

Sustainable Social Quality

The SOLA Project Working Paper Tampere University, November 2016

Richard Pieper, GEREC, University of Tampere

with the support of

Susanna Mukkila, THL, Helsinki and Merja Vuorisalmi, University of Tampere

and the Project Board

Pekka Rissanen, University of Tampere Marja Jylhä, University of Tampere Anne Konu, University of Tampere

Marja Vaarama, THL, Helsinki Sakari Karvonen, THL, Helsinki Ismo Linnosmaa, THL, Helsinki

Tampere and Helsinki November 2016

Content

1. Introduction: The SOLA project

PART I: The SOLA Model

- 2. The problem of social sustainability
- 3. The general SOLA model
 - 3.1 The structure of the model
 - 3.2 Definitions of central concepts
 - 3.3 The SOLA model as a practical model for social policy

PART II: Theory

- 4. Theoretical foundations: action theory and beyond
 - 4.1 Action theory and "varieties of goodness": G.H.v. Wright
 - 4.2 Social action theory and social system theory: Talcott Parsons
 - 4.3 Beyond Parsons: Further foundations in social philosophy and social theory
- 5. Alternative approaches to social sustainability and quality of life
 - 5.1 Quality of Life to social sustainability and the Capability Approach
 - 5.1.1 Subjective Well-Being (SWB) and QoL
 - 5.1.2 The Capability Approach (CA): Sen versus Nussbaum
 - 5.2 The social dimension of social sustainability: Recent examples
 - 5.2.1 Baines & Morgan: An Australian approach and its Finnish reception
 - 5.2.2 Colantonia: The importance of "socioenvironmental sustainability"
 - 5.2.3 Littig & Gissler: The importance of work
 - 5.3 The Social Capital Approach (SCA)
 - 5.4 The Social Quality Approach (SQA): A European social model
 - 5.5 The SOLA model and its alternatives: some conclusions
- 6. Social Sustainability: Models of change, welfare regimes and "virtuous circles"
 - 6.1 Three models of change
 - 6.2 Welfare regimes and "virtuous circles"
 - 6.3 Social problems and the SOLA model
- 7. Conclusions: The SOLA model as integrating alternative approaches

PART: The Instrument

- 8. Social sustainability: concepts and measurement
 - 8.1 The state of the art: Current approaches to the development of social indicators in Finland, Europe and beyond
 - 8.2 Indicators for monitoring societal progress: A systematic overview
 - 8.3 Indicators of social sustainability: Concepts and indicators
 - 8.4 Methodological suggestions
- 9. In conclusion: next steps

References

1. Introduction: The SOLA project

The central concept for the objectives of the SOLA-project is **social sustainability**. The concept is closely related to concepts like social development and social progress. All three concepts are introduced to capture aspects or dimensions, which are intended to enrich the current debate on economic sustainability and environmental sustainability by considerations "Beyond the GNP" and beyond "Greening the GNP". Starting points are insights into

- the environmental limits of economic growth, i.e. by taking into account the capacities of the natural environment to sustain current growth in modern developed societies and increasing future economic growth in developing societies, and
- the limits of economic growth to produce overall quality of societies and quality of life, and of economic indices (alone) to adequately reflect other important aspects of societal quality such as social, cultural, and political aspects and the subjective wellbeing or "happiness" of individuals.

At this point, the notion of social sustainability is introduced a necessary element of general sustainability, but the concept is used in quite different ways. A widely accepted model adopts a "three pillar view" of ecological sustainability as resting on environmental, economical, and social sustainability. In this view, social sustainability becomes a residual category including all relevant aspects not belonging into the environmental or economical category. In another reading of this model, the economic solutions of sustainability are treated as preconditions for any social development, i.e. social sustainability has to be looked for *within* the frame of conditions set by economical solutions. The social dimension is, then, seen as supporting economic strategies. The traditional role of social policy is still interpreted in this perspective as providing the social prerequisites for economic growth and addressing social problems which may arise as side effects of economic policies. Only recently, the social dimension is introduced in its own right and with its own problems, conditions, and opportunities setting also conditions for economic sustainability and enabling *new life styles* and *visions of qualitative societal growth* compatible with environmental sustainability.

A first objective of the SOLA-project is, therefore, to clarify the concept of **social** sustainability in relation to other dimensions of sustainability.

A central problem of any concept of social sustainability is that we need to define criteria for "good" social characteristics of a society, but we do not want to unduly limit the scope of social relationships that people might choose to live in - if only, because it calls for political consensus which may be impossible or difficult to establish. As a look around the world readily reveals, the number of social arrangements which somehow are "empirically possible" or "survive" is clearly larger than the number of desirable states. Actually, no existing society appears to realise some consensual standard of a "good society". We can not hope to settle the issue by social research on the "optimal state", although we need research to find out whether desired arrangements are, in fact, feasible.

One strategy to limit the scope of value judgements is to reserve them for the specification of the "good life" or quality of life on the *individual level*. Quality of life may be interpreted as the "final outcome" and as the standard against which all other arrangements – e.g. economical, political, social – can be evaluated. At least ideally, that is what liberal economic strategies claim to do anyway by letting the "free consumer" decide according to his or her preferences. The current debate shows a strong tendency to supplement the concept of "economic (wo)man" by a wider concept of quality of life which incorporates also non-economic aspects of life. Social sustainability is, thus, interpreted as the property of societies to generate (a sufficient level of) quality of life on the level of its individual members.

The second objective of the SOLA-project is, therefore, to clarify in what sense or to what extend the concept and measurement of **quality of life** can function as a criterion in the determination of social sustainability.

One serious limitation of quality of life measures is that individuals tend to adjust their evaluations in view of their situation, according to internalised social expectations or with reference to certain other persons or groups – all of which may not reflect what the individuals might choose as their way of life, if only they could choose against a background of other options. Moreover, options for quality of life are dependent on ways of life or life styles which include other people and their preferences and options (e.g. the roles of family members are interdependent). The perfect option for each individual most likely is not a "realistic option" – affording compromises satisfying some standard of fairness. In short, the quality of life of individuals and their expectations of a "realistically pursued good life" are shaped at least partly by the social circumstances in which they live. For the interpretation of quality of life measures we need information on the societal context, and since individual quality of life is only a final – and even insecure – outcome, it may be more effective to focus on the social circumstances which may prove to be suitable to produce that outcome. The focus shifts from the individual outcomes of developments and policies to the social structures and institutions. With the new role of the social dimension, the relationship of social sustainability to other concepts established in the tradition of the social sciences, social policy and social development in developed as well as developing countries had to be clarified. Probably the most successful carrier in this context of social sustainability in recent years has been achieved by the concept of social capital. The concept actually draws on theoretical debates going back to founding fathers of sociology like Emile Durkheim who insisted on the role of social institutions and processes as prerequisites of economic development. If social arrangements in a society are essential for societal development and individual quality of life, a "good life" has to be realised in a "good society". In analogy to (individual) quality of life these favourable circumstances can be called social quality.

The third objective of the SOLA-project is, therefore, to identify specifically social structures and processes (vs. e.g. economical) which can be interpreted to constitute social quality and which can be assumed or empirically proven to promote individual quality of life.

Obviously, there is a rapidly increasing wealth of literature and research on the topics of social sustainability, quality of life and features of social quality (e.g. social capital) and many countries and agencies including "global players" (e.g. UN, OECD, World Bank) are developing sets of indicators to measure social development or social progress. To formulate a manageable aim for the SOLA-project, some more specific focuses have to be introduced.

One focus is on suggesting an *integrative framework* for concepts and indicators of sustainability which specifies the place of the three central concepts – social sustainability, quality of life, and social quality – among other concepts of sustainability and provides a theoretical grounding. Currently, the debate is characterised by varying lists of dimensions or categories and indicators based on some non-transparent expert judgement and by an often explicitly acknowledged lack of theoretical grounding. The project aims, at least in this stage, not to develop and test new social indicators, but tries to sort out indicators suggested in the literature and to introduce them into an own comprehensive theoretical framework.

Another focus is on Finnish practices and research in welfare policy with the objective to make a contribution to the on-going debate and development of monitoring systems "beyond the GNP". Specification of a preliminary set of indicators based on available data and registers is part of this aim.

Finally, as has been noted by the Finnish participant, Ulla Rosenström, on a recent workshop on social development indicators in Berlin, there is a great need to design and present a new instrument for the measurement of social progress in a way which is understandable and communicable beyond the narrow circles of welfare politicians and statistical experts. Some effort is made, therefore, to design and to visualise the instrument with issues of dissemination in mind.

We agree with Martha Nussbaum, that it is necessary "to situate the approach (the capability approach – RP) in the narrative context of human lives, showing it makes a difference to what policy-makers notice in these lives and, hence to the ability of policy to construct meaningful interventions that show respect for and empower real people, rather than simply reflecting the biases of intellectual elites." (2011, p. xi) This implies that the presentation will strive to frame the issues in concepts, models and language which support interdisciplinary communication and discourse and reduce the complexity of issues and problems to a manageable degree rather than satisfying the requirements of intellectual elites. The latter aim itself could and should be theoretically founded. It reflects a serious challenge for the practical implementation of the framework and the set of indicators, because they have to be accepted *in practice* to achieve its objectives.

The report will proceed as follows:

After defining the task (in this section 1) the report will address in a second step (section 2) problems of social sustainability and clarify the central affordances for the SOLA model. The third step (section 3) will introduce the model with reference to recent developments of approaches to instruments of social indicators. This will result in a list of central issues to be discussed to provide a theoretical grounding. In the fourth step (section 4) the theoretical basis for the SOLA model will be laid drawing on a broad scope of social theory. The fifth step (section 5) will present alternative approaches and discuss some substantive issues of social approaches to social sustainability and quality of life. The sixth step (section 6) will broaden the theoretical basis once more by discussing the issue of social change introducing three models. In step 7 (section 7) some conclusions will summarise the results of the theoretical sections. The eighth step (section 8) will turn to the practical side of the model with a brief state of the art report of registers and instruments for social development suggesting a SOLA "dash board" of concepts and indicators extracted from various sources. The last step will conclude with some next steps.

PART I: The SOLA Model

2. The Problem of social sustainability

Sustainability means that we do not strive to define and to realise our quality of life in ways that diminish the opportunities of future generations to define and to realise their quality of life – to paraphrase the well-known definition of sustainability by the Brundtland Commission:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The definition acknowledges that further development is necessary to meet the needs of the present. But this process has to be realised in a way that respects the

"limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs" (World Commission on Environment and Development (WCED). Our common future. Oxford: Oxford University Press, 1987 p. 43.)

The definition refers to a general setting of development – the human ecology of the world's population with a developing state of technology in changing forms of social organisation and a limiting capacity for the *environment* to sustain meeting of needs. Social sustainability should be understood as part of this general concept and we will come back to the notion of a human ecology as a part of the SOLA model. But the concept of sustainability is complex and the concept of *social* sustainability inherits its complexity while introducing additional problems which often are neglected by a more narrow environmental and economical understanding of sustainability. The important and influential Stieglitz-Report (2009), therefore, addresses the issue of sustainability, but then refers the issue essentially to further discussion and research. A fundamental problem in the definition above certainly is that we can not know what needs future generations will want to meet. Cynically, we might even suggest that human needs are adaptable and future generations will find definitions of their needs which they have the means to meet. Alternatively, the temptation is great to limit the needs to some basic needs which we can hope will not be compromised by our current exploitation of the planet. In a more optimistic interpretation of the spirit of the concept, the needs refer to the affordances of a life worth living in circumstances at least as favourable as we experience today (or at least the worsening of conditions should not be due to our current way of life). Even if we do not dwell on these basic issues of sustainability, a number of problems contribute to the complexity of the concept.

First, sustainability describes a *relation* between human life and its environment. On both sides of the relation we have to recognise fundamental limits to our knowledge. Environmental sustainability is often misunderstood as implying stability or a steady state of the environment. But the environment, physical and biological, is characterised by an essentially open evolution. Even without the obvious impact of the human ecology on the natural environment, we have to expect natural processes which will change the "human condition". But certainly in the foreseeable future the issue of environmental sustainability will be to "fit" societal developments into the limitations posed by the capacities the environment. This already now includes that we develop technologies and social organisations which *regenerate and support* the environmental capacities without a precise knowledge what exactly the limitations are, especially in a longer time perspective. Technological progress may be our only chance to sustain a human life on earth worth living.

The environment for the human race and other species has to be produced and can not only left to its own capacities for regeneration if liveability is to be restored and preserved. Therefore, environmental sustainability is closely linked to economic sustainability which has to produce the goods and services for our needs, but in ways which preserve this productive capacity in the future. This implies that we develop a more comprehensive and long-term perspective on the economical sustainability taking into account not only *all* economic activities and their ecological "footprint", but also the footprint of the social organisation and the needs which determine economic activities. Saying this already makes it obvious that we do not have the required knowledge on "our" side of the relation either. *Sustainability has to be sought in a "turbulent" environment under conditions of risks and uncertainty*.

But pointing to risks and uncertainties we have to acknowledge that societies face these challenges on different levels of development. In developing countries the satisfaction of basic needs is already a problem, while in developed countries the risks - both environmental and social - are caused by inequalities created by societies themselves. The inequalities are even more prominent on an international scale. Therefore, one context for sustainability is the debate on *Human Development, Human Security* and *Social Protection* which aims at providing equal opportunities for all countries and all people world wide.

Second, the risks create the paradox that, on the one hand, we need scientific progress and technology to cope with the environment and negative effects of past interventions in the environment while we have lost the naïve trust that we can control the process technologically (e.g. nuclear energy), economically (e.g. financial crisis) and politically (e.g. terrorism). The future has become uncertain, because we observe environmental processes like the climate change, the demographic change, increasing socio-economic inequalities world-wide and cultural "clashes", which pose serious challenges for us today and for future generations. Moreover, we experience natural catastrophes, technological risks, financial crises and political instabilities which tend to destroy our belief that economic, political and technological progress will guarantee that solutions will be found and implemented in time. We, thus, search for a sustainable path into the future under conditions of risks which we have created ourselves without developing (yet) the capacities to cope with them. Sustainability requires that we improve our capacities and develop strategies, but in lack of adequate theories and models about the processes this means especially to improve our abilities to adapt to new situations, i.e. the capacities for decision making and strategic planning based on a comprehensive knowledge and information base. But these capacities have to be coordinated and collective controlled if we do not want (a) agencies with diverse interests to actually increase the complexity of problems for each other, and (b) agencies with particular interests and power to counteract the search for the "common good". Sustainability requires in this perspective especially the development and preservation of present and future capacities of cooperative and knowledge based action on all levels from local to global scale.

Again, the starting point is certainly different in developing and developed countries. While in many countries already basic freedoms have still to be realised, in developed countries we find an established political system of participation and administration. There may be serious questioning of the wisdom to export the Western concepts of democracy to other continents and cultures. But there is no doubt that the realisation of political goals within nations as well as the exercise of support and cooperation between nations requires a sufficient level of political efficacy. The rising theme of *effective Governance* in developing countries (recognised more and more in strategies of international support) and developed countries (just think of the current European crisis) makes it abundantly clear that this is not only a problem in the context of environmental sustainability.

Third, sustainability is essentially a normative concept. Societies are different in their visions of a present and future human life worth living. They have different cultural traditions and the current situation on a regional, national and global level is characterised by great differences in the stage of societal development and even by increasing inequalities. Sustaining the current situation would imply the persistence of global injustice. Even in countries which fare best in international comparisons on almost any meaningful criterion of a "good society" (like the Scandinavian countries), sustainability has to include that substantial societal change has to be achieved before we can reasonably expect acceptance of the "status quo" as worthy to sustain. The changes also can not be postponed into some distant future. In fact, considering the life expectancy of children born today, talking about "future generations" tends to downplay the urgency. It is our children living now who expect from us that the world is sustained in a way that they can have a decent life in their old age – about a hundred years from now. If we are able to achieve a global state of affairs worthy of sustaining in these hundred years, we have achieved more that we may now have good reasons to hope. But the development of visions to guide improvement needs a normative framework of values and norms. Even if we grant that societies have to find their own paths into the future based on their own visions, in a globalising world of mutual interdependence we have to develop a basic framework of values that can guide the solution of conflicts between visions of the "good life" respecting human dignity and the rights of others. This framework is especially both necessary and difficult to determine, because it involves the representation of people who can not participate in a "discourse" on the vision. This holds, for instance, for children today and generations tomorrow as well as those excluded by their position in society; it also should be seen to include other beings on the planet (e.g. animals) who can not express their legitimate interests. Sustainability needs a well-grounded, sufficiently shared and effectively institutionalised framework of values and norms for the evaluation of social development and social progress as worth sustaining.

Placing this issue in the context of international development displays immediately that a consensus on basic values and norms is anything but given; in fact, many see or predict a "clash of cultures" which divides the planet into groups with irreconcilable visions of what is "good" and "right". Perhaps the recent rebellions in Arab countries are the best reason for the hope that there is more convergence on a set of basic values possible than pessimistic outlooks want to admit. And this example also shows the importance of communication between opposing views to reach consensus – now more and more facilitated by information and communication technologies world wide. The tradition of the *Human Rights Movement* testifies to it that progress may be slow and suffer backlashes, but that the institutionalisation of basic rights on national and international levels is making progress.

Fourth, because our trust in societal progress is questioned, the search for sustainability has often obtained a conservative flavour. We turn to traditional sources for security and we experience a new turn toward natural ways of life in small communities and biological foundations of sustainability (e.g. altruism and family relations), on the one hand, and a search for religious and moral reconstitution of social order, on the other hand. While social organisation and social relations are important for sustainability and while community life and moral institutions certainly are essential elements, there is no way back to past ways of social life. We have to find new solutions for social life under changing conditions. And we have to develop trust not only in the adequacy of our visions and the efficacy of our strategies to pursue them, but also in the on-going process of living together. The "pursuit of happiness" can not be sustained, if situations of deprivation, fear, exclusion and anxiety prevail in human life. Sustainable development as a process requires that people in their everyday life can

experience that they are participating in a rewarding social process and can develop the motivational energy, trust and commitments it affords.

The concept of trust is probably one of those ranking highest in frequency and significance in the recent debate on sustainability. We have lost trust in the benevolence of "outer nature" as well as in our "inner nature" of individualistic motives and desires, trust in the economy is shattered and politics are too often perceived as not trustable and corrupt or at least not up to the challenges. The attention given to *World Values Surveys*, *Social Capital* and a revitalisation of *Civic Society* speaks to an international trend to find and create stability in social relations. The proliferating debate on Quality of Life, finally, is indicating more the search for new orientation than being proof of modernity coming to an "End of History" in the developed societies.

The latent conservatism of many visions of the "good society" points to a systematic problem in the concept of social sustainability which we will have to address. It is misguided to sustain past or current social arrangements – like societies – and expect them to solve future problems. *The concept of sustainability implies stability of some essential core which is worth sustaining*. But as it is quite aptly put in the definition of the Brundtland-Commission above, we have to sustain abilities or capacities not only structures of conditions – we want to sustain the capacity to cope with new challenges. But this requires sufficient stability in thos processes which produce and reproduce essential capabilities. We want to establish what has been called "virtuous circles" which ensure the *stability of human capacities to create and to change social organisations*. The concept proposed in the following interprets social sustainability as a set of processes in this sense. The concept, moreover, tries to reflect the fact that *we* have to establish "virtuous circles" – they do not arise and are sustained naturally – and that "we" refers to cooperation, consensus and collective identity which every politician knows is anything but self-evidently given in a globalising world.

The four problems of sustainability sketched out above and the four corresponding themes in recent debates on sustainability set the stage for the SOLA model of social sustainability. It is our conviction that these themes do not simply reflect the theoretical framework proposed here. Rather, the fact that recent debates and social trends can readily and meaningfully be addressed following these themes is further confirmation of the fruitfulness, if not validity, of the 4-dimensional framework of the SOLA approach to social sustainability. The next section will present this model.

3. The general SOLA model

To introduce the general SOLA model we will recapitulate developments and discussions which have lead to a search for a system of concepts and indicators to monitor sustainability. Each module of the model answers to a stage of the debate. Thus the basic the modules will be put in a context which should explain their significance. The aim of this section is to describe the model in general terms and provide a set of definitions of the central concepts. There is no intention to describe the debate over the last 30-40 years in detail, nor can we do justice to the contributions referred to in this introduction. We will be selective and focus on the emergence of the SOLA model out of the debate. Some of the most important contribution, in our view, will receive more attention in sections 5 and 6 when we discuss approaches to social sustainability in more detail.

The term "general" in characterising the model is intended to indicate two features:

- (a) The model is comprehensive in the sense that it can be generalised beyond the social dimension to provide a "dash board" for concepts and indicators for sustainability in general. Obviously, the specific concepts and indicators have to be "filled-in" by experts of the respective fields or disciplines, but a general framework is offered.
- (b) The model has features of a strategy or a tool which can be modified to address more specific situations, to focus on specific sets of indicators, and to explore options for intervention and policy.

This will become clear in section 6 when we introduce alternative models of social change. But it points also to the basic understanding of the model as primarily a support for practical social policy rather than as theoretical framework for social research. Interesting avenues for research follow from the model, but they are not at the centre of the SOLA project.

