of whether the material generates the non-material/spiritual, or the other way round. Reductionist, positivist science has withdrawn into the modernistic part of the integral world view without being aware of its reduction. Just as in the earlier case of the 'truth' of the institutional Church, the one-sided reality of that (material) part of the larger whole is erroneously seen as universal truth. As a consequence, the meaning of mainstream science for the larger problems of this time is also limited.

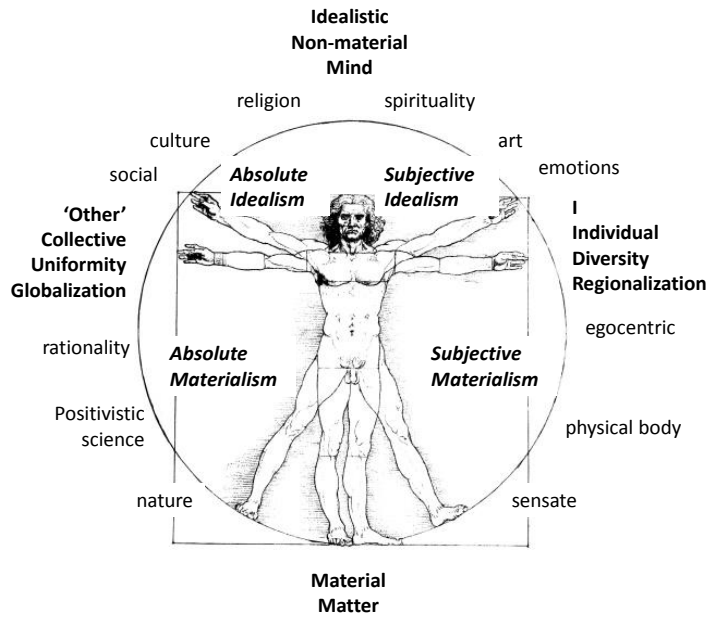


Figure 3. The integral world view

When the results from the value surveys are enriched with the many philosophical insights, a next and more robust version of the integral world view is obtained, as presented in Figure 3. This integral world view describes the human position in between 'heaven and earth' as well as 'self' and 'other'. The philosophical notions to a large extent coincide with the results from the social surveys.

3 The laboratory of history

If the resulting 'integral world view' would be a more than fair representation of the overall human value orientation, this should likely be reflected in the course of history. Indeed, the deduced integral world view, so far, appears to be a good framework for the interpretation of history. Projected onto the two-dimensional plane of the integral world view, historical developments form a telling connection. Over time, the value orientations that dominate within society life are changing. They can be seen as 'world views' that correspond to some of the various parts of the integral world view and that succeed each other in the order in which history repeats itself, as shown in figure 4:

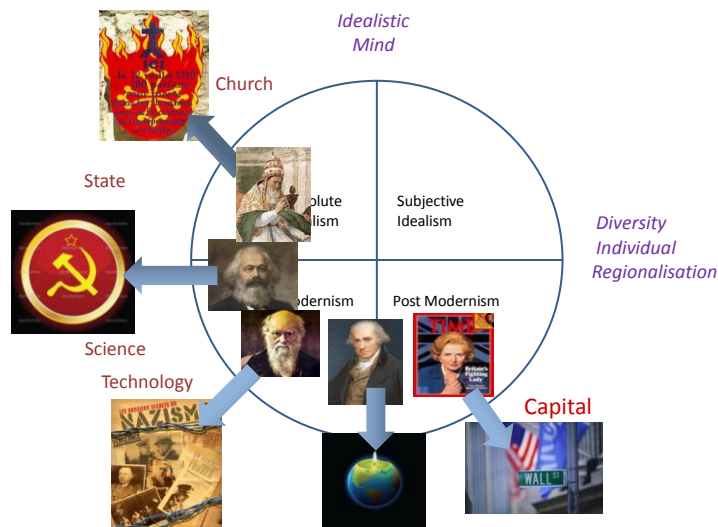


Figure 4

Looking back over the past 2000 years, the great social discontinuities such as religious wars, totalitarian ideologies (e.g. communism and fascism) and the ecological, financial and economic crisis were caused by the increasing one-sidedness of the prevailing value orientations. This process consists of a series of different mechanisms, starting with the loss of respect for opposing values and followed by the reversal of ends and means. At a later stage, the world view becomes ideological and fundamentalist.