3.1 The structure of the SOLA model

The concept of social sustainability has evolved in recent years into different approaches to the concept in the context of the more comprehensive debate on sustainability of societies and of human life on this planet. The development can be summarized into five stages which should help to characterised the SOLA approach.

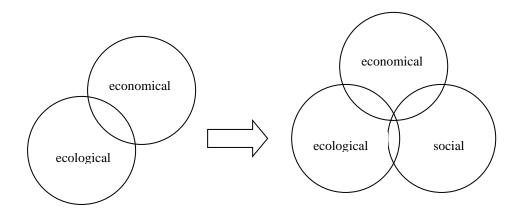
Stage 1: "Greening the economy"

In this stage "The Limits to Growth" - as the well-known title of the seminal report of the Club of Rome in the early 1970ies put it - are recognised and economic approaches begin to integrate ecological considerations. The limits are detected as well on the side of decreasing natural resources as well as on the side of the "footprint" left by the waste of production and consumption.

Stage 2: "Recognition of the Social Dimension"

In this stage the importance of social factors beyond the economy is recognised as important for social development and social progress. The currently still dominant model of "Three Pillars" is suggested: ecological, economical, and social sustainability have to be acknowledged together, although the priorities and relationships vary with authors. Typically, social sustainability appears at a residual category comprising a heterogeneous number of factors deemed necessary for *Human Development* and to supplement economic sustainability. But the social dimension in a more narrow sense also receives attention even from staunch economists with the concept of social capital, which starts a carrier also in strategies of social development in developing countries. Sustainability is seen as transferring a capital ("stock" or assets) of durable structures to future generations; social sustainability is interpreted as transferring social capital. This stage can be described as reaching its climax in the influential report by the Stieglitz-Commission (2009).

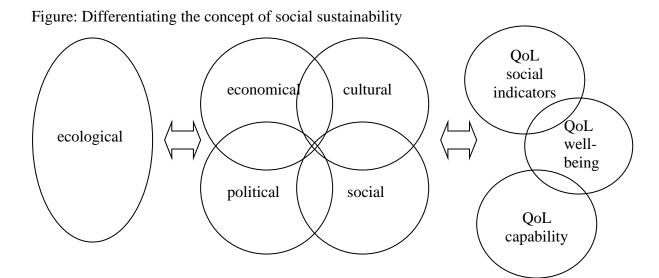
Figure: From "Greening the GDP" to recognition of the "Social Dimension"



Stage 3: Differentiation of approaches

With the recognition that environmental sustainability can only be reached by a concerted effort of all sectors of society and the growing awareness for the problem of sustainability in different disciplines the concept of sustainability further differentiates. In this stage further dimensions or forms of capital are distinguished; typical are 3-5 dimensions. It is recognised that "the social" has different dimensions which have to be addressed by different policies. Typically, the sustainability of the welfare state moves into focus and with it the *financial* sustainability of state budgets. The problems of welfare sustainability then trigger first concerns about *political sustainability* in the sense of stability of democracy and popular support for sustainability policies. The life styles especially in developed countries are questioned more radically as unsustainable and raise the problem of *cultural sustainability*. Since life styles especially in modern societies are individualistic and democracy places a high premium on individual consent to policies, social sustainability is increasingly defined in terms of individual Quality of Life. Here the debate joins with a rather independent research tradition since the 1970ies to develop social indicators of living standards and subjective wellbeing. Public registers are now scrutinised for their content of suitable social indicators and new indicators are proposed. Instruments for the measurement of well-being, especially in the realm of health care policies, are now evaluated for their validity and practicality in monitoring sustainability. The Social Indicator approach to QoL tries to measure QoL as objective outcome of economical and social policies; the Subjective Quality of Life approach (well-being approach) capitalises on surveys of life (style) satisfaction and social values. The Capability Approach emphasises that the individual is not only a consumer satisfying needs, but is seen as an agent exercising - or lacking - freedom and capabilities and as being entitled by human rights to choose a way of life.

Stage 3 characterises the current state of the debate. Two more stages of development are distinctions induced by two – not necessarily rival – approaches proposed as further differentiations, the Social Quality Approach and now the SOLA model.



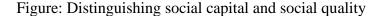
Stage 4: Distinction of social quality approach from social capital approaches

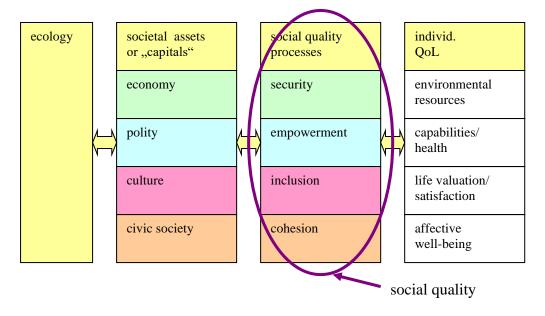
This stage refers to a distinctly European contribution launched by a network of European experts to strengthen the European Social Model by an own approach to social quality. Social processes which sustain a society's potential to develop social institutions and organisations (social quality approach - SQA) are distinguished from social institutions, organisations or systems as assets or social structures (social capital approach - SCA).

A special feature is the systematic and theoretically grounded 4-dimensional structure which curbs the current tendencies to introduce sustainability concepts for all kinds of relevant aspects of social development and social progress (see figure; the dimensions are represented by specific colours to highlight their theoretical basis; for better readability the interlocking circles are now presented as columns with dimensions as boxes which still should be seen as interlocking circles.) The SQA also recognises normative dimensions explicitly.

The QoL approach - focusing on the individual person - differentiates QoL into a multi-

dimensional profile of living standard, capabilities, life satisfaction and affective well-being.



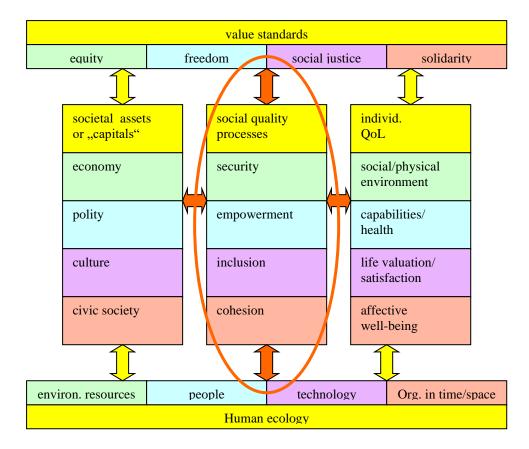


Stage 5: The integrated SOLA model

Inspired by the SQA but proposing a more explicit and comprehensive theoretical foundation the SOLA model introduces a number of additional features. In this model a consistent, theoretically founded 4-dimensional framework is applied to *all* sub-systems of stage 4 including the human ecology, the normative ethical frame, and individual QoL. The new theoretical base was developed in the context of social and health care systems and is generalised to apply to sustainability issues. It furnishes a theoretical grounding which reinterprets the 4-dimensional framework of SQA. This 4-dimensional scheme can be applied iteratively also to further differentiate the dimensions themselves, as demonstrated in the Overview Table for concepts and indicators in section 8 below.

An important feature is the re-integration of ecology. Until the 1970ies the social sciences had lost sight of the fundamental relationship between ecology and human society. Only in specialised field like human geography, demography and urban and rural sociology an older tradition reaching back to the founding fathers of the discipline survived. At the time when the ecological sustainability debate gained momentum also the social sciences "discovered" the natural environment and the space-time dimension in social relationships. Human Ecology evolved as the science of the human-environment relations. Already a decade earlier the seminal model of the "ecological complex" was proposed to structure conceptually these relations (Duncan et al. 1959). This model of human ecology - in the literature referred to as the "POET-model" for easier memory - distinguishes 4 dimensions (population, organisation, environment, technology) and can readily be interpreted in the SOLA-framework: The environment provides the resources (and receives the waste); the population is the active potential (from the human perspective); technologies have incorporated the aims in material culture; and the basis for the organisation of processes consists of the the time-space arrangement of people. More recently the Millennium Ecosystem Assessment project by the UN has proposed a framework which is compatible with the SOLA model (Alcamo et al. 2003). Finally, in the 1970ies a new debate on the ethical foundations of society arose (not the least with John Rawls' On Justice 1971). One influential tradition reaching back to Aristoteles soon impacted on theory and research of quality of life; again, his ethics can be seen as reflecting four basic value dimensions in human action. Thus, normative standards can be introduced distinguishing four major ethical values which are relevant in social policy and can be derived from philosophical ethics.

The following figure shows this application of a 4-dimensional framework to all aspects of sustainability. The ellipse highlights the social quality processes which constitute the concept of social sustainability including the mediating relations to other levels of the model.



The general SOLA model

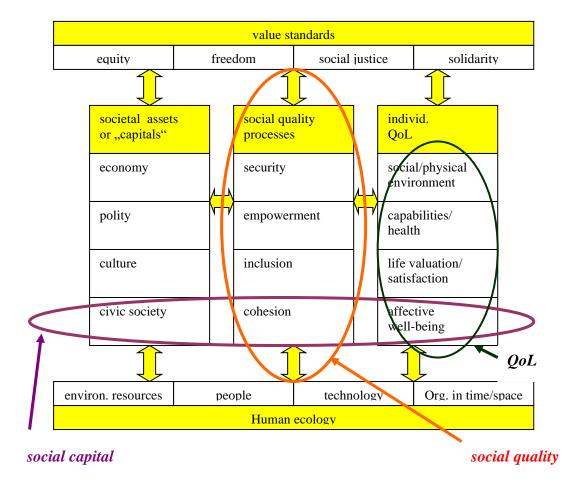
The main argument for the process concept of social sustainability in the SOLA-Model is that Social sustainability should be a dynamic concept in the sense that:

- (a) existing societal structures ("capitals") are not treated as given and to be sustained, but as open to change and progress while transmitting what is evaluated as "good" into the future.
- (b) existing ways of life or QoL are not treated as given and to be sustained, but as open to change and personal growth
- (c) different ecological environments including space/time horizons are considered e.g. regions (home, city, region, nation, world) and time horizons (life phase, life course, social change, generation change, societal epochs, cultural (value) change, ecological changes).

Therefore, the quality of the social dimension should be seen in the quality of the *mediating* processes between societal capitals and individual lives and as (re-)producing a "good society" on the institutional side and a "good life" on the individual side.

The distinction from two alternative approaches is displayed in the following figure. Here, additionally, the social capital approach (SCA) is included with an ellipse comprising *horizontally* the social aspect as distinct from economical, cultural and political aspects. The QoL approaches are show by an ellipse cutting out the level of individual QoL. Further distinctions could be made, since both the SCA and the individual QoL approach combine, in fact, quite heterogeneous approaches.

Figure: The SOLA model and Social Capital



The overlap of the ellipses of social quality and social capital suggest a central importance of *social cohesion* (and in some concepts of social capital also *social inclusion*). This, actually, is the case in the theoretical background of the SOLA model, namely, Parsons' social systems theory.

The SOLA model shares with SQA the basic four dimensions of *social security*, *social empowerment*, *social inclusion*, and *social cohesion*. Both emphasise processes rather than "stocks", but the focus of the SQA is especially on social empowerment introducing a somewhat different frame for the interpretation of the dimensions, as will be discussed in sections 5 and 6. Further, the SOLA model turns out to be more general in the sense that the SQA will be incorporated as a special case.

In the following section the central concepts will be defined and further differentiated.

3.2 Definitions of central concepts

In this section the basic definitions, concepts and indicators of the SOLA model will be presented in more detail to describe the dimensions of the model and to guide the identification of indicators for measurement in section 8.

The definitions follow the scheme below. The concepts are structured by a 4-dimensional framework which will be theoretically grounded in section 4. At this point we just call on the intuitions of the reader. The basic "logic" is that for any activity or process – individual or collective – we need

- 1. the resources and access to do it,
- 2. the know-how or capabilities to do it right,
- 3. ...the emotional-motivational disposition to feel comfortable in the process.
- 4. ...the orientation and values that doing it is right,

Resources and capabilities are the "means" to do it, while orientations and emotions point to the "ends" we want to achieve. Resources and orientations may be seen as conditions set "externally" by the physical environment in case of the former, by the social environment by the latter; Capabilities and motivations are the potentials or capacities that we ourselves "internally" contribute in the process.

Activities rely on satisfaction of corresponding *basic needs* which means that (1) food and shelter, (2) bodily and mental health, (3) socialisation and (4) cultural education (language) have to be on a level sufficient for survival. Moreover, these prerequisites of any enduring society can be regarded as *basic conditions*; they will be the primary focus of developmental policies if they are not guaranteed. Any further development of these conditions will be to the general benefit of individuals and social relations also on higher levels of societal development. The most recognised examples are health, education and income which are combined in the *Human Development Index*. But the need for social integration (or social capital) is also more and more recognised as a basic need and a prerequisite. For the specification of empirical indicators this implies that they have to consider the level of societal development: in more developed societies it is an "adequate" level of health, education, income and social integration which is important; satisfaction of only basic needs will indicate a social problem.

In the section 4 we will provide a theoretical grounding for the four dimensions, but for the understanding of the central concepts defined below, it is important that the four dimensions are related to four very fundamental problems faced by human beings and by four very basic strategies of coping with these problems. The following table summarises the problems and the strategies in a 2-dimensional framework applied to all tables in the report.

The table introduces also the four central dimensions to be defined more precisely below. Each definition is introduced by informal characterisation and typical examples and then specified in a more formal description.

It is worth emphasising that social sustainability and social quality in the SOLA-approach (and in the SQA) use the term "social" in the wide or basic sense that social processes are the processes constituting *all* societal phenomena rather than referring to a special realm or subsystem like the concept of social capital (see the vertical ellipse in the figure of the SOLA model!).

Figure: Basic Problems and Basic Strategies

	Instrumental "means"	Valued "ends"
Conditions:	Problem: Uncertainty and risks Environments carry contingencies and risks not under control Solution: Insurances and transfers for security of access to resources	Problem: Anomie Social environments generate differences of orientations, norms and interests endangering cooperation Solution: Shared values and institutions
	Social Security	Social Inclusion
Potentials :	Problem: Complexity Controlling the environment means to cope with complex causal relations Solution: Development of own capacities by promotion of health, education and cooperative divisions of labour	Problem: Anxiety Diffuseness about Being and Belonging creates anxiety Solution: Emotional identification and trust to channel passions and desires
	Social empowerment	Social Cohesion

Note: The four colours help to distinguish the basic four dimensions. Throughout the SOLA model the same colours are used for a given dimension

Social Sustainability (SS)

For social arrangements to be sustainable they must have the capacity to "survive" over time and in changing environments characterised. Since we as actors, in fact, sustain the social arrangement we must have "good reasons" to sustain the existing arrangement rather than to adapt to new situations; the concept is, therefore, intrinsically normative or based on evaluations. This is especially true, since we typically do not want to just sustain an existing state of affairs, but rather want to monitor the always necessary adjustments toward a "good life" in a "good society" in order to achieve some improvement, development or progress. To effectively sustain the arrangements we must be able *to produce and reproduce* arrangements as well as our ability to keep them "in place" and "running" or changing in preferred directions, i.e. there must be sustaining *social practices*.

In general, we would consider social arrangements as sustainable which provide everything it takes to keep us "working for their survival", as it were. According to the "basic logic" above that implies social practices ensuring: security of resources coping with risks, provision of orientations coping with anomie, development of capabilities coping with complexity, and socialising motivational dispositions coping with anxiety and diffuse identity. In a more formal way, we may distinguish the assurance of *social security*, *social empowerment*, *social inclusion*, and *social cohesion* theoretically grounded in section 4.

Social Sustainability means ends		
conditions	Social Security	Social Inclusion
potentials	Social Empowerment	Social Cohesion

Definition: Social Sustainability (SS) is the property of social processes to sustain social security, social empowerment, social inclusion and social cohesion for a population in a given region and over time.

SS refers to a potential that may be more or less realised depending on conditions due to historically developed structures (societal structures/institutions) and to the ecological situation (human ecology/environmental sustainability) of a society.

SS is intrinsically not only a *descriptive*, but also a *normative* concept, since criteria for social quality, social development, and social progress imply a reference to value standards.

Definition: Social Quality (SQ) is the extent to which social security, social empowerment, social inclusion, and social cohesion are realised for a population in a given region.

These definitions require specifying in more detail the four central concepts. In the following, we look at each at a time. To recognise the complexity of the concepts, each concept is, in turn, divided into four sub-dimensions capturing different aspects of the concept following again the general 4-dimensional approach and the basic problems of human kind described above.

Methodological note: To measure each dimension or concept by an index it is suggested to specify at least one indicator for each sub-dimension. The index should combine four sub-indicators and give extra weight to the focal indicator, e.g. count the focal indicator double. This would allow for a (suitably standardised) index to range from 0 to five points. More than one indicator may be combined in a given sub-dimension to acknowledge different aspects. Measurement of the sustainability in these four dimensions will result in a **Social Sustainability Profile** characterising the extent to which social arrangements in a given region represent Social Quality. Repeated measurement will reveal the extent of sustainability over time.

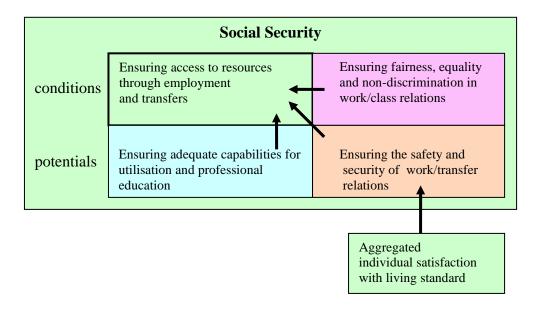
Social Security

Social practices have to ensure that necessary resources are available and accessible under conditions of uncertainty and risks; typically they are centred on work as a means to get access to the resources of society. This implies either employment and income or social transfer payments on the basis of some entitlement (e.g. retirement, child status, marital status, sickness, disability, etc.). But there are other risks which cut off the access to

resources, health risks and age (too young; too old) are important, environmental risks and natural catastrophes are becoming increasingly relevant. Insurances, transfers and services are designed to have a "fair access" to systems ensuring resources on the basis of "fair contributions". Therefore the central norm is "fairness" and the dominant medium is "money" (as measure of equivalence).

The focus of the practices is on the protection against risks by providing access to goods and services (green cell). But this protection only works when it is not counteracted by inequalities and discrimination on the labour market or in the transfer and insurance systems (e.g. social assistance) (violet cell). It also depends on the capabilities (e.g. professional education) (blue cell) to actually utilise the opportunities as well as on the motivations for engagement (e.g. trust in the reliability of the work relation and transfers) (red cell). A valid index should combine all four sub-dimensions of social security.

Additionally, we may choose (if data is available) to include the aggregated individual QoL in the dimension of "satisfaction with living conditions" as indicator of the extent to which the general safety and reliability of living standard is, in fact, perceived by individuals.



Definition: *Social Security (SocS)* is the extent to which mediating social processes apportion resources and secure their utilisation by individuals and groups by (re-)producing adequate conditions and potentials.

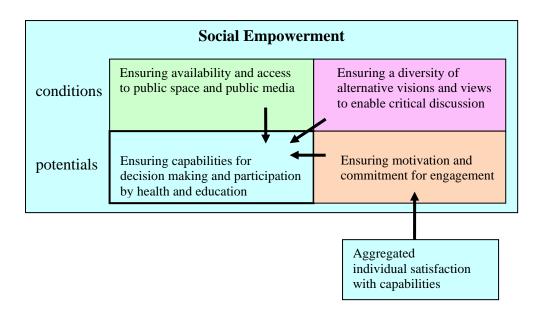
Conditions include income, housing, goods, services and environmental conditions as well as (in)equalities (not) barring "fair" access;

potentials include individual competencies as well as safety and reliability of utilisation.

Social Empowerment

Social practices have to ensure that individuals and groups have the capabilities to participate in decision making and cooperation for common goals, to express their interests, to associate with others of like interests and to influence relevant institutions and organisation in legitimate ways. The central problem is the development or the possession of adequate capacities; promotion of health and education are therefore of central importance for

empowerment. Since the "logic" of empowerment is participation in "getting things done" and controlling the complex processes of achievement by binding decisions, the medium of empowerment is "power" and the important norm is respect for "freedom" of all participants. Typically the practices are organised around forms of political democracy, but they apply also to other realms whenever binding decisions and cooperation for a common good are involved.



Additionally, we may choose (if data is available) to include the aggregated individual QoL in the dimension of "capabilities" as indicator of the extent to which individuals see themselves as capable to cope with their everyday life and to influence decision making in relevant (not only political) institutions, organisations and projects (perceived efficacy).

Definition: Social Empowerment (SocE) is the extent to which mediating social processes enable competent participation in decision making and cooperation for common goals by (re-)producing adequate conditions and potentials.

Conditions include the provision of public space and public media as well as alternative visions or world views;

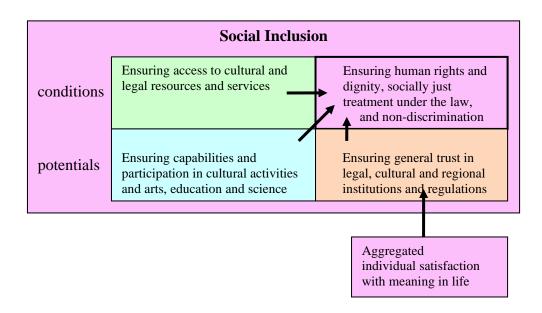
potentials include competencies for participation based on education and health as well as motivational dispositions for commitment.