After the initial phase of early Christianity with its multiform, individual belief system (upper right), the need for uniformity finally set the stage for the ‘one truth’ institutional church, which subsequently turned into its own caricature in inquisition and religious wars (upper left). Later, as values became more secular and even more collectivist, Marxism resulted in collectivistic communism. Darwinism as expression of modernistic science was turned into a caricature of itself with a time lag of about 100 years, finally enabling Nazism. During the same modernistic period (lower left), James Watt’s steam engine triggered the industrial revolution. In combination with the now dominating material value orientation this gave rise to the current ecological crisis (bottom). The 19th century Romanticism was a temporary (upper right) reaction to the extreme material and conformist values of modern (lower left) industrialism. Resuming the original course further in the direction of the dominating individual (right) but still under material values (bottom), societal power was shifting to the financial system, which became an end in itself and a means for individual material gain, denying the earlier orientations on more collective values. In this historical process, subsequent authorities of Church, State, Science, Technology and Capital played a decisive role. Time and again, the world became its own caricature as a result of ‘centrifugal’ forces driving the development into the periphery of the integral world view. The general driver of this mechanism is the tendency to develop one-sided core strengths at the expense of the development of an integral world view that would represent the general human value orientation as a coherent whole.

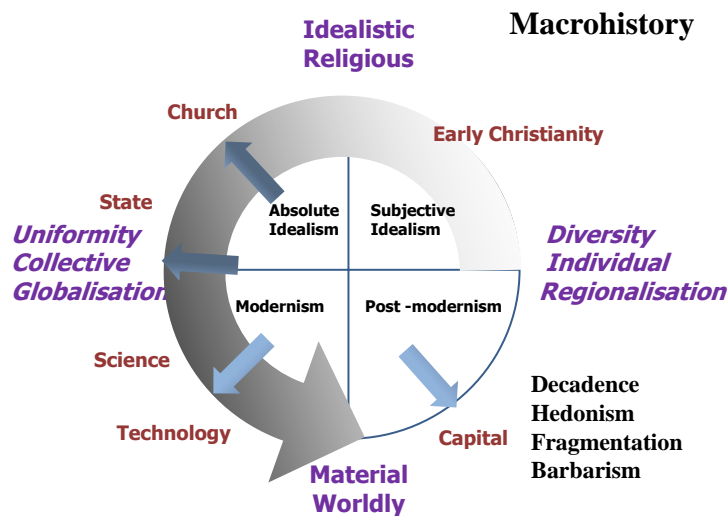


Figure 5

Dynamics within world views

Value orientations which are typical for the respective world views tend to be more outspoken at first and become over-emphasized and exaggerated at later stages. As soon as the social movement behind it receives momentum, there is a tendency to overshoot: the world view becomes its own caricature and sensible values and ideas turn so extreme that values of the opposing world views are no longer respected. Behind these dramatic changes, shown in figure 5, at least three centrifugal mechanisms can be identified:

- *Identification pull.* Individuals move to one of the corners of the integral worldview to identify themselves with certain convictions and associated social roles and material and non-material (psychological, institutional) benefits. Identity reflects a deep psychological need. Once certain

positions of status, power and money are reached, there is a strong tendency to legitimate these positions on the basis of world view. On the periphery, the individual is subject to the church, the state, science or his own (selfish) ego. In the present situation of dominating individual and material values, for instance, people may identify themselves with their material achievements, such as their cars or jobs. To maintain their ego, they then necessarily have to 'keep up with the Jones'. Such a centrifugal 'reference drift' contributes to the exaggeration of the characteristic values of the already dominating world view and its subsequent degeneration into its own caricature. This then leads to obsession with individual possession.

- *Responsibility push.* The second centrifugal force is the fear for the centre with its existential demands. The individual fears the freedom inherent to the centre of the world view diagram, where he himself has to take full responsibility for his existence. This fear pushes him away from the centre. Subsequently, he can opt for an identity borrowed from one of the world views on the periphery and which provide a feeling of belonging.
- *Reinforcement.* A dominating world view is legitimizing itself by the introduction and consolidation of institutions that extend and rationalize their domination over the social actors. Power is maintained by articulation of the initial value orientations that would still be part of the integral world view. Authorities, who are part of these institutions, reinforce the process towards one-sidedness. An example of this would be (most of) the media which are a driving centrifugal force whenever attention is paid primarily to extreme views rather than to their reconciliation
- The forces that drive the present *economic system* also are centrifugal. In order to maintain full employment for a growing population in the face of an ongoing increase in labour productivity by automation of production processes, total economic output has to grow. The values of consumer capitalism take precedence over ethical concerns about loss of community and non-material values. Consumption in the material world views is driven by the lack of realization of idealistic values, which then result in 'preference drift'. People strive after romantic subjective idealistic values by buying new consumptive goods, which are discarded as soon as it becomes clear that these do not satisfy the idealistic values.

Continuation of the current trends would imply that the coming period will be dominated by the values of the post-modernistic world view (Figure 5). In the longer term, the value orientation will subsequently move in the direction of the idealistic, individualistic world view which is oriented on the local scale. Given these trends, three likely futures can be distinguished:

- 1 Continuation of the present post-modernistic world view, which will result in a century of *global conflicts* over scarce energy, raw materials and food supplies. In such a situation, it is unlikely that conflicting positions will be bridged; the confrontation between cultural blocks, high population growth, high level of material consumption and the resulting competition for raw materials and food will continue. This development is not sustainable and will result in decadence, '*gated communities*' and cultural decline.
- 2 Transition of the present post-modernistic world view towards the more idealistic (upper right) world view, as characterized by a less material attitude and an orientation on the local scale, as represented by the current trend to climate neutral '*transition towns*'. However, it is questionable whether or not this again one-sided orientation can generate the physical and administrative energy to support a world population of nine billion people.
- 3 Shift of the dominating value orientations to the centre of the integral world view, according to which the one-sidedness of the different separate world views (quadrants) would be overcome. It then would be possible to simultaneously stabilize population size, temper material consumption, ease environmental pressure and keep bureaucracy within acceptable limits.

4 Ethical framework for a Sustainable Civilization

Sustainable development requires a democratic political system as well as a normative framework, about which a reasonable degree of agreement can be achieved. That framework is offered by the integral world view as initially derived from recent social inquiries, from philosophy and from the course of history. The integral world view thus offers a new ethical framework. Within this framework both centrifugal and centripetal forces are at work, as shown in figure 6:

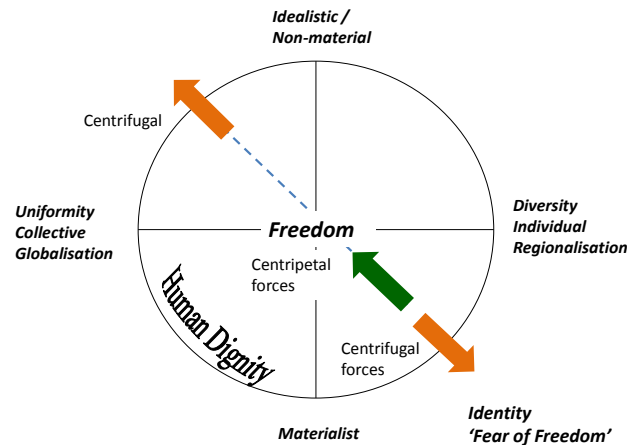


Figure 6

Centrifugal forces are considered to be ‘bad’, as they cause loss of cohesion, one-sidedness, fragmentation and, ultimately, disaster. Centripetal forces, however, are considered to be ‘good’, as they reinforce cohesion, respect and ‘empathy’ for opposing values in the circular world view. They thus support values that are located more in the centre of the integral world view. Within this domain, value orientations related to one of the individual world views or quadrants are not extreme or one-sided to the extent that respect for opposing value orientations is lost. This area within the circular boundary of the integral world view thus defines ‘*human dignity*’. In line with Aristotelian thought, the opposite of vice or evil outside the lower right-hand side of the circle is not virtue or good at the upper left hand side. On the opposite side, rather, there is another one-sided vice or evil. The virtue or the good has to be found in the centre, where forces are balanced and human dignity is maintained. This centre is also associated with freedom, as freedom is created by making a step from the egocentric ‘self’ towards the ‘other’. In doing so, the individual frees himself from the deterministic forces of the own ego. He also has to free himself from a one-sided fixation on physical and material things, thus maintaining the balance between mind and matter.