Social Inclusion

Social practices have to ensure that individuals and groups are included into an order of social justice coping with anomie and providing access to cultural and legal institutions and prohibiting discrimination. The set of values and norms, rights and obligations, and corresponding institutions will vary with cultural traditions. Generally, we expect basic human rights and human dignity to be institutionalised universally in each society. Moreover, practices have to assure the "rule of law", i.e. that everybody receives a just treatment under the given politically legitimised legal framework. Tolerance and justice for ethnic and religious minorities as well as gender equality and the protection of children, elderly and disabled are essential issues of inclusion generating a *general* trust in the institutional framework (vs. *specific* trust in relationships). In as much as a society specifies a minimum standard of living as a social right, it also may be treated as an entitlement for social inclusion (e.g. children poverty, disability)), although it usually is considered as an issue of social

security guided by the principles of a "fair share" depending on (past, present or future) contributions to the common good. The medium of social inclusion is the discourse producing ideas and values or "meaning" for a "good society"; the central norm is the principle of "social justice".

Typically the practices are organised around laws and institutions of non-discrimination of ethnic or religious minorities and the definition and social control of deviance, but rules and practices of tolerance and inclusion apply also to the (self-) expression in the arts and sciences. In the global information society a growing concern is the adequate regulation of exclusive rights of information to ensure privacy (data protection), ownership (copyrights) and selective membership for the assertion of social identity while enabling equal access to information (for social empowerment).



Definition: Social Inclusion (SocI) is the extent to which mediating processes include individuals under institutions regulating their position, rights, obligations and creative expression as recognised members with human dignity by (re-)producing adequate conditions and potentials.

Conditions include the access to cultural institutions and infrastructure as well as regulations for inclusive cultural and regional membership and for the non-discriminatory exercise of values, world-views and cultural identities;

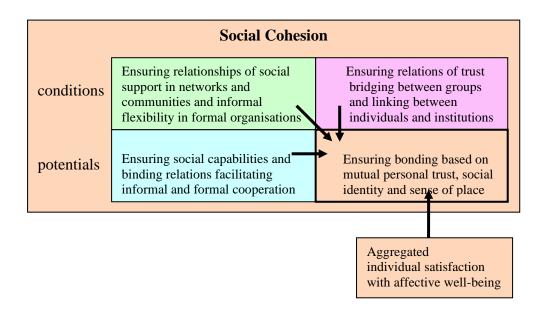
potentials include the participation in cultural activities as well as a general trust in institutional, cultural and regional/national regulations which will promote life styles compatible with though not necessarily compliant with accepted legal and cultural norms. Note: The normative basis of social sustainability is most obvious in the unavoidable specification of the limits to tolerance and in the definition of "deviant" or "pathological" life styles and activities.

Social Cohesion

Social practices have to ensure that pro-social, cooperative, committing and caring relations between individuals are facilitated integrating them into social networks, social groups, and communities including a sense of belonging to the home locality and coping with diffuseness of identity and anxiety. Social cohesion does not imply the formation of just *one* all-inclusive

social community or identity, but sustaining an infrastructure of relationships within and, especially, between groups, communities and regions which can facilitate coordinated and cooperative activities for the "common good", the values of social inclusion or the "good society". The characterisation as "glue" of society points to the general function of such relations to facilitate activities irrespectively of the goals defined by diverse and more specific interests. But this tends to under-estimate the important and substantial character of everyday life interactions, life-long socialisation and the material culture of a home environment for a disposition to co-orientate activities, especially in a society with an "erosion" of traditions, high mobility and "patch-work"-identities over the life course. A problem is that social cohesion is "blind" in the sense that it may facilitate also non-inclusive or deviant activities (e.g. organised crime, drug addiction sub-cultures). Therefore, special emphasis has to be given to *bridging* networks *between* social groups and communities and *linking* networks between individuals and specific inclusive institutions such as the social and health care system (expressed, for instance, by *specific* institutional trust). The medium of social cohesion is personal "trust and love" and the central norm is "solidarity".

Typically the mediating processes are organised around so-called *informal social relations* which facilitate coordinated activities through a network of personal relations and personal trust *embedded* in organisational, institutional and environmental arrangements. Facilitation is – by definition - related to the coordinated efforts in question. Because especially personal relations and communal bonds may also have negative effects by excluding third parties, only a positive "surplus" effect should ideally be included as cohesive, although this will raise difficult problems for measurement. Bridging ties between institutions and communities are of particular importance in as much as their effects are positive by coordinating under a common interest (but not always – see section on social capital).



Definition: Social Cohesion (SoCC) is the extent to which mediating processes facilitate social, pro-social or caring relations between individuals integrating them into social groups, networks or communities by (re-) producing adequate conditions and potentials. Conditions include the disposition for social support in the community or neighbourhood and the flexibility of formal organisation for the affordances of (legitimate) informal relations as well as the facilitation of bridging social relations between social groups and communities and the linking relationships between individuals and institutions;

potentials include the general social competence for creating binding social ties on the basis of norms of reciprocity as well as a disposition to engage in communal or bonding ties on the basis of personal trust and a sense of belonging to the locality, region or – increasingly in information societies – "virtual networks".

Some phrases appear in the definitions above which require additional elaboration:

- "Mediating" and "(re-)producing" refer to the fact that individuals and given conditions
 interact: conditions afford adaptations from the individual, but also provide a "shape" for
 dispositions; individuals bring potentials into the process which will also change the
 conditions.
- "Adequate" refers to the fact that there is an unavoidable relativity in the criteria of quality, because societies and cultures are different and have realised very different compromises between structural affordances (of the society) and individual dispositions (ways of life). On the one hand, stages or forms of modernisation as well as different welfare regimes make a difference. Historical change will continuously change the basis for adequate standards: societies will develop internally; increasing social and regional differences will raise the question whether there still is "one common society"; globalisation will increase the interdependencies and raise the question whether or to what extent we still live in distinct societies rather than in "One World". With shifting *criteria of membership* the base for a comparison of diverse conditions and capabilities will change and, correspondingly, also the evaluations of adequacy for observed inequalities. This means that societies (or regions) have to justify their criteria for social justice and welfare not only internally, but also in view of the situation of other societies.

On the other hand, the concepts of social sustainability, social quality and quality of life are "normative concepts" in the sense that they not only describe a state of affairs, but also contain an indispensable "normativity" due to the *selection* of criteria of membership and criteria of comparison: adequacy implies reference to a value standard. This is explicitly acknowledged by suggesting a set of ethical values corresponding to the four dimensions of social quality:

```
equity or "fairness" (security),
freedom (empowerment),
social justice (inclusion) and
solidarity (cohesion).
A comprehensive value defining membership should be seen in
```

A comprehensive value defining membership should be seen in human dignity.

The issue of normativity will be taken up again in later sections.

Additionally, three further concepts play a central role:

Social capital

Social capital is suggested as a term for "stocks", processes of social cohesion and personal dispositions centred on the *horizontal* dimension of integration (red colour; see SOLA model). It encompasses especially those social networks and social groups which, on the one hand, are integrating individual affective dispositions for personal trust, and, on the other hand, will be organised in civic society. The latter organisations will be developed in interdependence with the other three dimensions of societal institutions and are depending on the level of development of societies (horizontal ellipsis). Analogously, economical, political

and cultural capital may be defined by corresponding *horizontal* relationships in the SOLA model.

Personal social capital

Personal social capital is a concept referring to the fact that the relations of the individual to his or her social environment constitute a genuine resource of support for the person. In concepts of individual Quality of Life this is acknowledged in different ways. It typically includes social relations of support received and support given to others, the evaluation of social relations in general in one's life, and feelings of loneliness or social isolation. The concept thus may range over all dimensions of the QoL (vertical ellipse in QoL of the SOLA model; see above).

Quality of (individual) Life (QoL)

The definitions of quality of life vary considerably with the theoretical or conceptual framework employed (see also section 5 below). Typically QoL refers to the "subjective" evaluation (non-reflected, spontaneous judgement of satisfaction) of a person considering a medium time horizon (weeks or months), but the concept – essentially - makes reference to an "objective" assessment of conditions and capabilities controlling for self-deception and ignorance about one's situation. This implies a reflection on one's life with the support by relevant others. A definition following the spirit of the SOLA model would be:

Definition: *Individual Quality of Life* is the extent to which a person has achieved a balance in his/her relations to him/herself and to others by (re-)producing adequate conditions and potentials for a "good life".

Conditions include the availability of resources and a favourable home environment as well as the development of a sense of meaning in life in social relations and interactions with others; potentials include the development and maintenances of personal and social competences to pursue one's goals as well as the development of the disposition to enjoy positive and cope with negative emotional experiences.

• "Adequate" refers in this context to the fact that the chosen "way of life" has to "fit" into the ways how other relevant persons are pursuing their "happiness" and into the shared conceptions of a "good life" without giving up the entitlement by human rights to finding an own way of living within the contingencies of life. For example; in a family each member has to consider also the expectations connected with different roles and with the hopes and desires of the others. (The corresponding value standards of life or "Varieties of Goodness" see below G.H.v. Wright)

3.3 The SOLA model as a practical model for social policy

The SOLA model, as stated above, is theoretically well-grounded, but it is basically an integrative strategy and tool for social policy and monitoring social sustainability. The SOLA-model claims to be an *integrative* framework in several ways:

• On the level of theoretical foundations the claim is to provide a basis in social theory which should allow for the theoretical integration of *other sociological approaches*.

- On the level of *interdisciplinary discourse* the claim is that the approach is (sufficiently) compatible with approaches in other related disciplines in the social sciences (e.g. economics, political science, demography, geography) and even with the natural and engineering sciences on the basis of general system theory, information theory and decision theory.
- On the level of interdisciplinary coordination of *policies* the claim is that the framework clarifies the position and role of social sustainability in the context of ecological, economical, political, and cultural policies for sustainability.
- On the level of *practice* the claim is that the approach is (sufficiently) compatible with an everyday life understanding of the "things" to consider in cooperative activities and social policies and should be suitable for communication to and with practitioners.

By implication the claim is that a pragmatic and eclectic use of the SOLA-Model as a *methodological tool* under different theoretical or practical concerns is possible. The theoretical foundation is available (and has be further developed by theoretical and empirical research), but the SOLA-Model can also be used as a *heuristic device* in comparative research and practical projects. In particular, the 4 basic dimensions may be used as modules in a rather eclectic way to identify problems and strategies: on theoretical grounds it should *always* be possible to look for the structuring effect of the 4 dimensions in social activities or social problems.

This said, it should also be clear that such a practical use will influence the understanding of basic concepts, and, therefore, the "drifting" of the meanings under the influence of practical use has to be continuously reflected and evaluated.

Part II: The Theory

4. Theoretical foundations: action theory and beyond

A frequent criticism of the discussion on social sustainability and the development of a system of indicators to measure social progress is that the frameworks and models proposed are rarely theoretically grounded.

The SOLA model is in need of theoretical grounding for at least 6 distinct features:

- 1. The choice of action theory as a theoretical grounding including an integration of the normative dimension
- 2. The 4-dimensional structure and its generalisation over all elements of the model
- 3. The hierarchical structure of the model with three levels: persons, processes and structures
- 4. The rejection of functionalism and the inclusion of "critical" approaches to social sustainability
- 5. The choice of a 4-dimensional concept of Social Quality rather than Quality of Life approaches and/or Social Capital approaches
- 6. The elaboration of the basic model by inclusion of models of social change
- 7. The integration of the ecological and environmental dimension into the general model

This section will focus on point 1, 2, 3 and 4; section 5 will address especially point 5, and points 6 and 7 are then taken up in section 6.

A characteristic feature of conceptualisations of social sustainability and quality of life is that they propose some list of indicators and some intuitively more or less convincing groupings without providing a systematic argument just why the list is complete or at least not missing any relevant aspect, and why the grouping is meaningful and capturing the theoretically relevant dimensions of social quality or quality of life. Typically, the selection is justified as taking up some scheme proposed elsewhere in the literature or the preliminary status of the own selection is emphasised postponing further theoretical analysis. The SOLA framework claims it provides a consistent rational for the basic structure, which responds to the above questions on structure and completeness. Certainly, the model is only convincing if the theoretical foundation is accepted, but some good arguments can be put forward that the "works" in theory and practice. In theory, our arguments will demonstrate that the 4dimensional structure is suggested by traditions of social theory and philosophy; in practice, arguments could cite empirical research to support the relevance of the scheme (for research on social and health care see Vaarama et al. 2008). Not the least, we will try to show that the 4-dimensional scheme simply makes sense in "narrative context of human lives" (Nussbaum). Action theory, we believe, has the capacity to bridge the gap between scientific theory, sociopolitical practice and ordinary human life, which is why we will start with the theoretical discussion using it as the background for the introduction to the "logic" of the 4-dimensional structure as well as some basic features and concepts.

The SOLA approach is indebted to a wide scope of theoretical positions, as will become clear in the discussion below, but in this section three authors will be in the foreground: G.H. von Wright, Talcott Parsons, and Anthony Giddens. The first will provide a foundation for action

theory, the second will be employed to ground the general model in social theory, and the third will be referred to for some critical extensions of the model.

4.1 Action theory and "varieties of goodness": G. H. von Wright

Philosophers and practitioners like to start with everyday life experiences and common understanding, because they want to be sure that they do not loose sight of who we are, what challenges we face, what decisions and actions might solve our problems, and what we should strive for and value. Social scientists of all disciplines and theoretical predilections want to explain our actions, but while they are still working on the best theories, persons have to make decisions and act. From a practical point of view, we need a framework into which we can integrate the best theories and models as they appear on the "scientific market", and which we can adjust to new insights as we confront new challenges. Action theory, in our view, is such a framework. A grounding in philosophical action theory should help to bridge the usual gap between "theory" and "practice".

There are different philosophical traditions which may be invoked. The choice is here for Georg Henrik von Wright who has provided a widely accepted foundation for human action. In a lecture "On Freedom" (1984, p. 112) he distinguishes the following aspects

- (1) ... actions are based on learned capacities:
 _a person has to be able to do something
- (2) ... actions require appropriate means:
 a person has to have the necessary resources
- (3) ...actions rely on norms or rights:
 a person evaluates the action as having "good reasons"
- (4) ... actions are influenced by concurring emotions:
 a person avoids actions associated with negative feelings
 (e.g. pain or anxiety) and prefers actions associated with positive feelings
 (e.g. joy, pleasure).

Additionally, von Wright includes sufficient time and physical conditions which describe the "embeddedness", both in the body (e.g. state of health) and its environment (e.g. physical barriers). From the point of view of actions they usually can be seen as (lack of) resources (time, space, physiological efficacy). Actions are performed by *persons* and require self-reflective capacities based on linguistic and cognitive capacities; persons (unlike animals) are able to understand their own actions and those of other persons as meaningful and guided by intentions. They are able to communicate why they act as they act, and they have learned to act in the communications with others.

The understanding or interpretation of observable human behaviour, including our own behaviour, *as meaningful action* is a quite complex achievement. Actually, it appears as a miracle that already very young children are able to learn it (on this miracle see *The Philosophical Baby* by Gopnik 2009). We all learn it as we learn to structure our own behaviour in the interaction with other human beings in a way that is also meaningful to them.

The basic model of action v. Wright describes here may be summarised in the following graph. Action somehow succeeds in joining two processes. One process consists of the determination of the action by the stream of ongoing behaviour. This process we experience as the causal forces which determine the opportunities and restrictions but also potentials we have as we start to act. The other process consists of an interpretation of the ongoing behaviour and of the action we intend to start. This interpretation draws on our ideas and ideals on what is meaningful to do in the current situation. As v. Wright emphasises, we have

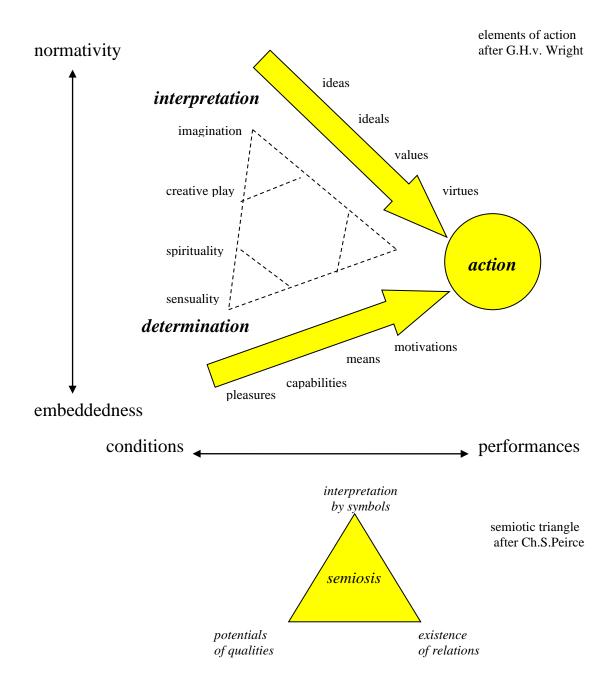
every reason to assume that the causal determination incorporates more than just one possible course of action. We have also to recognise that the interpretation of action and the design of further action has to use general "types" of action which then have to be transformed into the specific "token" of the action as we actually perform it. Just like knowing a language is not the same as speaking it in a concrete situation, knowing what courses of action are meaningful in a given situation does not mean that we are actually able to perform it successfully. The arrows in the graph begin with what is possible in "reality" or in our "imagination" and they join in the actual performance which in a sense is the only thing that then "exists". The reality and our imagination contain infinitely more than we can actually transform into action.

The discussion of the philosophical implications of this graph is way beyond the scope of this report. Let us only note that the triangle which is formed by determination, interpretation and action is actually a version of the more general semiotic triad by Charles S. Peirce. Peirce introduced the triad of *Firstness*, *Secondness* and *Thirdness* in his pragmatic philosophy not with this graph; Peirce never used a triangle to visualise his triadic scheme, but he comes close to it (see: Lectures on Pragmatism (1903) in Collected Papers 1931-35). Since he claims that his three categories provide a classification of all possible systems of metaphysics, we might hope that it also can guide a more mundane endeavour like the SOLA framework.

Returning to v. Wright we recognise that the four elements of action appear as part of the determination arrow, but as *part of an action* we should see each of them as reflecting interpretations of the actor. Actions thus have a 4-dimensional internal structure in v.Wrights theory. These dimensions have to be placed in a basic frame of (a) realisation relating *conditions* and *performances* and (b) a frame relating *normativity* and *embeddedness*.

	Conditions	Performances
Normativity	Normative conditions	Normative performances
Embeddedness	Embedded conditions	Embedded performances

Both relations are conceptually interdependent because performances also select their conditions and the meaning of norms becomes only apparent in actual practices. Moreover, keeping Peirce in mind, we should acknowledge that the triangle actually pictures a *triadic* relation which logically can not be represented by two dimensions (of the frame) or by two separate processes (arrows): the symbols or actions constitute the holistic experience we have of the world (see Nöth 2000). Any distinction (concept, dimension) we introduce to understand what is the case, reduces the complexity and leaves "things unsaid" (see also Luhmann 2002). This fundamental statement seems to be of little relevance for any practical scheme like the SOLA framework. We will see, however, that it lingers behind the different interpretations we find for different models using the "same" four dimensions.



This analysis of the structure of action can be pursued in different directions. Von Wright is specifically concerned with the problem of freedom in human action and with the distinction from behaviour in animals. He observes that "the range of freedom of an agent is greater or smaller depending upon the number of kinds of actions he can do" (p. 116). Thus, freedom is closely related to the capabilities of a person, a theme we will return to in the section on the capability approach. The actual capabilities in a given situation (1) will depend on the restrictions posed by the other three dimensions, i.e. the availability of resources and the accessibility of a suitable environment (2), a favourable social order of legal and moral institutions (3), and a psychological internal setting of affects, desires and emotions (4) which support the exercise of freedom. Von Wright does not refer to these dimensions, but he does identify corresponding types of restrictions. The ways how "external" social norms do or do not, in a given situation, influence actions can be quite varied depending on the sanctions involved, e.g. withholding resources, threatening with bodily harm, stigmatisation as deviant, and the "internal" interpretation by an actor of those norms and sanctions and his choices.

Thus, freedom or autonomy as a feature of human action has its place in the 4-dimensional structure of action as a set of capabilities (1).