In practice, this comes down to avoiding one-sidedness. A current example of such one-sidedness would be the domination of the financial and economic system over political and cultural life. Achieving social ends is the main task of democracy. The most important social end is to keep the dominating value orientation within the central part of the integral world view (represented by the circle). Such a policy can be seen as the ‘philosophy of the radical centre’.

5 The all-time message of culture and religion

The call to maintain a dynamic equilibrium in the field of fundamental forces is the central message of many cultures and religions. Through the ages, both individuals and society as a whole have been invited to focus on the central part of the integral world view which represents the general human value orientation, as this would avoid the one-sidedness of the periphery and its associated disasters.

5.1 Culture

Many great cultural works around the globe, in particular in Europe, reflect the message of maintaining equilibrium. In his poem ‘the Second Coming’, Irish poet W.B. Yeates describes the centrifugal forces using the metaphor of a falconer and a falcon. As the falcon is flying in increasingly widening gyres, he can no longer hear the falconer and eventually, according to the poem, ‘things fall apart’ and ‘the centre cannot hold’. The same occurs in many legends, such as the one of Icarus, who was advised not to fly too high, where the sun would melt the wax on his wings, or too low, where he would be hit by the waves; he had to fly in between, right through the centre. The importance of the centre is also the central theme in many fairy tales. For example, in *Sleeping Beauty*, where the centre

is represented by the princess who is 'awakened' by reconciliation of opposing values, which subsequently results in increasing human consciousness. Also in legends, such as the Ring der Nibelungen, the Flying Dutchman and Parsifal (on which Wagner based his operas), this reconciliation and increase in consciousness is the central theme.

The works of Shakespeare tell the same story. His comedies seem to represent situations in which the centripetal forces prevail, whereas his tragedies describe how centrifugal forces result in catastrophe. His final work, the Tempest, is related to Mozart's Magic Flute and is also about reconciliation of the many opposites, resulting in increasing consciousness, represented by the main land of the 'island' amidst the unconscious forces, represented by the sea and the tempest.

5.2 Religions

Western civilization originates from early Christianity. The symbol of the cross, especially the Celtic cross, represents the fundamental forces between 'heaven and earth' (spirit and matter) in the vertical direction and between the 'the self' and 'the world' in the horizontal direction. These two dimensions refer to the two main commandments to 'love God and love your neighbour'. The message with respect to the horizontal axis is known as the golden rule or ethics of reciprocity. In Islam, this is also the central message, as the Prophet Muhammad said: 'None of you has faith until you love for your brother what you love for yourself'. The message is to develop centripetal forces, in particular 'love' in the wider sense of the word, as the essential force countervailing the centrifugal forces. Other religions and spiritual movements start from the same notion of necessity to maintain equilibrium within the integral world view, avoiding the 'outer darkness'. The diversity in world religions can be understood as the result of centrifugal, one-sided articulation of these same notions. This may provide some hope for reconciliation of the big institutional, for the time being dogmatic religions. Such reconciliation would be a prerequisite to increase consensus on the integral world view, as a common denominator for further 'sustainable' development.

5.3 East and West

The integral world view was based on western philosophy and culture, western historical developments and (recently measured) social attitudes in western societies. This raises the question of how representative the integral world view is for the world as a whole. As indicated, uniformity has been the dominant value in the West during the last two millennia. At the same time, the dominating values of the East have been multiform, which is expressed for example in polytheistic religions such as Hinduism. After having achieved its full extent, however, modern uniformity in the West is finally making room for the more (post-modern) individualistic and multiform value orientations that dominated the East. Now that the old values have been 'worn out', the West has to turn to the East because there is no other way to go. However, in addition to this 'Easternization of the West', a simultaneous 'Westernization of the East' is taking place, where eastern values shift towards more uniformity and a more material orientation. Apparently, the one-sided value orientations of East and West are complementary parts of the same integral world view.