Von Wright also considers the role of values or "good reasons" in action. A person's "involvement in the social fabric constantly provides him with reasons for and against certain action" (p. 128). The capacity of self-reflection enables the person to deliberate on the quality of reasons as guiding "good" actions, and other persons will asked for justifications in the light of their own evaluation of a person's actions. A person "builds" his own life (p. 128) by choosing a pattern of activities and a set of "good reasons" or personal values creating meaning, a sense of identity and quality in life, thus structuring the social value dimension (3) of activities. But again that will be successful only by considering (2) the relationship to the means or resources employed in the pursuit of valued goals (the means must be justifiable by the ends), (1) to the effectiveness or competence of performing the actions ("good will" is not good enough), and (4) to the authenticity and desirability of the affects involved (in virtuous conduct one should be in harmony with one's passions as Aristoteles – cited by v. Wright – already claimed). As v. Wright elaborates in an earlier book on "The Varieties of Goodness" (1963) these four elements give rise to four varieties of goodness, since each of them may come in a good or bad quality:

- (1) *Instrumental goodness* (including technical and medical goodness) refers to competent ways of using causalities to realise certain goals
- (2) Utilitarian goodness refers the quality of things as means to other ends
- (3) Moral goodness refers to the quality of one's motives and intentions, and
- (4) *Hedonic goodness* refers to what one likes and enjoys as pleasant and pleasurable. He also explicitly rejects rigid dichotomies like means and ends which implies that valuing means for their own sake is an option. Actually, v. Wright emphasises the possibility that a person may reflect on the different types of "goodness" and develop an own "ideal of a happy life" which capitalises on one of the four varieties. But, to cite another philosopher of ethics, Höffe (2007), the art of life consists in finding the right measure in the pursuit of four basic goals in life: power, material welfare, social prestige, and pleasure. Höffe sees these as fundamental goals of human action across historical times and cultures, and, again, the four elements are readily identified. He also emphasises that the pursuit of any of these goals in isolation will lead to ethically or morally questionable forms of life. They four goals can orient actions to build a "good life", but they need responsible reflection which aims to balance the four goals of well-being with each other and which, especially, respects the dignity and the "pursuit of happiness" of other persons. As v. Wright has it, the pursuit of personal "goodness" must be developed as a set of virtues including the duties one has toward others and respecting the *principle of justice* in the pursuit of the common good. The personal "good life" can only be pursuit in the context of the "good society" for all. This is essentially an understanding of the "good life" which goes back to Aristoteles (see McMahon 2006 for a wonderful description of the historical carrier of the concept of happiness and the influence of Aristoteles).

To return to the fundamental triad above, we may say that the "ideas of goodness" have to be transformed into "ideals of a good life" which in turn imply that corresponding "values of a good society" are realised in "virtuous actions" – this transformation describing the "arrow of interpretation".

To summarise: "Free" action can build a "good life" if it finds the right measure for power (1), pleasure (2), and social valuation (3) based on the respect for the "pursuit of happiness" of others. Thus, the concept of quality of life should reflect the structure of action in four dimensions of well-being, but it should also acknowledge that persons must find their own interpretation and balance. The "good society" should not only provide the four "goods",

but also reflect the affordances of discourse and negotiation with others, like institutions and human rights, which enable all persons to create quality in their lives. The latter requirement may also be interpreted as the basis of social quality. In the context of social quality we might then say that

The richness of ideas combined with	The social values combined with moral	
utilitarian goodness leads to welfare.	goodness lead to social justice .	
The choice of ideals combined with	The virtues combined with passions and	
instrumental goodness leads to freedom .	motivations lead to solidarity .	

These hints at a philosophical and ethical foundation should support two claims: first, that the 4-dimensional framework is not a disciplinary framework in a narrow sense, particularly not a necessarily sociological one or depending on a specific sociological theory. There are theories, however, which use a radically different framework, notably neurophysiologic-behavioural approaches starting, as it were, "below" the level of action theory, and versions of system theory starting from a level of systems "above" actors. But only if those theories find a way to relate their view of human life to our everyday understanding of acting and interacting in practice will they be helpful in our pursuit of a "good life".

4.2 Social action theory and social system theory: Talcott Parsons

Nowadays it is fashionable to call a summarising exposition of what you are talking about a "narrative". So we suggest a narrative of what it means to strive for social sustainability, social quality and quality of life in the light of social action theory.

Lets us start with the observation that all kinds of events happen in our everyday life and form our stream of experiences. For some aspect of these events we are more or less responsible, because they are part of what we do, while other aspects appear to be happening without our doings or involvement. In fact, most things happen without our on doings, although many events will have a direct or indirect effect on us. We will attempt to monitor the flow of events and our active part in them according to the goals we set ourselves in the process. In order to do so, we have to have the capacity of at least some - if restricted - self-reflexivity, creativity in developing actions, and self-determination in the selection of actions (The question of "absolute freedom" we can - in this context – leave to the philosophers). Our capacity for using symbolic systems (like language) for representation what is or should be "going on" makes these capacities possible, and is therefore, a basic assumption for any action theory.

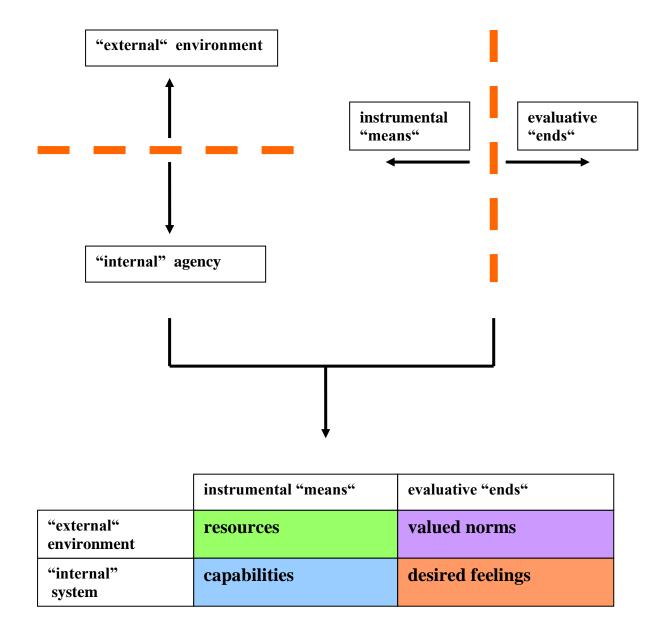
To picture this situation it makes sense to distinguish between "us" as the reference point for what we do and feel and "our environment". Aspects of the events which constitute our doings or feelings we may call "internal" or related to us as agents; those aspects which relate to our environment we may call "external". Although, we should keep in mind that - in our narrative - all events are part of our experience or occur in our life world. We might think of the situation of waking up after loosing consciousness and asking "Who, Where and When am I?". Interestingly, the questions try to re-establish what features in my immediate experience belong to me and which belong to a somewhat independent environment (e.g. I will try to recollect not only my memory, but also my eye-glasses, my purse, possibly my wheel-chair, i.e. everything I need to act as the person I am in the current situation as it shapes up with my recovering memory).

Another distinction we would like to make is between those events which constitute what we like to be, to do or to feel and those actions and events which we are interested in only as -more or less necessary – conditions, resources or instrumental steps toward realising the desired events. We distinguish, thus, between "ends" and "means". Although, the possible causal relationship between means and ends is very important for the distinction of means versus ends, the distinction is not depended on causal knowledge. In most cases we do not have (sufficient) knowledge about underlying causal relations; we have only some experience of "what works" in certain situations. What we consider means can also, on other occasions, refer to objects which we consider valued parts of desired experiences (e.g. a teddy bear can be a respected friend or suitable to wipe up spilled ice cream). Ends can become means for other "higher" ends, and means can become valued ends, no matter what the causal consequences may be.

The two distinctions are clearly independent from each other in the sense that we will find means in our "external" environment (e.g. goods, services) as well as "internal" within us (e.g. our skills to make desired things happen without necessarily liking the effort of exercising them). And there are "ends" in us, namely the aspects of events that make us feel good, but also "ends", which we experience as related to our social environment and which intrinsically require the acknowledgement of others. Social norms, rules and values have this character, which we internalise in the interaction with others. We may critically modify the meaning of norms or even reject values, but they remain "external" and social in the sense that we must always be able to justify our position in as much as our actions affect others and require the consensus, tolerance or valuation by others. If we cross-tabulate these two distinctions in the indicated way we receive the figure below.

Actions we can now conceive as the operations by which we influence – in a wide sense of the term – the flow of events in line with what we cherish by selecting and using available resources and exercising our capabilities in order to realise social values and to experience pleasant feelings. To some extent we can say that certain actions are specifically designed to achieve one of the four aims, but we also have to acknowledge that acting is always "embedded" in the flow of events or in concrete situations, so that actions always have to satisfy all four aspects, if we want to be "in control" and "in harmony" with a given situation. Our experience is also not "cut and pasted" as a series of distinct actions. Actions are imbedded on a flow of other actions, some more basic like taking a first step here and now, some involving the planning and execution of many actions of preparation in the past, of a complex performance in the presence and of anticipation of the future, e.g. like making a journey, building a house or writing a book.

Figure: Two basic distinctions in Parsons' Social Systems Theory



Many activities we perform without much conscious thinking, they are routines while we focus on what we want to achieve or to enjoy. Still, on which ever level we happen to focus, we have to make sure that the means are available, that we have the required competences, that our actions are meaningful considering what we value, and that our actions are associated with a flow of feelings which sustain our motivation. Or: if you are a youth in our society and do not have the money to pay the rent, have not acquired an education, are convinced that going to work and raising a family is meaningless, and feel anxieties to even start, you are not going to conduct a very ordered "normal" life. You may be creative and develop an alternative life style, but it still has to satisfy the affordances of embedded actions. To summarise: action theory assumes an actor or agent who (more or less successfully) monitors a flow of activities in a physical and social environment by continuously ensuring that the activities fulfil (sufficiently) the requirements of what it means to act rather than to

drift in a stream of events. In certain activities one of the four (or a combination) dimensions may be more dominant than the others, especially complex activities may have different focuses or themes organising activities especially around the need of acquiring resources, or the need to organise influence effectively, or the need to clarify the relevant justification, or to preserve the affective "climate". Action is a constant flow of problem solving.

Herbert Simon has described in The Architecture of Complexity (1962) how essential it is for the construction of more complex things or plans that we can rely on (relatively) stable building blocks or modules when assembling the construction. His example is a watchmaker assembling a clock. It is very important that the unfinished clock does not fall completely apart every time he is disturbed, say, by a telephone call. There have to be relatively stable steps or modules, otherwise he has to start all over again and again. This applies also for the assembling of actions into relatively stable structures. In the case of actions, this principle suggests that we try to establish routines for the provision of the four fundamental building blocks of actions to have them available for the design and conduct of more complex activities: If we want to throw a party, we might save *money* to be able to pay for the drinks, learn how to dance to impress our partner, care for the relationship to have a loving friend for the occasion, and develop a *lifestyle* which justifies such festivities. The building blocks – money, dancing competence, loving relationship, lifestyle values – can certainly be employed also on other occasions; and there are alternatives available (steal the drinks; develop small talk; enjoy drugs; demonstrate despise for bourgeois events). Still, we should expect that the 4-dimensional structure of actions will support the development of structured activities (corresponding to the 4-fold-table above) on different levels of complexity. Furthermore, these structures may have a focus on one dimension, but because they have to be relatively stable as complex actions, they also will exhibit themselves the four dimensions.

At this point it is important to realise that the agent – in our narrative - can also be a group, an organisation, a community or the nation-state as long as it fulfils the basic requirements of agency, namely self-reflexivity, self-determination and creativity in the development of options. We may hesitate to attribute these features to collective agents, and rather use the term agent in those cases only metaphorically to describe the fact that certain groups of individual actors organise their activities as if they were an agent. And in any case it should be an open empirical question whether or to what extend a set of actors, in fact, achieves this sophisticated coordination and on what level. Not any network of actions will show this kind of self-organisation. Still, networks consists of actions and, therefore, it is always meaningful to ask how the four requirements of stable actions are fulfilled in the network by the participating actors, and which needs of the actors (resources, enhancement of own efficacy, value orientation, emotional support) are fulfilled by the network for actors. Stability of the network then results as an "unintended consequence"; no individual agent and no collective agent is interested in maintaining the network as such, but everybody gets according to his or her needs and contributes to the satisfaction of partners – markets are such "non-agent" networks. Not all networks are markets; markets arise from actions exchanging resources, other networks may organise, for instance, pathways of political influence, or serve spreading new world views, or tie individuals into relationships of mutual care. The four dimensions, thus, can distinguish the main focus of different networks, while it is still meaningful to ask how all four dimensions are involved in the constituting actions to guarantee a sufficient stability. Without a certain degree of stability the participants can not rely on the network and will resign from it in favour of more reliable relationships (if there is a choice).

To summarise the "narrative": The ordering or structuring of actions will, on the one hand, tend to occur with a certain focus on one of the dimensions of actions to provide "building

blocks" for more comprehensive activities. On the other hand, the actors will in some cases try to establish a common agency to achieve control over activities; in other cases they will leave the negotiation of co-ordinated actions to the individuals. The common agencies we may call communities, the negotiated relationships we may call social networks. Both processes will be more or less effective in creating relatively stable social relationship. Both processes are characterised by the affordances of (relatively) stable actions and, therefore, produce and reproduce patterns of activities which can be described as focusing on a particular dimension or as combining dimensions. Relatively stable patterns must induce the participating actors somehow to sustain all four dimensions through their actions to maintain the "infrastructure".

The structure will consist of a hierarchy of agents and collectives, communities and social networks, on different levels with relative stability. In the perspective of action theory, the hierarchy will consist of three levels: the level of individual agents, the level of interactions between agents, and the level of structures created to coordinate complex interactions. Each level is characterised by relative independence and stability; each level may be further differentiated: agents being "multiple personalities; collective actors in networks; interactions forming forming complex networks; structures evolving into complex societies. The hierarchy can also be "nested" with collective agents controlling networks and networks coordinating agents. The "network society" (Castells) becomes very complex because it has created the information technology which increases the capacities for networking immensely.

Any existing complex pattern of actions – such as groups, communities, networks, organisations, nation-states – will be the product of attempts to bring some order into the relationships. Since people are "only human" and since the environment and history will provide ever changing challenges – we can not expect existing patterns to exhibit a "perfect order". But the thesis is that assuming three levels and following the 4-dimensional scheme we have good chances to give a meaningful and practically relevant order to our co-ordinated activities. Taking the case of societies as an example, not all societies will have reached a sufficient stability in their organisational and institutional structures (e.g. developing nationstates), and not all will have raised the complexity of their structured activities to the same level (e.g. modern societies). Therefore, the analysis will in each case come to different conclusions about just which dimensions have to be developed. And it will make a difference, whether we focus on the processes which are expected to mediate the development to a *future* state or on the requirements of enhanced stability of an existing state. The instabilities of the existing state may be the prerequisite for further development or the reason why further development is barred. A lack of balance in the existing structure may be due to the erosion of supportive processes (e.g. the socialisation of children, political protest) or to an environmental challenge (e.g. climate change, migration). Moreover, we should expect that development in one respect may compensate for the lack of development in another respect.

All these evaluations have to be made with reference to the "good society" to be realised; they require reference to ideals and values. Without knowledge of the "golden standard" of societal organisation we will have to agree on what we value – and to agree on who is "we". Unfortunately, the two questions are interdependent, since the agreement on values will be influenced by who is accepted as a participant in the discussion, and how contributions are weighted will depend on the values of those deciding over participation.

The narrative did not say this explicitly, but the four-fold table represents one version of the well-known AGIL scheme of Talcott Parsons (1963, 1978), who derived this scheme from an analyses of sociological (e.g. Max Weber), economical (e.g. Pareto) and psychological (e.g.

Freud) action theories. Thus, the scheme incorporates a respectable scope of social theory (Joas and Knöble 2009). The structure of any action is characterised in this perspective by these 4-dimensions (actually, formed by the intersection of two dimensions, as described above). Parsons has later generalised these four dimensions to interaction systems claiming that any self-organising and self-reproducing system of actions will also have to realise the 4-dimensional structure: Social systems have to show

Adaptation they have to utilised resources and select a suitable environment

efficiently, e.g. a family needs money and a home

Goal-Attainment they have to develop and organise their activities to reach their

goals effectively, e.g. a family has to organise housework and

other daily activities

Integration they have to develop and regulate motivations and feelings othe

members to sustain supportive affects, e.g. a family needs

mutual love between partners and children

Latent-pattern maintenance they have to sustain a set of values or standards of

performance which enable the identification of favourable states, e.g. a family has to keep the value and meaning of "the family" alive in the face of all kinds of events which might make one doubt whether the living in this family is really "worth living".

This approach to social systems has been widely criticised as being "functionalistic", i.e. picturing essentially free, meaningful and creative human actions and social interactions (as described in the section on v.Wright) as cybernetic control systems and reducing historical processes to the evolution of social organisms. Fortunately, it is perfectly possible to adopt the 4-dimensional framework identifying four focuses or themes of social action and organisation without accepting Parsons' (later) social systems theory. Actions and interactions can be interpreted to be structured by the affordances of "problem solving" which exhibit to the four dimensions, as described above, and these actions can be attributed to agents in everyday life as well as to organisations and to societies or nations. The concept of problem solving, moreover, serves also as the interface to general systems theory and decision theory – and thus to an interdisciplinary discourse.

4.3 Beyond Parsons: Further foundations in social philosophy and social theory

Keeping the three levels and four dimensions as basic modules of a model does not necessarily imply to accept they way Parsons arranges the dimensions in a higher level of two constituting meta-dimensions: external/internal and means/ends (see figure above). As we see in more detail in section 6 below, alternative meta-dimensions are possible and meaningful arranging the 4 dimensions differently and somewhat modifying their meaning. Although the SOLA model is clearly indebted in its development to Parsons, we suggest as theoretical foundation a tradition in sociology characterised by Karl Marx, Emile Durkheim and Max Weber, which is currently promoted most prominently by Anthony Giddens. In this tradition human practices are organised into societal structures which may or may not be functional to sustain social organisation on a higher level. These structures have to be produced and reproduced, but they also have to be evaluated and improved to find new and better arrangements to cope with historically changing problems. Giddens was also one of the first sociologists to re-introduce the concrete environment of actions in time and space back into social theory, which had been widely lost in an interpretive and/or social-constructivist sociology focusing on the upper "arrow of interpretation" in the figure of the fundamental triad above. (The founding fathers of sociology -like Durkheim, Marx, Mead or Simmel – still

had a theoretical sense for the embeddedness of social action which was largely lost under the influence of symbolic interactionism, ethnomethodology, and structuralism.) Parsons, on the other hand, has been accused with some justification (Joas and Knöble 2009) to have neglected the issue of interpretation in his system theory giving too much credit to the "natural" processes pictured in the "arrow of determination". The dimensions of the AGIL scheme can, therefore, be projected on the determination arrow (see above).

In the present context we do not need to clarify which theoretical tradition is "right". Within the SOLA framework, as stated above, we are well advised to be eclectic and just "take the best" of theoretical offers. The fundamental triad turns into a heuristic tool to play with alternative theoretical approaches and to generate fruitful interpretations. This "eclectic" approach can receive a theoretical foundation when we acknowledge that the human condition is characterised by four fundamental problems which, in fact, are faces by any "system" in the sense Niklas Luhmann (1984) has generalised the concept. Systems have to make a distinction between the system and the environment on the basis of a "self-thematisation" – a distinction corresponding to our distinction between conditions and practices. The fundamental problem (for Luhmann) is complexity which means *reduction of complexity* is the central problem; "anything goes" as long as complexity is reduced effectively – a perfect justification for eclecticism. In the spirit of Luhmann we then can distinguish four basic problems:

- *Uncertainty and risks* due to the uncontrollable external environment. Since the environment is by definition uncontrollable, the only promising strategy is to either select a different environment and see if that works better, or to install insurances or transfers from other sources to cope in case of crisis.
 - All forms of providing social security have this basic "logic".
- *Complexity* due to the complicated causalities involved in those cases where the control of system operations is effective.
 - The best strategy in this case is to develop the capacities of the system by learning (education) and ensuring fitness (health).
 - All forms of social *empowerment*, i.e. of enhancing effective decision making and control make use of this solution.
- Anomie due to inconsistencies and contradiction in the orientation of the system. The most important source is the fact that systems are composed of parts which might not agree on central objectives and create "strategic games" within the system. The best strategy in this case is to create values and institutions enforced by sanctions to cope with deviance. (Since Durkheim we know that that does not work totally, so every institution is a "reduction of complexity".)
 - All forms of *social inclusion* which seek to impose a social order or social justice are examples of this strategy.
- Anxiety due to the fact that no reduction of complexity gives total assurance exactly because they are "just reductions" the basic problem of "Urvertrauen" or anxiety remains
 - Since this problem can not be solved instrumentally or controlled the system has to rely on mechanisms which ensure "unconditional" cooperation or mutual care. All forms of *social cohesion* have this character of "boot-strapping" solidarity by solidarity without in the last analysis providing any *guaranteed* benefit for those engaging in the common effort. Much of social theory revolves exactly about the problem of the basis of love and trust.

This reflection on basic problems shows that these four problems are so fundamental that we do not need a strong concept of a system to start analysing the *human condition* or any social

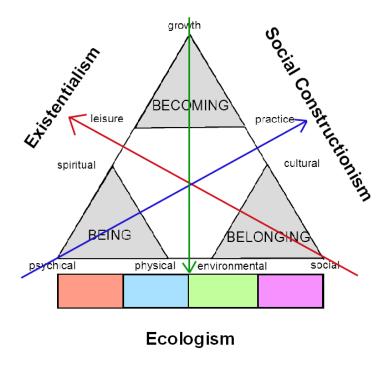
phenomenon in term of the four dimensions. We can use the "building blocks" rather freely for any kind of analysis. The reflection has introduced also the basic concepts which we have already employed in the description of the model.

Looking for alternative ways to use the four "building blocks", for instance, we can place them again into the triad of action theory (see above) and distinguish different conception of social change. The realisation of the "good society" is a process of joining "natural" social developments with normative visions of the goals. There can be alternative conceptions, for instance, about the initial *conditions* or the *agency* carrying the social practices as well as about the character of *embeddedness* and the role of *values* and norms. We will show in section 6 that there are essentially four alternative approaches to social change available which employ the four dimensions as basic modules.

Another strategy is to look for alternative interpretations of the basic triad. There are critical social theories which are modelled on the triad. Prominent examples are Sigmund Freud (Es – Ego – Superego) and his reception in psychoanalytic approaches all the way to recent theories by Jacques Lacan or Slavo Zizek (reality - symbol - imagination) which point out the openness of human potential due to unconscious and irrational potentials of human being. Theories of the human condition since Friedrich Nietzsche have – so to speak – focused on the "open space" formed in the basic triad by the two arrows. In an existentialistic perspective they have identified there human imagination, creative play, spirituality and sensuality as deep driving forces or potentials which, in fact, may be seen as beneficial as well as tragic (see the figure of the triad above). G.H. Mead (I – Me – Generalised Other) has developed his pragmatic approach (based among others on Peirce) out of the interdependence of actors. Hegel, Marx and Neo-Marxists unfold a triadic dynamic of the "objective spirit" which is strongly inspired by the progress of philosophy and science, then "put on his feet" by Marx as a dynamic of social progress which is strongly grounded in (ecological) materialism (see figure below). One may even detect the triad again in these positions (Freud – Mead - Hegel). Moreover, Jürgen Habermas in his attempt to find a synthesis in the theory of communication proposes a new triad of claims to authenticy/truthfullness, normativity/correctness and validity/truth in any discourse on the meaning of social action and consensus.

This places the triad in a social context which Georg Simmel and later Emanuel Levinas have analysed with special emphasis on the problem that the perspectives of different persons remain essentially different. On the one hand, this asserts the relative independence of the person; but on the other hand, the triadic capacities for empathy, for "taking the role of the other" and for objective impartiality introduced by a "third person" create a distinctly social level of orienting and coordinating activities. But the basic triad is here projected on a social triad of relations between persons (see Pieper and Vaaram 2008). On this level, persons participate in a relational process of interlocking actions over which they individually have no direct or total control - they never had. But this does not mean that they can not influence the rules of the game; social institutions are the "trick" which enables us to create a mutually binding set of rules. The chances for creating institutions on the basis of communication and cooperation are better than ever before as new information technologies and democratic institutions facilitate communication. But the triadic situation, as Simmel (1950) emphasises can also lead to conflict if coordination, cooperation, consensus and commitment fail to be achieved. In this case, the actors find themselves in a practical situation which is not sufficiently structured by embedded conditions and/or ideas and values. Solutions have to be generated and implemented out of the problem situation itself. This signifies a "revolutionary" situation which calls for a collective agent with the empowerment to effective change – one of the models of change to be discussed in section 6.

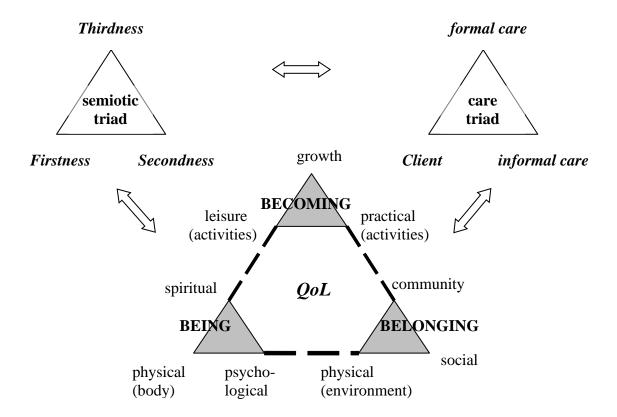
Figure: The Triad of Basic Approaches in Social Theory



The theoretical power of the triad can be appreciated even more, if we recognise that the concepts lined up along the two arrows and in their open space (see figure above) are actually owed to a reiteration of the triad applying it to each corner in turn. In the context of semiotic theory, using symbols in this way to further differentiate and understand given symbols is exactly what enables us to make sense of the world. Pieper and Vaarama (2008) have employed such iteration explicitly to generate a conceptually richer triadic model of quality of life and have interpreted the sub-dimensions slightly different to fit the semiotic triad. The 4dimensional model of quality of life included in the SOLA model (see below) appears in this framework as a special case addressing only the four dimensions at the base of the triad. Their model picks up two previous triadic approaches: the humanistic growth model and the Having-Loving-Being model of Eric Allardt (1993). The first model (Brown and Brown 2003; Renwick and Brown 1996) introduces a triad of Being, Belonging and Becoming and uses the triad to further differentiate the three concepts in turn, thus obtaining nine dimensions of quality of life. The latter combines this triad (with Allardt's Having~Being and Being~Becoming) to further distinguish objective and subjective indicators (Allardt 1996). Both approaches make no explicit reference to Peirce or, in fact, to any more elaborated theoretical foundation; the former see their basis in humanistic psychology and phenomenology, the latter claims to be influenced by v. Wright. Comparing the concepts lined up along the sides of the basic triad with the specification of the sub-dimensions in the QoL model the relevance of the SOLA framework becomes apparent.

Combining the scheme of Being-Belonging-Becoming with the basic triad, we receive an enriched framework which allows us to place fundamental approaches to social experience and action as indicated above. The approaches capitalising on the upper "arrow of interpretation" are here roughly combined as "social constructivism"; the approaches reflecting on the social human existence and confronting it with the openness or

meaninglessness *between* the arrows are labelled here "existentialistic"; approaches like Parsons' system theory emphasising the "natural" basis of the human condition are summarised as "ecological". (The four colours under the triad indicate the four dimensions.) The detailed elaboration of this triadic framework is beyond the scope of this report and will be delegated to a separate essay (forthcoming).



In spite of the attractiveness of the richer or more critical frameworks, the SOLA framework draws heavily on Parsons and system theory for three more practice oriented reasons:

- First, system theory is a powerful framework for *interdisciplinary* conceptualisations and, thus, supports the integration of social sustainability with economic and environmental sustainability approaches and indicator systems.
- Second, the concept of sustainability implies the goal of establishing some kind of relatively stable and self-reproducing system which sustains a desired state of affairs. Social theorists, historians, and ecologists will argue (rightfully) that the actual process into the future left to its own dynamics will certainly *not* be a self-sustaining and self-regulating process, but to achieve some degree of stability we have to develop, implement and continuously adapt a "system" which regulates the "turbulent" social and environmental process. As stated above, in that sense social policy is necessarily conservative and not radical.
- Third, a system theoretic model makes it possible to distinguish "naturally" between different and relatively autonomous levels of persons, social organisation, and societies

and to reiterate the same 4-dimensional structure on each level. A triadic approach can also be applied in iteration – one example has been mentioned - , however, this approach quickly leads into complex models which are difficult to handle in a practical framework. To put it over-pointedly: Critical and humanistic theory is very good for criticism and putting meaning into concepts of life, but a framework which identifies social agents in their environment and orders the world in "means" and ends" is more facilitative for practical problem solving and social policy.

In the following sections on alternative approaches to social sustainability and on models of social change we will try to show that this close contact with social systems theory does not exclude introducing other perspectives "beyond Parsons" when they are helpful for a more differentiated analysis or critical reflection on strategies and policies.

5. Alternative approaches to social sustainability and quality of life

Approaches to the issue of social sustainability can be divided into two major categories. The first approach considers social sustainability as part of quality of life and introduces a social dimension as an aspect of individual quality of life which is then aggregated in some way to characterise the quality of life in a society or region. A prominent example is the Stieglitz-Commission (2009) which suggests including social indicators into the assessment of societal welfare, among them also a measurement of social connections or "social capital". Typically, the measurement is conducted on the level of the individual or the household; some approaches prefer objective indicators and others focus on subjective indicators or "subjective well-being". The state of the art is clearly a recommendation to combine both kinds, although available statistics in practice favour objective indicators. Still, the disadvantage of individual data is that they do not represent adequately the *context* of social relations and environmental conditions or the structure of opportunities actually available to the individuals. This is the starting point for the Capability Approach (CA) which focuses on individual quality of life but conceptually relates activities and choices to actually existing opportunities, including those not selected and expressed in action and preferences, in order to capture the dimension of freedom of choice.

The second approach strives to assess the social context itself which presupposes some way of identifying the social and/or regional collective which may be the municipality, a district or the nation. This allows the measurement of collective properties such as social networks (not centred on a person) or the access to social infrastructures. Often the assessment has to rely on individual data to estimate collective properties. In this case the difference remains that the conceptual framework attributes a specific significance to the quality of the social context rather than focusing on the individual life quality. In a sense, the second approach focuses on the opportunity structure emphasised in the CA, but typically relates it to the wider societal context. An example is the research of Putnam on the role of social capital for societal welfare.

The concept of social sustainability in the SOLA project clearly chooses the second approach and extents it by focusing on the mediating role of between individual quality of life and societal structures. Therefore, we will in this section limit the discussion to models of this approach and especially exclude the wealth of research on individual quality of life. An exception is the CA, because it takes a role between the approaches. Therefore we will take first a look at the quality of life approach to social sustainability and the CA, and then concentrate on two models which are conceptual rivals of the SOLA framework, namely, the Social Capital approach (SCA) and the Social Quality approach (SQA).

5.1. The Quality of Life approach to social sustainability and the Capability Approach

Quality of Life is a concept which has attracted a wide philosophical, scientific, professional, political, public media and everyday life attention in recent years leading to a diversity of views and concepts (happiness, well-being, life satisfaction, living standard, "good life") which only recently tend to converge into a set of consensual concepts and measurement instruments. Reviewing this literature is clearly beyond the scope of this report. Still some clarifications are in order.

First, there is a wealth of literature on quality of life which grapples with the fundamental meaning of life or with the loss of meaning in modern life (see for instance: McMahon 2006; Vernon 2008; Nussbaum and Sen 1996; Eagleton 2008; Rapley 2003; Bucher 2009). We will not even start to review this literature in this report, although we want to emphasise that no more practical and political approach – like the project to develop an instrument to monitor social development and progress – can be meaningful or successful without being in touch with the on-going debate in philosophy, society and everyday life on what it means for life to be "worth living". In the SOLA model this means taking the normative frame seriously and giving it a practical forum by appropriate forms of discourse on all levels.

Second, there is a wealth of welfare research with a psychological focus on the well-being and happiness of people with little or no connection to the debate on social sustainability which is largely a debate on social welfare and social policy. Only recently has some of this research entered the scene of the social politics and is – on is tempted to say, even - recognised by the economic community as scientifically established enough to be considered in public accounting of welfare (see Layard 2005).

Third, there is a long tradition since the early 1970ies of social indicator research which has developed sets of indicators for social policy which are now critically reviewed and revised in light of the new criticism looking for indicators "beyond the GNP". Allardt (1993) has already been mentioned as an early Finnish researcher in this tradition. Two trends are observable: On the one hand, the need is recognised to integrate some measurement of subjective well-being along with the further development of indicators for societal welfare. The strategy is supported by an increasing awareness for the importance of individual needs and preferences in modern societies in economics as well as in politics and social life. The importance is enhanced by empirical findings showing that in modern societies further increases in material welfare do contribute only marginally to increases in subjective wellbeing. "Post-materialistic" aspects of quality of life such as personal freedom, leisure activities and especially social relations become more important. The World Values Survey and other surveys have documented this trend world wide over the last decades (see Layard 2005 for an evaluation of research relevant for this report; and the website www.worldvaluessurvey.org). On the other hand, it is recognised that corresponding to the subjective importance of social relations the need for objective indicators of social relations is increasing (see section 8).

In the debate on social sustainability, the Stieglitz-Commission (2009) has clearly acknowledged and dignified both needs and put them on the European and international political agenda. With Armatya Sen as a member of the commission, the CA was included as an approach which is explicitly critical of utilitarian, resource-oriented conceptions of quality of life.

5.1.1 Subjective Wellbeing (SWB) and QoL

The research by Diener and others has shown that SWB is a important element of the concept of QoL which can be measured with sufficient validity and reliability and compared across nations and cultures (Diener et al. 2009; Gullone and Cummins 2002; Kahnemann et al. (eds.) 1999). Therefore, any serious accounting of QoL for welfare politics has to recognise SWB in its model of quality of life. SWB is composed of two important dimensions, the subjective (cognitive) evaluation of one's own life (life satisfaction) and affective-emotional experience (hedonic experiences). Both dimensions are well-grounded in the psychology of cognition and emotion and valid and reliable measurement instruments have been developed. The two dimensions are relatively independent, but may together be interpreted as constituting SWB.

Corresponding to these attempts of supporting the case for SWB by psychologists, the widely received book by the economist Richard Layard (2005) on "Happiness. Lessons from a new science" represents the economic perspective. His review and integration of literature on happiness research makes not only for interesting reading promoting the cause of the "pursuit of happiness". It also has a telling strategy to cope with the reservations of his economist colleagues against SWB measures. On the one hand, he dignifies SWB by emphasising its neuro-physiological base or correlates: Objective measurement of subjective states seems basically possible, if not yet clearly established. On the other hand, he makes an evolutionary argument for social dispositions of altruism, cooperation and orientation toward a common good, again providing a natural science base for objective treatment of the social dimension. Having established this background he can then quite freely argue for a broader concept of our understanding of economic sustainability extended by a socio-psychological dimension. From the perspective of a philosophy of mind and social theory the comment has to be made that neither the relation between the brain and the mind nor the relation between genetic social disposition and socio-cultural practices, at least at the current stage of knowledge, gives much support for any straightforward connection between these levels of human behavioural organisation. But as support for the pursuit of happiness in a world under the influence of economists impressed by natural sciences and technology his strategy might work.

The concept of SWB has been widely criticised because people tend to adapt to their life circumstances and even deceive themselves about their actual situation. Cummins and colleagues have gained some prominence in the debate by combining SWB with the notion of homeostasis and resilience claiming that individuals regulate their SWB as to adapt to life events and to keep SWB within certain bounds (Gullone and Cummins 2002). While individuals may have experiences (positive or negative) which impact on their SWB, they tend to find back to a normal level of subjective well-being corresponding to their basic personality make-up. On a statistical and collective level these dynamics have the effect – so Cummins – that people are on the average "80% happy". This model has been under serious criticism (e.g. Rapley 2000), especially since it seems to imply that welfare politics and strategies of social development are rather fruitless from the perspective of QoL, since people adapt to whatever situation they experience – e.g. rich or poor, disabled or healthy - for a sufficiently long period. People have aspirations to get ahead, but because they adapt to what ever they achieve they find themselves aspiring more and more (aspiration treadmill); in as much as they adapt to affective experiences and loose their sensitivity they might find themselves on a constant search for a new "kick" (hedonic treadmill). A somewhat different but related problem is the problem of social comparison which leads people to adapt their preferences to the situation of people around them keeping them enclosed in their possibly disadvantageous social environment. If combined with striving for positional goods (e.g.

social rank or power), these comparison will create a "rat race" for the higher positions (see Diener 2009; Fleurbaey 2009; Layard 2005).

These problems have been addressed in two directions. On the one hand, it was demonstrated by research – also by Cummins and colleagues – that such regulatory mechanisms have their limitations. People adapt only within certain limits and this should be considered a healthy response; beyond those limits (e.g. if things get to bad) and independent from theses mechanisms people are subject to motivations (e.g. for achievement) which are in a dynamic interaction with such adaptive mechanisms. The model has been extended to include a differentiated behavioural personality theory ("Big Five" theory; see Costa and McCrae 1989) and, thus, places the concept of QoL in a defined theoretical context which most QoL concepts, admittedly, do not have. On the other hand, limits to adaptation have been demonstrated on a collective level by research showing long term improvements of SWB under the impact of welfare policies. Especially, convincing are recent results from the SOEP panel in Germany which could use longitudinal data on SWB and not only cross-sectional data (Headey et al 2010).

Insights into the adaptive tendencies of people are not exactly new, especially in a philosophical and political perspective. Not all people react rational and with political protest to unfavourable conditions; the fight for freedom and social justice depends on subjective as well as objective evaluations. Already Aristoteles knew that pursuing happiness requires certain competencies which have to be learned in interaction with other people and for which the conditions must be favourable. Similarly, the emancipation of people through communication, social interaction and critical discourse – as proposed by Jürgen Habermas (see Kajanoja 2009) - rely on social practices as the context in which competencies for critical reflection and discourse have to be learned. Therefore, the problem of counterproductive adaptation to conditions in the physical and social environment or within one's own physical body and psychological character has to be part of a concept of QoL. The problem has to be addressed as a methodological problem in the sense that indicators measuring QoL have employ methods which enhance the capability of "subjects" to reflect on their life. This means that SWB as reported by the individual should be taken seriously, but it should not be equated with the concept of QoL. The crudest way of making the point is the reference to a happiness-machine or drugs to influence our brain to feel happy. Conceiving happiness in this way simply means that one has not understood what happiness is about (see philosophers like G.H. von Wright, Ottfried Höffe, Charles Taylor, or Robert Nozick).

The possibility of deceiving oneself about one's QoL is a good argument against basing QoL only on SWB and for providing a context in which critical reflection on one's own situation can be learned and discussed with relevant others. It is not a good argument against SWB in general, because there is – in the end – no substitute for asking people what they want, prefer or value. This holds for interaction in everyday life as well as in welfare politics. It is an essential part of respecting the individual and human dignity. In fact, statements of SWB can be understood as one way of democratically expressing approval or disapproval for the situation experienced in a given society. All ways of expression have their shortcomings (as the theory of democracy proves again and again) and regular measurement of SWB may have a positive function provided it also finds an adequate procedure and implementation like our democratic voting. Arguments against SWB because of the possibility of to influence and manipulate SWB surveys could as well be directed against political voting or expressing content or discontent through public media. Like in voting and in individual tax declarations we perhaps need institutionalised and accepted procedures of expressing QoL – a regular

national and regional census on quality of life recognised by all participants as an important means of self-expression.

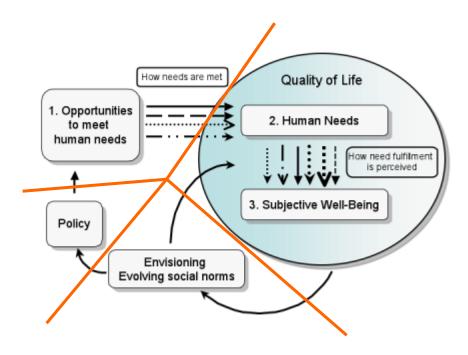
The critical assessment of SWB should be interpreted as an argument for a concept and measurement of QoL which combines objective and subjective indicators and give individuals an opportunity to reflect "objectively" on their situation, their judgments and affective responses. The usual procedure to ask persons "How satisfied are you over all with your life?" is of dubious validity. If we ask an economist "How high was your over all average income during the last year?" he will answer that this is a very difficult question and whether we want, for instance, the contribution of his wife's household work included in monetary terms. Most likely he will ask us to come back next week, when he had time to think it over. But income is only *one* aspect of QoL and not even the most important as research consistently shows. This would speak for measurement procedures which are more "discursive" by providing relevant information and giving guidance on how to assess one's QoL. The argument is analogous to the problem of "informed consent" in medical treatment and to decisions on advocacy for impaired persons – a simple question or information is not respecting the person as a being with human dignity which should as reflectively as possible take responsibility for her own life. The most explicit - conceptually and methodologically concept and strategy for the assessment of QoL encountered in the literature is the model of Brown and Brown (2003). The model combines a complex triadic model of QoL (see above) with a triangulation of different methods of assessment (see also Pieper and Vaarama 2008).

For practical reasons, we will have to rely on surveys; such surveys, however, should be based on a model of QoL which is theoretically and empirically well-grounded and incorporates SWB. The SOLA approach suggests two strategies. On the one hand, we could look for a reduced model which tries to capture QoL with a limited set of indicators or survey questions supported by adequate guidance and validated by more differentiated assessments. On the other hand, we could provide a general framework which is able to integrate information on individual QoL from different sources. The SOLA model includes both options (see section 8).