6 Agenda for sustainable civilization

The ethical framework and the insights into the mechanisms that, time and again, bring disasters to societies, now enable a concrete agenda to maintain civilization and avoid the next catastrophe, which is always bigger than the one before.

6.1 Personal development

The mechanisms that govern the social dynamics of value orientations are almost identical to the psychological mechanisms at work in the individual. Referring to the work of C.G. Jung, there appears to be a strong correlation between the balanced psychological development of the individual and the sustainable development of society. One-sided development results in psychosis on the individual

level, and in discontinuity and disaster on the social level. As a consequence, civilization can only be maintained if its development runs parallel on both planes. The world cannot change without individual people also changing. In the same way in which the historical trajectory through the quadrants of the integral world view results in ‘freedom’, the individual lifelong experience of working through different value orientations results in ‘self-awareness’. By bridging the opposing values within himself, the individual can be said to already ‘have paid his contribution to world peace’.

6.2 Science and education

Reductionist, positivist science has withdrawn itself into the modernistic (lower left) part of the integral world view, without being aware of that reduction. Just as in the earlier case of ‘the Church’, the one-sided reality of that – in this case material – part of the larger whole is erroneously seen as universal truth. As a consequence, the contribution of mainstream science to solving the larger problems of this time is also limited. So in the world view that nevertheless is dominated by science, modern and posts-modern societies suffer from meaningful objectives; the economic growth in GNP is the only social objective that remains. Social development has become a process of trial and error, in which any ‘trial’ starts optimistically following the disastrous ‘errors’ of the previous one. Science contributes only to the development of technologies meant to enhance survival chances, but meanwhile also amplifies the consequences of the ‘errors’ as the scale of these technologies increases. Science should again serve societal objectives on a higher (macro) level and be oriented on the integral world view as a whole, instead of only on a reduced part of it.

Following from this, education should be directed not only to the part of the modernistic orientation of present society, but also to the whole of the integral world view. As suggested by Huxley, education should partly allow specialization to create relevant societal values (e.g. by means of technology) while partly being dedicated to the understanding of the whole context in which the specialized activities take place. Students have to be able to zoom both in and out.

6.3 Health care

According to the dominating values of the (lower left) modernistic world view, a strong emphasis has been put on evidence-based medicine, with a subsequent reduced attention for the other aspects of health care: the institutional organization (in the upper left quadrant) with its dilemmas about the (further) introduction of market mechanisms, the mental health care and alternative medical care (upper right), as well as people’s own responsibility for their physical well-being (lower right) by preventing diseases such as obesity. In health care, things also have fallen apart, just as in the integral world view. In line with the need to restore the cohesion between the separate parts of the value orientations in the integral world view, the parts related to health care also should be reintegrated. Herein, the centripetal force consists of the educated discriminative power of the general ‘body-and-mind’ practitioner, whose role should be revalued.

6.4 Environmental policies

As might be expected, environmental policies up to now have mostly been inspired by the value orientations of the lower left (modernistic) quadrant, with its typical focus on technological solutions such as the three-way catalyst for cars. To a lesser extent, typically upper-left legislative measures have been taken, mainly as formal confirmation of the implemented new technologies. In the current shift to the upper-right ‘small-is-beautiful’ world view with its local scale ‘transition towns’, emphasis is on the local scale where energy is generated by solar and wind power and food is produced by biological agriculture. This shift to the upper part of the integral world view indeed implies a lower material intensity and a subsequent lower ecological footprint. The diversity of the many small-scale activities does enhance the resilience of the overall system, but the efficiency of the large-scale production systems, as promoted in the left-hand side, uniformity oriented world views, remains a prerequisite for the energy and nutritional needs of a world population growing to 10 billion people.

Therefore, the real solutions will have to come from a combination of the typical approaches of each world view, finding the optimum between resilience and efficiency. This implies that, apart from the technology in the lower-left modernistic world view and the small-scale approach in the idealistic upper-right world view, also the governmental institutional arrangements of the upper-left world view and the self-sufficiency in energy and food safety policies of the lower-right (post-modern) world view will be required.

6.5 *Policy, leadership and management*

The essential task of the democratic *political process* is to reach as much of an agreement as possible on an integral world view that forms a common denominator of society. In this process, the boundaries of human dignity are articulated and societal objectives thus defined. Given a certain level of agreement on the integral world view, centrifugal forces can be recognized at an early stage, and be discouraged by democratic means. The most threatening centrifugal forces at this moment are the financial system, the increasing populism and fragmentation.

To avoid the oscillations and subsequent loss of energy in the big battle for a small majority, the political system of majority government should make room for governments that fully mirror the political parties in parliament. This would allow continuously shifting majorities for the many different subjects that modern societies have to deal with. At the same time, within such a government system, substantial minorities no longer would be ignored for periods of four to eight years, and the most important human social need for ‘recognition’ would be satisfied.

Consequently, this proposed approach can be seen as the ‘philosophy of the radical centre’, as it substantiates a political process in which fluctuations of political orientations are limited, more or less to the mutually accepted boundaries of the perceived human dignity.

Sustainability of the individual, organizations, society and civilization can be seen as a *leadership and management* challenge. The task is to keep the dominant value orientations within the central ‘human dignity’ domain of the integral world view, avoiding a self reinforcing shift into the catastrophic periphery. The above described insights from the ‘laboratory of history’ suggest that leadership by authorities on the periphery would be counterproductive. Hierarchic leadership is based on the one-sided dogmas that are characteristic of the respective world views and that, subsequently, contribute to the centrifugal forces. However, constructive leadership should strengthen the centripetal forces by a reconciliation of opposites. This only can be done through a thorough understanding of all respective opposing values and thus requires a more ‘participative’ leadership.

The legend of King Arthur and the Knights of the Round Table tells the story of such a form of leadership. The knights represent the typically human values on the periphery and Arthur is the leader who integrates and reconciles them. In doing so, awareness and consciousness is raised. More in general, in these types of legends, the king is the representation of the consciousness of the group. This increasing consciousness, in turn, generates a natural hierarchy by which the king or the group is able to make concrete decisions in practical situations.

6.5 *Economy, ecology and the financial system*

As the threefold crisis is primarily a crisis of value orientations, the discussion so far has been directed at how social value orientations could be maintained and managed within their limits of stability, preventing overshoot and collapse. Given policies to restore articulated value orientations as social ends, the realization of just these ends is the primary function of the economic system. As shown in Figure 7, the economic system forms a separate layer below the layer of social value orientations; the economic system is a means to a social end. In turn, the third level of the financial system has to facilitate the economic system.

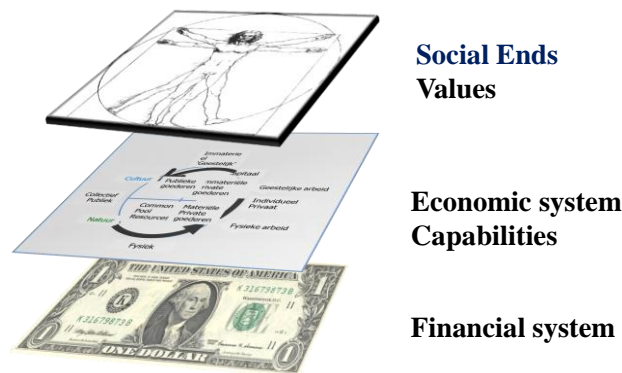


Figure 7

The intermediate, second layer of the economic system is shown in more detail in Figure 8. Instead of value orientations, the quadrants now represent economic goods and functions. The axes remain the same, albeit that the vertical contrast is interpreted as the rivalrous (materials) versus the non-rivalrous (ideas) and the horizontal contrast as the exclusive (individual) versus the non-exclusive (collective). This then specifies private goods and club goods, as well as common pool resources and public goods. Now the economic process can be seen as starting from the common pool resources of nature, creating private goods by physical labour, improving the production of private goods through mental labour, thus saving labour in the form of ‘capital’. Saved labour finally allows the production of ‘culture’. In the realistic economic process, the last step largely is cut short on the common pool resources as the profitability of harvesting existing resources is large. In addition, capital is used to produce more capital by means of financial trade and speculation.