Not all models of QoL are suitable for the SOLA model. An illuminating example for an integrating view and a starting point for a practical model of QoL is furnished by Costanza and an interdisciplinary team of colleagues (2008). The model clearly sees QoL on the individual level related to and integrated into a more comprehensive social context. The model thus provides a conceptual interface with the SOLA approach. Citing Costanza:

"Quality of Life (QOL) is the extent to which objective human needs are fulfilled in relation to personal or group perceptions of subjective well-being (SWB, figure). Human needs are basic needs for subsistence, reproduction, security, affection, etc. SWB is assessed by individuals' or groups' responses to questions about happiness, life satisfaction, utility, or welfare. The relation between specific human needs and perceived satisfaction with each of them can be affected by mental capacity, cultural context, information, education, temperament, and the like, often in quite complex ways. Moreover, the relation between the fulfilment of human needs and overall subjective well-being is affected by the (time-varying) weights individuals, groups, and cultures give to fulfilling each of the human needs relative to the others. "

Figure: Integrative model of QOL (Costanza et al. 2008)



(Note: The orange lines are added to differentiate the four dimensions "economic", "political", "cultural" and psychological "integration" – RP)

A closer look reveals that the model is actually integrating two different levels: the first level of the internal dynamics of needs and subjective well-being within the circle, and the second level of interaction with a relevant cultural, political and economical environment. Orange lines have been added to the graph to make the 4-dimensional structure on this second level of external relations more transparent. Additionally, the authors introduce a list of human needs: subsistence, reproduction, security, affection, understanding, participation, leisure, spirituality, creativity, identity and freedom. We suggest to differentiate and to order this list also in a 4-dimensional scheme of physical-functional, psychological, social, and environmental needs in the spirit of the modified WHO-QoL model (see below). Now the circle of QoL in the graph may receive a double interpretation: In the perspective of the individual we see an internal 4-dimensional dynamic; in the perspective of the interaction process involving the other three "outer" dimensions we may see the individual participating in interaction with other individuals learning and negotiating their psychological well-being. Thus, a 4-dimensional scheme would be reiterated on two levels: a personal QoL level and a social level of interaction with, again, social-integrative, cultural, political, and economical dimensions. This is essentially the approach of the SOLA-framework applied to the level individual QoL.

The 4-dimensional model of QoL was developed in the CareKeys project (Vaarama et al. (eds.) 2008) modifying and theoretically grounding the WHO-QoL model (Skevington et al. 2004). The model is applied to social and health care and demonstrates that the 4-dimensional scheme can be used also on a more differentiated model of levels of social interaction, i.e. personal level, social and health care, and social management. It should be noted that the 4-

dimensional framework was also empirically validated in this research. The SOLA approach extends the model to describe the conceptual structure of social sustainability. The CareKeys project used the WHO-QoL-Bref instrument for measurement — a standardised questionnaire extensively tested in international research. In the project and in subsequent research in Finland (Vaarama 2004) also reduced versions with only 8 questions (two for each dimension; see section 8) were explored. Further research should confirm that such a short version could fruitfully and practically be included in other general surveys. It is also obvious that this method of measurement does not yet fulfil the methodological requirements just argued as required for valid QoL assessment.

The alternative strategy could be to use the SOLA framework to integrate results obtained with diverse instruments. A methodology for this strategy has been developed for the purpose of international comparison of social development drawing on diverse instruments and indicators applied in different countries (see section 7 below). The SOLA model thus would support a strategy of secondary analysis of existing registers and surveys (see also the Bologna poster in the annex). The module of individual QoL in the SOLA model offers for such a strategy the systematic "slots". Instruments and surveys capitalising on living standard and resources can be used for an index of personal security, data on competences and capabilities for an index of personal capabilities, indicators of cognitive satisfaction with life including the cognitive dimension of SWB would find a place in an index for life evaluation, and affective well-being is represented including affective SWB in the fourth dimension. All indices could combine subjective and objective information depending on the available data and their validity and reliability.

To summarize: We should distinguish "happiness"- research or SWB from QoL research. The inclusion of SWB in registers for the assessment of welfare is to be recommended and their subjective quality no serious argument against their inclusion, since their validity and reliability has been sufficiently established. However, SWB should not be equated with QoL, because the more or less spontaneous evaluation of satisfaction with life is no substitute for a more deliberate assessment of one's life situation which reflects on the actual accessibility of resources, on the competence and autonomy to determine one's life, on the more enduring aspects of emotional life, and on the values realised in one's own conduct. This is an important conceptual distinction, even when we have to rely largely on survey questionnaires for the assessment of both concepts. The methodological complexities of QoL assessment are no reason to reduce reflections on life (!) to the measurement of present states of satisfaction. Finally, measurements of individual QoL are no sufficient substitute for measurement of the quality of the social and environmental context. The fact that people do find ways to arrange their lives more or less satisfactorily in given situations is a strong argument for independent measurement of individual quality of life; but the same fact also implies that the conditions under which they structure their way of life have to assessed independently to evaluate to what extent these conditions are favourable or unfavourable, are offering choices or affording personal compromises. This is the central argument of the CA.

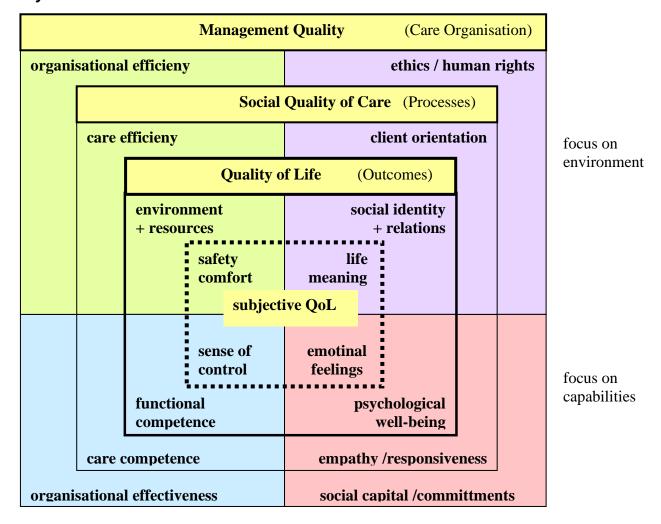
Figure: A framework for integration of levels of Social Quality and Quality of Life in Social and Health Care: management quality, care quality and care-related quality of life

(modified from Pieper / Vaarama 2008)

Normative Level of Care

equity, fairness, choice	morality
sustainability (equity over time)	values, virtues, dignity
freedom , voice, responsibility	happiness
innovation, creativity	personal well-being/social soldiarity

Psycho-Social Level: Qualities in Care



instrumental achievement of the "good life" (means)

evaluative experience of the "good life" (ends)

Level of Material Conditions of Care

environmental care resources	material care culture	
care technology x organisation	care safety	

5.1.2 The Capability Approach (CA): Sen versus Nussbaum

The capability approach is currently the most debated and internationally accepted approach to the measurement of QoL and social sustainability. But a closer look reveals that there are at least three different versions emphasizing different features of the approach. A first version – characteristic of the view apparent in the Stieglitz-Commission and its reception in subsequent commissions (e.g. the French-German cooperation to exploit the results) – welcomes the CA as a valuable contribution to an essentially economic concept of QoL. Problems of preferences and utilities of rational actors can be placed in a broader context of individual choices under certain conditions and their interdependence reflected in social choice theory. Although Sen raises severe criticism of a utilitaristic-resourcist approach to human welfare, his focus on the individual as (more or less) rational agent makes the accommodation of his views rather easy for economists. For an approach focusing especially on social sustainability this version is rather irrelevant, exactly because it modifies a economic approach only marginally. The views on a "good life" or a "good society" are left to the individual to decide and to express in preferences. Individual QoL is at the centre and social aspects are recognised as relevant for individual preferences and decisions. A distinctly social aspect is acknowledged in the concept of "social capital" as one of the assets or "stocks" of individual or corporate agents which should also be transmitted into a (economically) sustainable future. This concept will be discussed below. The second version is the position or interpretation given by Sen himself. This version addresses a fundamental issue of liberal approaches, namely the issue of social justice (Sen 2009). This approach was developed in view of the vast global inequalities and the need for new strategies, since economical strategies have obviously failed to bring more justice into the distribution of wealth. The Human Development approach is the context in which the CA was formulated to emphasise the need for a concept which looks not only at the redistribution of resources to benefit deprived people, but makes sure that those people have the freedom and the competencies to utilise the wealth and the resources which, in fact, may be available in their own environment. The emphasis on health, education and a sufficient income in the CA (measured worldwide by the Human Development Index HDI) derives from this approach.

Capabilities - it should be emphasised - include the freedom, opportunity and competence to realise actions which may actually not be chosen – implying a criticism of the liberaleconomic concept of "revealed preferences". Capabilities include, therefore, not only socalled observed "functionings" or actions, but also options in the social and material environment. And those options must, in principle, be "real", i.e. they must exist for the individual in question and not only as a general option for "everybody". In the debate on QoL, this corresponds to Lawton's concept of "environmental fit" meaning that not environments in general are behaviourally relevant, but only those aspect of the environment which are matched by a corresponding competence of the individual (e.g. sitting in a wheelchair you have a totally different environment than another person in the same location; see Pieper and Vaarama 2008). That means, capabilities and QoL can not be measured without the consideration of specific and relevant contexts of activities. This creates on the level of theory a complexity which can not be transformed into a simple measurement procedure of the kind provided by usual and practical surveys. One way of coping with this problem is to create reference cases in intensive, participative research; the reference cases allow for a practical comparison of individual cases with the relevant "standard" (e.g. the "normal" situation of a person in a wheelchair). Actually, life styles, social groups and communities have the character of such reference cases ("ideal types") which are in an analogous fashion introduced in social choice theory or fair equivalence theory as one way to solve the problems of

interpersonal comparison of preferences (Stieglitz-Commission 2009). From a sociological point of view this implies that the measurement of QoL is not really meaningful without measuring the relevant social context independently. This is a requirement of the CA, and this strategy is followed, in effect, by the Social Quality approach to be discussed below.

A problem with Sen's version of CA is that he focuses on the issues of freedom and justice, but wants to leave it open exactly what kind of life people eventually choose under conditions of freedom and justice. The pragmatic background is the diversity of cultures, the impossibilities of coming to agreements on a global scale, and the injustice involved in imposing on people standards even of justice or freedom. The theoretical issue is a criticism of John Rawls' theory of justice which – in his reading – attempts exactly that: imposing a theoretical (deontological) principle of justice "top-down" as universal standard. Instead Sen (2009) focuses on the power of impartial and rational deliberation and on the comparison of specific cases or models of life in societies, cultures or regions. The assumption is that comparisons are more politically negotiable and leading to concrete improvements if they are not burdened by references to some ideal standard – a standard whose existence he seriously questions. Thus, the definition of a "good life" and a "good society" beyond emphasising the essential role of education, health and democracy for rational deliberation on justice is left open and subject to negotiation in practice.

A third version is proposed by Martha Nussbaum (2011) who originally created the approach together with Sen, but departed from his position in a way both consider to be significant. The main difference is that Nussbaum is convinced that, on the hand, people need to have a vision of the "good life" in order to even perceive "good" opportunities and to develop "good" abilities which then bring into view new options. On the other hand, she (as a philosopher of law rather than an economist like Sen) sees the necessity to institutionalise essential elements of the "good life" in human rights which can be effectively claimed to be respected and promoted by governments. Thus she develops a strong concept of the "good life" and tries to develop an essentially normative framework of rights or "entitlements" which functions as a reference for the evaluation of social arrangements. The background is an Aristotelian concept of quality of life identifying a set of ten Central Capabilities which describe competencies and conditions for exercising a "good life". The framework leaves room for the personal definition of a way of life, and it reformulates widely accepted human needs in the framework of action, social interaction, and societal prerequisites especially in form of a legalconstitutional set of rights and obligations toward others. Precisely for this reason, there is no problem of re-ordering her list of Central Capabilities and placing them into the SOLA framework. Nussbaum does not employ an explicit action theory, in fact she does not refer to any kind of social theory, but her Aristotelian approach readily agrees with a grounding in action theory in line with von Wright (see above).

In her normative frame actions acquire the character of Aristotelian virtues which are exercised to achieve quality in life. The Aristotelian background also assures that those actions are placed into the context of a "good society"; there is no quality in life which is not related to a conception of the common good. A critical ethical issue for both Nussbaum and Sen is the social justice for women. Both realise the crucial issue of family roles and their effects on the life opportunities for women and men. Sen tends to interpret this as a case of "cooperative conflict" (Sen 2009, p. 167) which should be kept below the radar of formal regulations unless other rights are violated. For Nussbaum this is a paradigm case for the interdependence of lives which should receive clear guidance to the partners about what a virtuous conduct implies respecting the dignity of each other. A central issue for her is also the importance of care for children, disabled and the aged. We need more specific visions and

rules for virtuous conduct in care situations and institutionalised support of the caring persons as well as the persons in need of care. And these values and norms are relevant for quality of life and afford a sensitivity of indicators for the violations of social justice also on the level of individual conduct and self-evaluation.

After all, *quality* of life implies the reference to some standard and it can be argued that we should take the standards not simply "from the street" of everyday life around us, but agree upon them using our best and responsible knowledge of the "good life" and incorporate them into our institutional setting.

For Sen (2009), this solution is too restrictive; as a liberal economist by background he prefers to strengthen individual options for own choices by providing favourable conditions. SWB, in this perspective, is not central, it occurs under the influence of exercising one's freedom. For Nussbaum, we have a long history and an obligation for developing ways of defining and agreeing upon the "good life", and we should live up to this challenge also in the context of measuring QoL and social sustainability – not leaving the issue of moral and social development to anonymous economical or political "markets". Pluralism in a globalising world certainly makes this challenge not easier, but the means of communication and with it channels for negotiation are also enormously increasing. Sen and Nussbaum, after all, trust in the competence and the willingness of people to find sufficient common interests to create a way of life with welfare, freedom, justice and solidarity for all the normative frame of the SOLA model.

From the perspective of the SOLA framework the lesson should be that there is no meaningful concept of quality of life without a clarification of the role of normativity in setting standards for "goodness" or — with Nussbaum — defining at least minimal thresholds backed up by social rights. The CA also contains a strong argument for the independent conceptualisation and measurement of the social context or the opportunity structure which sets the stage for individual pursuits of quality of life. The CA lacks, however, a theory and a conceptual model to adequately describe this social level. It remains on the level of identifying conditions for individuals and their resources, competences, hopes and desires.

5.2 The social dimension of social sustainability: Recent examples

To render the concept of social sustainability more precise, some examples from the recent literature will be discussed which are also cited in most recent Finnish contributions on social sustainability.

5.2.1 Baines & Morgan: An Australian approach and its Finnish reception

Baines and Morgan (2005) base their appraisal of social sustainability on an extensive literature review and, avoiding a definition, they provide a list of elements and discuss their relevance especially with reference to research from Australia and Canada. Social sustainability is agreed to include:

- meeting basic needs;
- overcoming disadvantage attributable to personal disability;
- fostering personal responsibility, including social responsibility and regard for the needs of future generations;
- maintaining and developing the stock of social capital, in order to foster trusting, harmonious and co-operative behaviour needed to underpin civil society

- attention to the equitable distribution of opportunities in development, in the present and in the future;
- acknowledging cultural and community diversity, and fostering tolerance; and
- empowering people to participate on mutually agreeable terms in influencing choices for development and in decision-making.

Their list is accepted by Alila et al. (2011) as a starting point; another is a frequently cited contribution by Kauttio and Metso (2008) (see also sources cited in section 8 for Finland). Considering features of a social dimension within the broader concept of sustainability, the authors distinguished 3 sub-dimensions extracting them from the literature (Colantonio 2007, Rask 2006, Kohl 2006, Ellisaari 1999, Kauppinen 1999) without reference to a specific theoretical framework:

"First, as common feature could be stated that it is often considered simply meaning justice and equality. Even so it could be seen standing for several different dimensions depending on which level are under regard, regional, individual or generations." "Secondly, a part of social sustainability is considered to be supporting a development that strengthens people's possibilities to affect their own life. For example, it has been proposed in Finland that sustainable development guarantees people equal possibilities for creating their own well-being, achieving fundamental rights, getting their basic needs of life satisfied and opportunities for equal participation in decisionmaking in their own country and in the international level (Ellisaari 1999, 8)." "Thirdly, socially sustainable development is often required to maintain and strengthen peoples' communal identity (Kauppinen 1999, 51)." "There are weighting differences, and the content of concept varies depending on the context. Globally, for example, the objective is to create the conditions for the wellbeing; in industrialized countries, on the other hand, social sustainability refers to the preservation and transmitting of welfare (well-being). Social sustainability can be understood either as a state of current situation or as a process towards sustainability." (Kautto & Metso, 2008, p. 416)

Thus, the authors identify the following core elements of several different definitions of social sustainability:

- justice and equality
- individual's possibility to affect their own life
- maintaining and strengthening the individual's communal identity

Alila et al. (2011) themselves propose a similar 3-dimensional set of indicators for social sustainability acknowledging the lack of a theoretical foundation:

- Ensuring of sufficient income, adequate well-being services and safety
- Sharing resources and possibilities for participation fairly and individual's possibility to affect their own life
- Inclusion, cohesion and integration."

While their own indicator list (53 indicators) contains many interesting candidates for measurement of social sustainability, the dimensions appear somewhat arbitrary and, correspondingly, the order of indicators in the dimensions is not convincing and certainly requires empirical confirmation. The annex of this report contains the indicators; they are also included - albeit re-ordered to correspond to the SOLA framework.

5.2.2. Colantonio: The importance of "socioenvironmental sustainability"

Some approaches to social sustainability have to be seen in the tradition of urban and regional development since the 1970ies. They emphasis a local perspective and - in some cases - apply the strategies of self-reliance and social development from developing countries to modern societies. Initiatives under the Agenda 21 since the 1990ies can be interpreted that way. But certainly local and decentralised strategies of neighbourhood and community development have also an independent tradition which is merging in the late 1970ies with environmental movements. The contribution of Andrea Colantonio (2007) – cited by Kauttio and Meso (2008) - is an example with a strong connection to environmental issues. She also provides a literature review which is valuable in its own right, as the following quotations demonstrate:

"A more comprehensive definition with a special focus on urban environments is provided by Polese and Stren (2000: 15-16) who define social sustainability as "Development (and/or growth) that is compatible with harmonious evolution of civil society, fostering an environment conductive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the

Their definition emphasises the economic (development) and social (civil society, cultural diversity and social integration) dimensions of sustainability, highlighting the tension between economic efficiency and social disintegration intrinsic to the concept of sustainable development. However, they also acknowledge the importance of the physical environment. "(2007, p.3) (...) "At a more practical level, social sustainability stems from improvements in thematic areas of the social realm of individuals and societies, ranging from capacity building and skills development to environmental and spatial inequalities, as illustrated in Table 1. It can be seen how social sustainability blend traditional social objectives and policy areas such as equity and health with issues concerning participation, needs, social capital, the economy, the environment, and more recently, with the notions of happiness, well being and quality of life." (Colantonio, p.7)

Table 1: Thematic areas of social sustainability (from Colantonio 2007)

quality of life for all segments of the population'

Socio-Institutional Social 1. Access to resources 26. Capacity Building 27. Participation and empowerment 2. Community needs (e.g. are communities able to articulate their needs?) 28. Trust, voluntary organisations and local networks (also know as Social 3. Conflicts mitigation 4. Cultural promotion Capital) 5. Education 6. Elderly and aging Socioeconomic 7. Enabling knowledge management (including access to E-knowledge) 29. Economic security 8. Freedom 30. Employment 9. Gender equity 31. Informal activities/economy 10. Happiness 32. Partnership and collaboration 11. Health 12. Identity of the community/civic pride **Socioenvironmental** 13. Image transformation and neighbourhood perceptions 33. Inclusive design

14. Integration of newcomers (especially	34. Infrastructures
foreign in-migrants) and residents	35. Environmental Health
15. Leadership	36. Housing (quality and tenure mix)
16. Justice and equality	37. Transport
17. Leisure and sport facilities	38. Spatial/environmental inequalities
18. Less able people	
19. Population change	
20. Poverty eradication	
21. Quality of Life	
22. Security and Crime	
23. Skills development	
24. Social diversity and multiculturalism	
25. Well being	

Colantonio groups her overview into relevant dimensions or "key themes": Quite obviously the list of the "Social" is very heterogeneous and needs some theoretically grounded ordering; "Socio-institutional" is rather close to the concept of social capital; and the special highlighting of the socio-environmental dimension is certainly arguable. It is acknowledged in the SOLA framework in the category of Human Ecology.

5.2.3 Littig & Gissler: The importance of work

Another model received and accepted in the Finnish discussion on social sustainability is the model by Littig and Gissler (2005). The authors define social sustainability as

...a quality of societies. It signifies the nature-society relationships, mediated by work, as well as relationships within the society. Social sustainability is given, if work within a society and the related institutional arrangements satisfy an extended set of human needs [and] are shaped in a way that nature and its reproductive capabilities are preserved over a long period of time and the normative claims of social justice, human dignity and participation are fulfilled. (cited by Colantonio (2007, p.3))

The authors summarise their concept in a model as depicted in the Figure below. Interestingly, Littig and Gissler explicitly cite Talcott Parsons as a theoretical source which has inspired their graph summarising their position. It displays nicely their implicit Marxist heritage by placing the social dimensions inside the circle of environmental conditions or "nature" and by letting "work" doing the mediation between "nature" and the social realm. One might question the role of "work" in the graph as distinguished from "material reproduction". The authors apparently distinguish between work in a more fundamental Marxian sense of the relation of social systems to the human ecology and work in the context of economic relations. This, in fact, might be a fruitful approach to characterise the former relation. Still, it is revealing that the social dimension of Parsons is dropped (only social needs form another inclosing circle), while the other three dimensions are included. One is reminded of the early criticism of Habermas of Marxist theory that it over-emphasises "work" to the disadvantage of "interaction". Parsons' social dimension, certainly, has received a lot of criticism by Marxist social theorist of being too conservative and functionalistic, which might have motivated the elimination. In view of the rise of the importance of the social dimension in current debates as a counter-acting or complementing factor in capitalist society we may

question this return to "work" as a dominant category in social sustainability as again proposing a too narrowly economic model of sustainability.

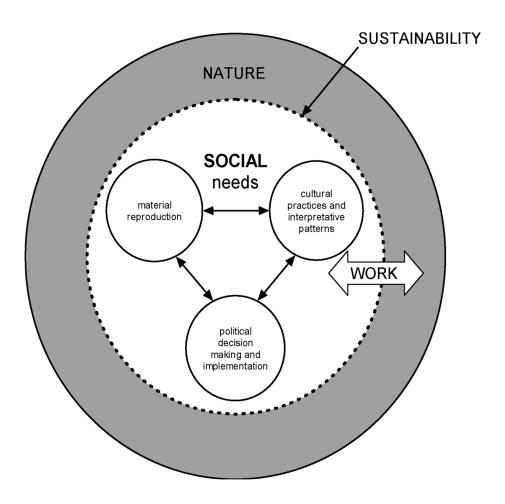


Figure: Schematic portrayal of sustainable development and the relationships between society and nature (Littig and Gissler 2005).

5.3 The Social Capital Approach (SCA)

The concept of social capital has experienced an exponential rise in popularity since the early 1990ies and reached the level of citation frequency of the concept of human capital in the Social Science Citation Index (Franzen/Freitag 2007, p.9). The concept plays an important role in the debate on social development and social progress and is a favourite candidate for measurement of the social dimension in sustainability models. Reviewing social capital within social theory and research it becomes obvious that the term alludes not only to rather old and established concepts, but also to quite diverse phenomena (for reviews see Portes 1998; Franzen/Freitag eds. 2007; Rothstein 2001; Guiso/Sapienza/Zingales 2011; and the website "social capital gate way"). The concept was originally introduced by the sociologist Pierre Bourdieu (1983), but has since made a carrier in political, economical and other social sciences as well as in more practical contexts such as the social development in developing countries, notably after being adopted by the World Bank to identify and measure the social dimension (Woolcock 2000).

All discussant – pro and con – agree that there is not yet a consensus on the concept and its measurement. As Portes (1998) already assessed, social capital can be treated as a set of conditions or causes as well as a set of effects in social processes, and, as Putnam (2000) made clear, the concept has to be developed in a multi-level model. Landolt (2007) summarised the research in the following table, where we can interpret social capital as a set of potentials generated in social relationships and networks, which are conducive to the formation of social patterns on different levels and produce certain effects or properties of networks which, in turn, serve to produce or reproduce the potentials. As the first column (not made explicit by Landolt) indicates, potentials and effects can readily be interpreted in our 4-dimenional framework.

Table X: Dimensions of social capital

Social capital: causes, effects and levels							
AGIL –	Generated		Levels		effects		
dimensions	potentials						
Value	Internalisation		Personal		Compliance with		
Dimension	of values		relationships		values and norms		
Integrative	Solidarity				Social closure and		
Dimension	bonds	\	Social networks and		bridging		
Resource	Reciprocal		social groups)	Social support for and		
Dimension	exchanges	 /		<u> </u>	from others		
Capability	Trust in	'	Communities		Control and efficacy		
dimension	cooperation				of collective action		
			Institutions/Societies				

Adapted from Landolt 2007, p.23 and p.25

The table helps to identify and distinguish a number of different approaches, especially when we project it onto the general SOLA model (see graph in section 3):

Personal relations as a resource

Originally, Bourdieu (1983) used the term on the level of personal relationships and interpreted them as potential resources or privileged access to resources. Later developments drew the connection with network theory distinguishing strong vs. weak ties and bonding, binding, and bridging ties (Landolt 2007); others linked the concept with rational-choice-theory and considered the generation of stable ties of cooperation under conditions of strategic situations (Diekmann 2007).

These approaches focus on the level of individual quality of life in the SOLA model and link it to social relations and processes. Actually, we should distinguish three aspects of this linking process:

- A first process integrates the person into the social fabric by *life long socialisation* and creating social relations *of* persons,
- A second process is resting on personal relations but creating bilateral networks based on networking principles (e.g. "the friends of my friends are my friends") described in a tradition of social network theory (Granovetter 1973; Wellman 1999; Coleman 1988). Based on interaction they constitute a primary process of shaping relations *between* persons.
- A third process acknowledges that the positions of persons in social relations are already structured in a network of *positions* due to given social structures or arrangements. Depending on the positions considered these processes create a link of *the person to positions* in social structures *or to institutions* (Lin and Erikson 2010).

Only the second process recognises a genuine *social process* and can be considered at the heart of *social cohesion* in the SOLA model. The first process is certainly social in character but concerns relations of the individual. The third process acknowledges social structures, but again looks especially at the link to the individual.

Personal relationships are an essential element of individual QoL, since they describe the (lack of) integration of the person into a network of relations which are necessary for his or her way of life. This approach was, therefore, already addressed in the discussion of the CA above. Personalised social capital very easily fits into individualistic frameworks as a type of resource; thus, this approach is especially suitable for economic adaptations. But the individualistic concepts fail to utilise the potential which the concept has as description of a particular social "common good".

Social capital as economic resource(Bourdieu)

Already Bourdieu chose the term to capture a specific type of resources of individuals in direct analogy to human capital and economic capital. This gave the concept from the start an economical flavour and triggered a debate whether social capital, in fact, does fulfil the requirements of capital in the economic sense of the term. Bypassing this discussion we can agree with the recent assessment of Guiso et al. (2011) that – given a proper specification of the concept – social capital can indeed be made a sufficiently precise concept and – like human capital – be introduced into economic theories and models. The more important problem is whether this is meaningful in the context of social development and sustainability: the concept was introduced to represent the *social* dimension to correct in some way for the *economic* and *environmental* bias in current models. Like the attempts of "Greening the GNP" in relation to genuine environmental issues, this strategy reasserts the priority of an economic perspective.

Guiso et al. (2011) suggested making the term more precise under the title of "civic capital" by defining it as "those persistent and shared beliefs and values that help a group to overcome the free rider problem in the pursuit of socially valuable activities" (p. 419). This definition clearly captures a very important aspect of social capital, namely, to promote and sustain cooperative action which also satisfies their requirement of showing a demonstrable "economic payoff" (p. 419). Problems arise, however, in other respects: "socially valuable activities" have to be identified with reference to a set of social values which the authors accept – in the traditional economic way – as given in form of (re-)produced social and historical traditions. Fortunately, these values are now seen as measurable – even on the level of international and intercultural comparisons (e.g. World Values Survey; European Social Survey) – and this makes them respectable in an economic perspective (see also Layard 2005). Selecting specifically values and beliefs which promote "socially valuable activities" is, however, problematic. As the authors state, they want to exclude criminal gangs and their cooperative behaviour as not "socially valuable", but their definition does not achieve this without reference to *communities* sharing the values (p.419). All communities – by definition as it were – somehow solve the problem of cooperation and they do so by treating the "free rider problem" very differently depending on the social problem: including or excluding children, older persons, women, uneducated, medical patients, dying persons, deviants, or migrants from other cultures. The definition of an adequate contribution to "socially valuable activities" in order not to be considered a "free rider" is anything but clear. And the values and norms adopted by a community do not have to be criminal (or revolutionary) to deviate from the views of our average economist – as the wide scope of accepted ways of working

and paying taxes even in modern societies (how about Greece ?) demonstrates. You have to re-introduce "economic man" through the backdoor to specify the "right" social capital and exclude the "wrong" values, norms and beliefs — or have to accept that people *socially value ways of life* (i.e. have social capital) which do *not* fit well with (much of) economic theory and still may be characterised as coordinated, cooperative and even consensual and committed.

While it is a totally legitimate enterprise for economists to improve their theoretical framework, it is much less obvious that cleaning a concept like social capital first of any content which may not easily fit into an economic discourse (Guiso et al. 2011, p. 419) will support an *interdisciplinary* effort to enrich the perspective on societal development. Actually, since the attempt of Bourdieu to ease the communication with economic approaches, the social sciences find themselves in an awkward position. Since one of their founding fathers – Emile Durkheim – has analysed and emphasised the non-economic basis of economic activities over hundred years ago, sociology has developed an approach which is only reluctantly acknowledged in economic theories as an important exogenous field (of conditions as well as effects) to their approach. Thus, an economically tailored concept of social capital is not suited to capture the richness and complexity of the social dimension beyond a narrow economic perspective any more than human capital is adequate to describe the human dimension. Just like the capability approach is designed to reassert the dimension of freedom and human rights of quality of life in a world too narrowly focusing on economic development, the focus on the social dimension should emphasise the non-economic aspect of social, cultural and political life. It may well be questioned that a concept essentially modelled on economic sciences is adequate for this purpose.

Social capital: Networks, cooperation and civic society (Putnam)

A central issue for the social dimension is a distinction within the concept of social capital: the distinction between networks, communities and institutions.

One way to address this issue is through the supposition that social capital assumes *shared values and beliefs* and the formation of communities with a *collective identity*. In a more general sense, we have to distinguish between *social groups* and *communities* who are organised around a collective identity and show a measure of inclusion and exclusion achieved by some definition of membership, and *social networks* which are essentially open because they are based on bilateral relationships *between* participants (individuals or collective actors). Especially in our modern globalising world open networks reach all over the world between individuals and between communities which in turn are not co-extensive with nation-states or societies. Cooperation and conflict are guided by *institutions* (sets of values, norms and beliefs re-enforced by organisations entitled to exercise diverse social sanctions) which are shared but not simply co-extensive with communities or nation-states (consider e.g. human rights, religions, professional ethical codes) and not centred on a collective identity. Therefore, within a concept of social capital we have to distinguish between

- personal social networks which position an individual and integrate him or her into the social fabric or life world; this is the approach of Bourdieu
- social networks which are linking, binding, or bridging between actors; this is the approach of general network theory and basic social cohesion
- social groups and communities which are bonding and committing around social identities; this is the approach associated with the seminal research by Putnam

• institutions which structure activities and relationships by sets of values, norms, and sanctions not closely bound to certain collectives within society; this is an approach associated with Fukuyama (see below)

To appreciate the differentiation, we have to keep in mind that the formation of social relationships evolves not only about social concerns for, say, good neighbourly relations. Relationships usually are created to solve some substantial problems as identified above in the section on action theory, i.e. organising the (re-)production of resources, power, or knowledge and culture. In as much as these processes results in relatively stable social organisations, we should make a distinctions between such organisations and the processes producing and reproducing them. This distinction is an important feature of the SOLA model.

One way of conceptualising this fact is by making a distinction between social integration on the level of everyday life and system integration on the level of associations and organisations. Somewhat different distinctions to this effect are introduced by David Lockwood, Jürgen Habermas and Niklas Luhmann; to discuss the differences is beyond the scope of this report. But typically approaches operating with similar distinction tend to make assumptions about the closure on both levels (communities, life worlds vs. organisations, systems). The famous distinction of Gemeinschaft (community) vs. Gesellschaft (society) by Ferdinand Tönnies clearly assumed closure on both levels. In a world of an open and globalised "network society" (Castells) this closure is a property of social relations that can not be conceptually assumed as given. Rather than focusing on qualitatively different levels of organisation, we might emphasise the distinction between processes of structuration and relatively stable structures (Giddens 1984). This way it is conceptually easier to avoid implicit assumptions about the closure or system character of levels, i.e. keep the difference between networks vs. communities, on the one hand, and institutional arrangements vs. societies, on the other hand, open for empirical determination in each case. Especially, in developing countries the "systemness" of the historically evolved interrelations between, say, individuals, tribes, political organisations and human rights institutions may well be in question.

Another issue is concerned with the fact that strong relations within one group or community imply relatively weak to other individuals or groups. Social integration between groups will depend on bridging ties, but individuals bridging the gap between social groups (like Romeo and Juliet in Shakespeare's drama) may, in fact, motivate other group members to identify even more with their own group to defend it against external influences, thus, strengthening internal cohesion and counteracting the integrating effects of individual bridging on the collective level (Forbes 2003). Related problems arise when collective identities (based, for instance, on language, social classes, regional differences, and traditions) are employed as "symbolic weapons" in strategic conflicts. The history of regionalism in Europe since the 1970ies demonstrates that even modern nation-states can break up under the influence of conflict between communities (Pieper 1987). The extensive literature and debate about social movements shows that originally rather diffuse social networks will change into an opposition of "we" and "they" under the impact of conflict. Collective identities and their boundaries are shaping up as the conflict proceeds and people are forced to decide which side they are on. Moreover, this process of forming collective identities – especially in modern societies – is never comprehensive or complete leaving options for new alliances under changing conditions. A formation may even create the seeds for new formations because of internal inequalities and sanctions imposed on non-compliant members.

Therefore, social capital refers to solidarities, cooperation and social cohesion, but can not be evaluated without answering the question "with whom?" to describe the structure of cooperative collective actors and their role in society, and possibly "against whom?" to identify potentially disruptive cleavages, and "for what purpose?" to characterise the substantial focus of cooperation. Some of the collective actors and their arrangements may best be located in the realm of the economy and associated with social classes; other collective actors have political character rivalling for power and constitute the political-administrative system; cultural, religious and ethnic groups may have their own formal ("top-down") societal institutions (e.g. science, churches) or they may be part of the civil society; the civil society will comprise all organisations, associations and groupings which are essentially forms of social organisations from "bottom-up" rising out of processes of solidarity without being immediately absorbed into the "system" constituted by the other three realms. As discussed in section 6, the SOLA model tries to acknowledge this kind of dynamics in models of social change.

Putnam (2000) focused especially on the role of groups, associations and communities as patterns of the civic society incorporating trust and mutual support. By emphasising the function for the society as a whole, his approach centres, in the SOLA perspective on the importance of networks of social cohesion for the formation of civic society, and on the function of civic society in the context of other societal structures. His approach, therefore, characterises best what we have defined as Social Capital Approach (SCA) in the general SOLA model.

Figure: AGIL vs. Putnam

AGIL			Putnam			
evaluative	culture	integration	Values and	Values and Subculture		
"ends"	institutions	cohesion	solidarity	Ethnic	solidarity	
	rights	networks		communities	socialisation	
instrumental	economy	political	Exchanges	Non market/	Non-	
"means"	resources	power,	and	nonprofit	government	
	access	capabilities	cooperation	production	organisations	
	environment	agent/system		Society	Community	
	extern	intern				

In the case of developing countries it takes the role of the base on which further societal development has to rest (see also Woolcock 2000). As described in the model (see section 3), the SCA can be interpreted in the SOLA model as choosing a perspective on the *horizontal* relationships in *one* dimension in the model between civic society, social cohesion and personal social relations. The Social Quality Approach (SQA) and the SOLA model take the perspective of the mediating processes which are located *vertically* in the model integrating *all four* dimensions.

The task is then

- to describe the structure of civil society by their relevant social groups, associations, and communities
- to determine the relevance in view of their role in relation to economy, polity, and culture (including especially education and science)
- to describe the mediating processes by analysing social cohesion through the connectivity and strength of bonding, binding, linking and bridging ties

Bridging networks and institutions should be given special attention and weight in the evaluation of the social policies (see also Stieglitz Commission), since by definition they rely on some common effort for a presumably "common good". But by their very logic bridges have to rest on the description of the structure of relevant social groups and communities which are to be connected and integrated.

Social Capital, values and social order (Fukuyama)

Fukuyama (1995) emphasised especially the property of *general* trust institutionalised as identification with social values. General trust is not so much generated in networks, but rather is an effect of the hierarchical organisation of society. This becomes more transparent in developing countries which still are in the process of nation-building. To understand the "working" of this kind of social capital it is important to distinguish - following Rothstein and Stolle (2007a, 2007b) – a "bottom-up" and a top-down" process of generating social capital.

The "bottom-up" approach focuses on interactions in social networks and addresses the problem of trust and commitment necessary to sustain cooperative activities. Actors build up a reputation of being reliable partners which is cast into routines and traditions of common practices which in turn are explicated in institutions, i.e. sets of values, norms and beliefs which regulate how things are achieved for the "common good" or at least to the benefit of participants. A feedback process is assumed where initial investments in trust are employed to develop more complex ways of cooperation.

The "top-down" approach enters this loop at the level of institutions and states that at any given time the actors are already in situations structured by institutions and are socialised to comply to a certain extent with norms and have made experiences with the positive effects of institutionally regulated activities which in turn enhances compliance. An important factor of this "top-down" process is the way collective actors – especially the elites in politics, economy and culture - produce and reproduce institutional values and norms like justice, fairness, honesty and democracy in their own conduct and how the public media make their conduct transparent to the general public. Trust in institutions or "the system" is, thus, generated "from above". As especially Luhmann (1973) has emphasised, trust in institutions (or systems) can not simply be explained "bottom-up" by trust generated in personal interactions; complex networks of interactions develop trust as a "medium" in interaction which does not depend on the rather unreliable dispositions of individual actors. To participate in the flow of actions they have simply "to play by the rules" (or follow certain codes in Luhmann's terminology). But again we find a feedback process whereby institutionalised social capital (re-)produces itself through compliant activities.

Fukuyama (1999) has applied this perspective to the processes of development in developing countries where hierarchies have yet to be created and an effective "top-down" regulation of society has to be institutionalised under the guidance of social values. The generation and institutional organisation of values and norms is at the centre of Fukuyama's model (see figure). This process he understands pretty much in the sense of Max Weber's description of the rise of secular and rational bureaucracy with "protestant ethics". In developed societies, in his view, these rational hierarchies have developed under the influence of economic welfare and economic rationality in a way that they produced a "Great Disruption" which means that the level of "bottom-up" generation of solidarities does not function anymore and causes social problems. *Social integration* has to be strengthened again by finding a new balance in *politics* between *economic* rationality and "arational" values as they are found in religious and ethical *traditions*. His matrix – as this all too short description of his position reveals – also

employs a 4-dimensional scheme which is constituted by the dimensions rational vs. arational and spontaneously self-organising vs. hierarchical (see below). As we will see more clearly when placing the approaches in the context of social change, his matrix arranges the four dimensions of Parsons' AGIL scheme in a different order (see below), but it still can be interpreted as using the basic dimensions of the general SOLA model. (As a sociologist one might "be amused" by finding sociology (rather than the humanities?) in the quadrant of revealed religions.)

Figure: The Sources of Order (Fukuyama 1999, p. 152)

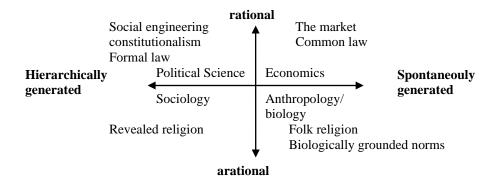


Figure: AGIL vs. Fukuyama

AGIL				Fukuyama			
evaluative	culture	integration		arational	arational Historical		
"ends"	institutions	cohesion			tradition	religion	
	rights	networks			Folk religion	Formal ethics	
instrumental	economy	political		rational	Economic	Soc-political	
"means"	resources	power,			markets,	engineering	
	access	capabilities			coord. interest	formal law	
	environment	agent/system			Spontaneously	Hierarchically	
	extern	intern			generated	generated	

The model of Fukuyama clearly has its strength when applied to a historical process of development and secularisation of societies. It, therefore, fits quite convincingly into the perspective of the Human Development Approach as identified in the beginning as one of the influential traditions in the debate on social sustainability. The model is less convincing in its application to modern society. The perspective of a linear progress is not so attractive anymore in a situation where there is serious doubt about the merits of progress and especially of progress as defined by Western culture. The "End of History" proclaimed by Fukuyama himself makes us turn to models which are more focused on the mechanisms producing and reproducing social problems in our society. To interpret them in terms of development from traditional-tribal to modern-open societies seems to missing the point and only introducing a conservative bias for traditional forms of social organisation.

Some conclusions

Four aspects of this look on social capital as a rival for conceptualising social sustainability are important in the perspective of the SOLA model:

First, the concept of social capital obviously comprises very heterogeneous social phenomena and is desperately in need of more differentiation and precision. It actually introduces a wealth of sociological knowledge which should be put more systematically to work for a concept of social sustainability. A suggestion in this direction is proposed in the SOLA model.

Second, the distinction "bottom-up" vs. "top-down" only makes sense when we accept the distinctions of levels in the processes producing and reproducing social capital. It has to be clear to what level and processes we are referring when we employ the concept of social capital. In this way, approaches to social capital support an approach – like the SOLA model - incorporating distinct levels of social organisation.

Third, the concept of trust as a common denominator for forms of social capital is deceiving because it suggests a common factor which, in fact, refers to quite different things. In the case of social inclusion, the focus is on social *institutions* which define social rights and on general *trust in institutions* which motivate identification (positive) with or deviance (negative) from institutionalised values. In the case of social cohesion, the focus is on *interpersonal relations* and social networks which are guided by "norms of reciprocity" or solidarity. These relations also depend on trust, but this trust is generated in specific personal networks. The difference becomes clearer in practical contexts when trust is *missing*, since strategies to develop trusted institutions pose different challenges than generating trust in personal relations.