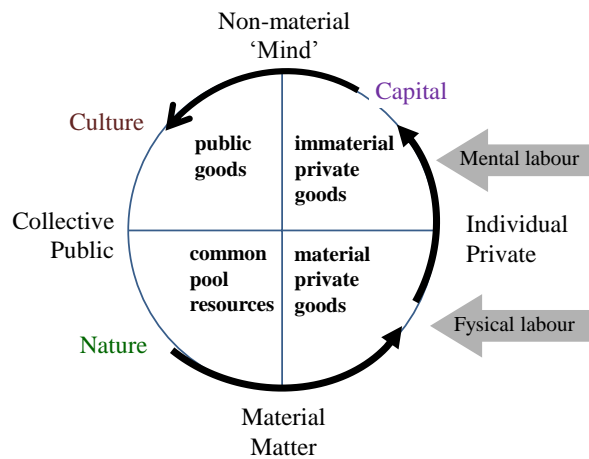


Figure 8

The division between public (left) and private (right) goods and functions can be legitimized from the required balance in value orientations. These considerations relate to theories on property and motivate why certain things are public and others are private. But given the imbalance in value orientation, now dominating the individualistic and material values on the right-hand side, there is a strong tendency to deny the values on the more collective left-hand side. This has resulted in irrational and unmotivated privatization of goods and functions which legitimately can be ascribed to the public domain. This raises questions, for example, about intellectual property and physical property, such as public or private claims on nature (areas / reserves). Restoring the balance between public and private property is a prerequisite for sustainable development.

As the financial crisis is the result of the imbalance between public and private domains, this balance needs to be restored. One-sided individualistic and material values also have fostered privatization of money creation. In combination with speculation on financial markets as an end in itself, an ultra-economy has come into play in which values are no longer created within, but outside of the circular boundary of the integral world view and thus are beyond human dignity. Money has become a product in its own right. Money creates money, whereas the initial intention of money was to value saved labour (so-called ‘capital’) and redistribute values throughout the economic system according to the values which are expressed by and within the integral world view.

Restoring the balance between public and private functions would imply that money creation becomes once more the prerogative of the public / governmental domain. In a growing economy, money has to be created according to and limited by real growth. Money is a common pool resource and the created money can be used to produce public goods such as physical, cultural and social infrastructure. The private financial sector has the function of broker on the financial markets.

This would allow Keynesian stimulation of a weak economy by investing the money that would be created (within certain limits) at the right time in the right economic sectors. It thus could ease the current financial crisis and subsequently would relax the need for economic growth in a debt-oriented economy, which is confronted with its limits. In the end, the financial system again has to become subordinate to the economic system, which in turn has to become subordinate to the social system and the values of the ‘integral world view’ as a more or less democratically shared common denominator.

7 Sustainable Civilization

The Brundtland paradox to simultaneously meet the needs of present and future generations now can be solved by considering ‘human dignity’ as the most essential need. Here, human dignity is defined by the circular, integral world view in which the value orientations show mutual cohesion and opposing orientations are still respected. The ethical framework is formed by the distinction between centrifugal and centripetal forces. As a consequence, sustainability is not a matter of future scenarios and associated assumptions, but an attitude in the present. A society that is based on the thus defined notion of human dignity, is a sustainable one, as it avoids the extremely one-sided periphery with its disasters and barbarism. Such a society builds a sustainable civilization.

The principle of the urgent reinforcement of centripetal, emphatic forces and the weakening of centrifugal, fragmenting forces is not new. Over the centuries and millennia, the story has been told in many if not all religions and in the great works of literature and music, from Shakespeare to Mozart, Beethoven, Wagner and Mahler. When will we ever learn?