Trust in institutions is based, as the "top-down" mechanism reveals more clearly, on the acknowledgement of rules which appear to be justified, because its is assumed that "in principle" they are a part of a valid interpretation of "what is right". In modern societies that implies that they are "in principle" open to criticism, argumentation and consensus or "discourse". Sanctions can enforce compliance in many ways, but they are also subject to justification. Trust in personal relations operates "in principle" differently in as much as it exactly avoids (too extensive) argumentation by appealing directly to unconditional willingness to cooperate (the classical case being "just cooperate because you love me"). Surely, on the one hand, trust in charismatic politicians, for instance, can operate in a similar "personal" fashion, and, on the other hand, institutions pervade our everyday life (e.g. by defining what it "means to be a family"), but nevertheless we should distinguish between social capital based on shared institutions (e.g. human rights) from social capital based on experiences of cooperation (e.g. norms of "reciprocity"). This difference, of course, reflects the distinction between the dimension of values and the dimension of integration in action theory, and gives rise to the distinction of social inclusion vs. social cohesion. Moreover, "bottom-up" and "top-down" processes can be expected to interact and mutually support each other (re-)producing interdependence between institutions of social inclusion, on the one hand, and networks and communities generating social cohesion, on the other. Strong religious ethnic communities are an example.

Fourth, the models of social capital typically assume positive feedback in the (re-)production of itself. To avoid functionalist assumptions, the existence of these feedbacks has to be

empirically established and they should be interpreted as *implemented and maintained by* social practices and policies, but once evolved and kept under favourable conditions by policies we will expect them to support and carry social sustainability. As we have already stated, the concept of sustainability presupposes some positive regulation vis a vis adverse historical change and natural disturbances. This is clearly accepted in the SOLA model as will be further discussed in section 6.

5.3 The Social Quality Approach (SQA): A European social model

A distinctly sociological approach emerged from a European group of researchers which organised itself in the European Forum on Social Quality (since 1997; see http://www.socialquality.org) and widened into an international network on social quality since 2006 without giving up its original concern for a European Model of social welfare. Central to this approach is a focus on the concept "the social" and a framework identifying three basic kinds of factors — constitutional factors of "the social", "conditional factors" and "normative factors" — with each kind consisting of four dimensions, thus, giving rise to a "social quality architecture" of 12 factors.

normative factors

- Social justice/equity
- Solidarity
- Equal valuation
- Human dignity

(Interpretation)

"the social" as actors in relations

conditional factors

- Socio-economic security
- Social cohesion
- Social inclusion
- Social empowerment

(actual existence)

constitutional factors

- Personal (human) security
- Social recognition
- Social responsiveness
- Personal (human) capacity

(potential)

"The social" is understood as a field of relations determined by the three types of factors in the triad which are seen as conceptually linked and holistically defining each other. Each "corner" is consisting of four corresponding dimensions; thus, the triad may also be pictured as four layers of triads — one for each dimension. The authors do not suggest the representation in a triad, which is chosen here to accentuate the relationship with the triad introduced in the section on action theory. The constitutional factors refer to the *potential* for social quality which rests in social relations between actors with the capacity to reflective social actions with social recognition of each other, responsiveness of the relations to actors and embeddedness in a world of potential resources. The potentials can, then, produce actual

conditional factors of actors in given settings which will in light of *normative* dimensions then interpreted or "judged" as *conditions* for social quality. The four conditional factors are, accordingly, also the dimensions for the development of social indicators suitable to establish the existence of social relations in correspondence to potentials and normative standards. Thus far, this foundation is quite compatible with the SOLA model with the notable exception that the SQA explicitly starts with *relations* as basic concept, while action theory as characterised above starts with the concept of action and agency or actor. But since both approaches introduce the "missing" concept (actor vs. relations, respectively) already on a very basic level, this need not have consequences particularly in a rather pragmatic perspective.

With this foundation van der Maesen & Walker (2005) define "social quality" as "the extent to which people are able to participate in the social and economic life and development of their communities under conditions which enhance their wellbeing and individual potential" (p.12). And v.d. Measen and Walker (2005) explain the 4 basic conditions of SQ:

- Socio-economic security is the extent to which people have resources over time.
- Social cohesion is the extent to which social relations, based on identities, values and norms, are shared.
- Social inclusion is the extent to which people have access to and are integrated into the different institutions and social relations that constitute everyday life.
- Social empowerment is the extent to which the personal capabilities of individual people and their ability to act are enhanced by social relations.

Some comments should be added to understand the SQA. First, it explicitly claims to be a social theory approach and, in this regard, it is rather unique in the literature on social sustainability and QoL. The term social quality is introduced as a distinct alternative to approaches that conceptualize individual QoL extended or aggregated into models of social development and social progress. SQA also claims to have a theoretical foundation which distinguishes it from the (often admitted) lack of theory in empirical social research and development in the field focusing on indicator system for purposes of describing social change or guiding social policy. In the following we will try to characterize the theoretical approach as it relates to the SOLA model. But since the presentations of the SQA by different members of the group have varied over the years and since the approach by its complexity is difficult to summarize for our purposes, we can only hope to do justice to the approach. Our interest is a better understanding of the SOLA approach by contrasting it with a viable alternative, but may be it also helps to clarify the theoretical "drift" of the SQA.

Lets us point out, first, some common ground. Both approaches, as stated already, are essentially social theory approaches, although the predilections for certain theoretical traditions do differ. Both approaches are decidedly "normative" in the sense that an explicit reference to social and ethical values is integrated in the approach. Although there is a difference in the way SQA aims to integrate "normativity" directly into the "holistic" triad of its architecture (see figure above). On the one hand, the triadic representation of the model is already a "benevolent" interpretation of SQA, in fact, the constitutional and normative factors in the model are not systematically elaborated and usually not employed in the approach; on the other hand, the integration of the normative factors appear especially in the role of empowerment and gives the model an especially critical flavour. The SOLA model, on the one hand, is more explicit in the use of values and their foundation in the triad; on the other

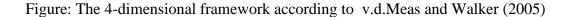
hand, it is more pragmatic by leaving also some room for choosing the meta-dimensions and the relation to values in different models. This way, as demonstrated below, the SQA receives its place as a special strategy in the *general* SOLA model. Alternative strategies are closely linked to conceptions of the welfare state and thus reflect basic positions in the value dimension.

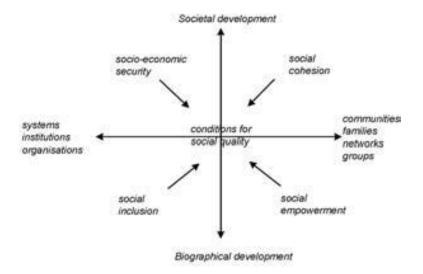
Over the years the SQA has tried to integrate relevant discussions and empirical results from different approaches such as quality of life concepts, human security and social protection, the capability approach, social capital, and recently Asian concepts of social harmony into a framework inspired – among others – by Durkheim, Lockwood, Honneth and Habermas. The theoretical references, however, change quite liberally in different publications. Most consistently, there appear references to social constructivist approaches although SQA is explicitly understood as integrating the embeddedness of actions and relations into concrete environments in time and space. Together with its emphasis on empowerment it is close to the position of Anthony Giddens, although this proximity is only recently acknowledged (Herrmann et al. 2008). It has, however, initiated a growing number of empirical research projects (see the European and International Journal on Social Quality; v.d. Maesen et al 2001; 2005; Vuori and Gissler 2004; Yee and Chang 2009). Clearly, the approach distances itself from any behaviouristic or functionalistic position which includes Talcott Parsons whose 4-dimensional framework is – to our knowledge - never mentioned or discussed. But the correspondences of the 4 conditional factors with the SOLA model are obvious, and, in fact, Marja Vaarama (2009) has realised the potential of this approach for research on ageing, social and health care, and social policy, and integrated it conceptually with early system theoretic model of QoL by Veenhoven (2000) and the CareKeys model of QoL (Pieper/Vaarama 2006) creating an own approach to social sustainability. This approach is now developed in more detail in the SOLA project.

Besides the indebtedness to the SQA there are also some important differences deriving mainly from different theoretical foundations. Some shifts in the meaning of the four "conditions" can already be observed in the definitions above. First, the political and the cultural dimension are not explicit in the definition of social quality (although in other definitions the cultural life is included; see Beck et al.1997). This is strange on first sight, since values and institutions as well as empowerment are explicit in the conditions. Values appear in the definition of social cohesion and not in social inclusion pointing already to a somewhat different concept of social cohesion. Empowerment is referred to in the notion of "individual potential", but this certainly is a very restricted concept of power. The reason for the differences becomes more transparent when we consider the two meta-dimensions which constitute the "social quality quadrangle" as shown in figure X below:

The horizontal meta-dimension "systems – communities" refers to opposing ways of social organisation roughly corresponding to the famous distinction of Gemeinschaft (community) vs. Gesellschaft (societal systems) by Ferdinand Tönnies, or more recently the distinction of social integration and system integration by David Lockwood (1964). The vertical meta-dimension "biographical – societal development" captures the different

time horizons of individual socialisation and appropriation of social relations and of societal elaboration of structures.





A closer look reveals that there is no possibility to align Parsons' AGIL-scheme with this framework, although the four dimensions are – on the face of it – referring to the same features of social relations. This becomes apparent when we arrange the quadrangle in a corresponding four-fold table and compare it with the AGIL-scheme as in the figure below:

AGIL				SQA				
evaluative	culture	integration		biographical	biographical inclusion emp			
"ends"	institutions	cohesion		development	institutions	capabilities		
	rights	networks						
instrumental	economy	political		societal	security	cohesion		
"means"	resources	power,		development	resources	social		
	access	capabilities				relations		
	environment	agent/system			systems	Communities		
	extern	intern				Life world		

First note that the columns identifying the external environment and the system, respectively, seem to correspond quite well. Also we note that agency corresponds to communities, especially if we keep in mind that in the Parsonian scheme it is left open whether we look at an individual actor or a collective actor; his scheme is intended for application on different levels. The SQA opts for social relations as basic entities and, therefore, communities or groups are the entities uniting actors under one identity. The choice of the second meta-dimension, however, creates some basic differences also in the interpretation of agency. The Parsonian scheme introduces a means/ends distinction which is indebted to Kant, the SQA chooses a distinction between the time horizon of an individual life process and the time horizon of social change. While a central issue in the Parsonian scheme is the (causal) effectiveness of action, a central issue in the SQA is the time frame in which actors are empowered to find their place in the social fabric and/or to change that fabric according to

their needs. Due to this interdependence, the fabric itself is subject to processes of change in a different (longer) time frame. In the biographical perspective time is short, empowerment becomes the crucial condition for affecting change. The institutional framework of *inclusion* becomes important especially in the biographical horizon as a condition facilitating or hindering collective action for improvement. *Social cohesion*, on the other hand, plays a central role in the constitution of agency in Parsons', while it assumes a rather Durkheimian character as a societal process integrating communities in SQA. Its is also interesting that in this confrontation the indebtedness of Parsons to economical thinking becomes apparent in the close connection of power to economic resources as instrumental for the achievement of desired ends, while in the SQA resources and the economy play more the role of a more or less favourable condition for the collective political efforts of improvement.

There is clearly a certain charm and attractiveness (not only) for social theorists in the SQA as characterised here, although we have to caution again that our interpretation might not be validated by the SQA research community. The attractiveness is not the least due to the relational approach which takes the force away from the more individualistic and utilitarian approaches featuring the self-interested rational actor. The concept of social sustainability certainly implies some valuation of social relations and social values as opposed to more individualistic if not egocentric orientations. Recently Kenneth Gergen (2009) has agued convincingly for going beyond the "bounded self" to a concept of "relational being", although he also argued for going "beyond community", since he appreciates more clearly the inherent dangers of community formation as mentioned above in the discussion on social capital. Attractive is also the placing of the conditions in a frame of social space (community/system) and social time (biography/social change); the difficulties of including time horizons, especially open, historical time, in social system approaches are notorious in the criticism of "functionalism" – though certainly solvable. And finally, the option to focus on the empowerment of persons in the horizon of their life course to affect social change seems to be very appropriate, especially at a time when the timeless and invisible hands of the economic markets have lost their credibility and young people all over the world are seen as taking the initiative for more freedom and empowerment. In the basic triad of the SOLA model (see figure section 4) the SQA, thus, takes the perspective of realisation through action.

An interesting study has been conducted by Yee and Chang (2009) which displays both the strengths and the limitations of the approach. As they emphasise, the 4-dimensional framework establishes a convincing set of dimensions and links these dimensions to explicit social values, thus, creating a structure for a social concept of the "good society". The theoretical focus is on *processes* relating opportunities in the social context to participation and utilisation of those opportunities by individuals. This should be considered a clear strength of the approach, although methodologically it creates problems, because the study has to grapple with limitations of available statistics, since process indicators are rare. Also the Finnish partner of the SQA network had to cope with this problem when attempting to identify indicators from Finnish registers for the EU project (Mika Vuori and Mika Gissler 2004). It has to be conceded, however, that these problems trouble also studies under different approaches including the SOLA model. But the SQA has also more conceptually based problems of identifying indicators as Yee and Chang admit and try to avoid (p. 3). Problems with the interpretation of the dimensions and with the results arise especially from the way the dimensions are placed into the higher level framework of two meta-dimensions.

These dimensions create special theoretical effects which motivate Yee and Chang to tentatively modify the scheme, especially in their interpretation. Both meta-dimensions seem to describe hierarchical dimension besides accentuating different features, i.e.

informal/networks vs. formal/systems and biographical vs. societal processes. The 4 dimensions, however, appear to describe features of social interactions on *all* levels as well as characterising mediating interaction processes *between* different levels. Why, for instance, social cohesion applies specifically to societal development as manifested in families or networks, or why social inclusion is specifically an issue of personal participation in system institutions and not in communities is hard to understand, especially in view of the definitions quoted above. Similar questions can be raised by pointing out the importance of families for social security or for empowerment in relations to systems.

The theoretical puzzle is only solved when we acknowledge that the SQA does *not* think in hierarchies, but treats life worlds and systems, on the one hand, and biographical development and social development, on the other hand, as "two sides of the same coin" or, in Giddens (1984) terminology as two sides of the "duality of structure and action". The conceptual situation is then that of an (more or less) empowered collective in a societal situation – all on one plane of analysis. One is reminded here either of the Marxist scheme of the "revolutionary subject" which is an integrated part of society while at the same time alienated enough to be play the part of the revolutionary class, or of the social-constructivist (collective) interpreter of a society (as text) who can only "distant" himself from the "text" but not leave the common of plane of the language of both text and interpretation, thus caught in a "hermeneutic circle". Actually, reading the expositions of the SQA one gets the impression that the authors shift between these two critical positions. Both schemes, as admitted in section 4, have their merits as critical perspectives, but are conceptually difficult when applied to the context of practical social policy. In this context, the concept of hierarchy simply makes sense and facilitates the conceptualisation of social policies. Yee and Chang in their modification in fact break up the scheme and analyse the processes of participation or empowerment in two different settings or two distinct levels of a hierarchy: the life world and societal systems. And they employ on both levels indicators which might as well be assigned to all four dimensions in both cases. With this modification they actually introduce Parsons' AGIL scheme and "betray" the critical intentions of SQA. Or to turn the argument around: If one is willing to accept on theoretical grounds to take the critical perspective of the "subject" of empowerment, then the framework of SQA may open new avenues for interpretation. In this perspective of "emancipating empowerment", however, the concept of social sustainability looses its base, since everything is put into question when choosing the radical position of action (see also the section 4 on the triad and beyond). We will try to substantiate this claim in the next section on social change.

5. 5 The SOLA model and its alternatives: some conclusions

A few points will serve as a first summary of this discussion on potential rivals for the SOLA model. The theoretical foundations have already indicated that the SOLA model claims a theoretical background including also its rivals.

Reviewing strategies which emphasise the quality of life of individuals, we have argued that the level of the individual has its justification, not the least on the grounds of a respect for the dignity of the person in most cultures. But the pursuit of a "good life" is not conceivable without a clear concept of the "good society". The latter concept presupposes a vision (and measurement) of the social context of the individual, i.e. going beyond the perspective of individuals to social relations and processes.

Reviewing approaches to the conceptualisation of a genuine social dimension, we have argued that they have at least one of three deficiencies:

- They fail to make necessary distinctions in the field of social relations providing more or less organised lists of candidates for measurement without a satisfactory theoretical grounding; we have briefly presented some examples.
- They fail to convincingly structure the different levels and sub-dimensions in the comprehensive social dimension; this is clearly the case in the social capital approach (SCA).
- They assume a more basic framework of meta-dimensions which should be represented in a more comprehensive approach to clarify the relationship to alternatives. The SOLA model claims to provide a theoretical framework which allows including the rivals as special cases.

The Social Capital Approach (SCA) including the model by Putnam was identified as compatible with the SOLA model on the basis of a common ground in Parsons' AGIL scheme. Two major alternatives emerged which we will further consider in the following section under the perspective of social sustainability and models of social change: The model by Fukuyama choosing an essentially Human Development Approach (HDA) and the SQA model incorporating a "critical" perspective.

6. Social Sustainability: Models of change, welfare regimes and "virtuous circles"

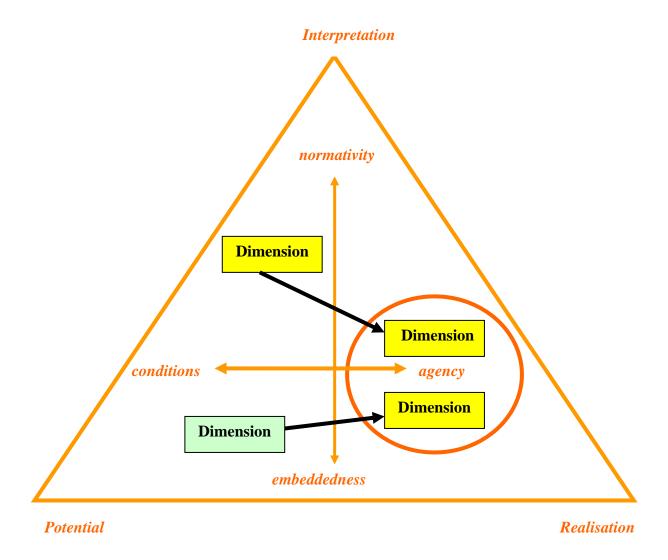
6.1 Three models of change

So far we have considered the social dimension (and more specifically social capital) in the perspective of structural differentiation, i.e. identifying the four different focuses for structuring actions and interactions. We saw that the different approaches interpret the four dimensions somewhat differently by arranging them in a 2-dimensional framework. In section 4 on theoretical foundations we have shown that this implies the reduction of an underlying 3dimensional framework. The advantage clearly is that a 2-dimensional approach is much easier to manage conceptually and methodologically, but it also implies that some content or issues are "left over" and have to be dealt with in some other way. A typical strategy is to place the structural model (explicitly of implicitly) into a model of social change and agency. Three models should be distinguished which are incorporated in the three approaches to the social dimension discussed above: Parsons' AGIL - scheme, Fukuyama's Human Development Approach (HDA), and v.Maes/Walker's Social Quality Approach (SQA). The Capability Approach (CA) offers in a sense a fourth option, but as we have seen, it avoids the specification of a conceptually independent social dimension by emphasising either the role of the rational actor (Sen) or the moral actor (Nussbaum). Both choose as context for the CA a human development approach which is in line with their concern for global inequality and social justice. The Social Capital approach in Fukuyama's version will be addressed in the following as a HDA, and otherwise be treated as a field of social research with quite heterogeneous contributions to the specification of the social dimension and of social sustainability.

To compare the three models of change and agency we will draw on the triadic relation between interpretation/norms, potentials/determinants, and performances/actions introduced in the section on theory. To describe the conceptual reduction in each model we will "split

up" the triad (graphically the triangle) into two arrows; this provides us with four "slots" at the beginning or end of the arrows. Additionally, a circle will indicate the agency. The scheme is placed in the frame of the triad to remind us that it operates – so to speak – in the field of the gravity of its three poles. Within the triad their influence is marked by the concepts of normativity vs. embeddedness and conditions vs. agency. The models differ in the way the "fill in" the slots on the basis of their conceptions of change and agency. One dimension is actually fixed in its position – the dimension of resources/economy of social security – because all models consider it as a basic condition providing resources although in all models it is also considered to change in the historical interaction between human conditions and human agency. The remaining three slots can be "filled in" by concepts of social empowerment, social inclusion or social cohesion.

Figure: General Scheme of the 4 Dimensions in the Basic Triad



The interpretation of all four dimensions will display modifications depending on how they are placed in relation to the other three dimensions. Logically, there are exactly three options to place the four concepts, if we want to organise them in a fourfold table constituted by a 2-dimensional framework. As we have seen above, that is what all three approaches do although in somewhat different ways. Correspondingly, there are three options to choose an

interpretation for the two dimensions; these interpretations are not totally determined by the arrangement, since the interpretation of the four dimensions can also be adjusted. But in as much as the four dimensions characterise four basic aspects of action and the human condition, the interpretations can also not be totally arbitrary.

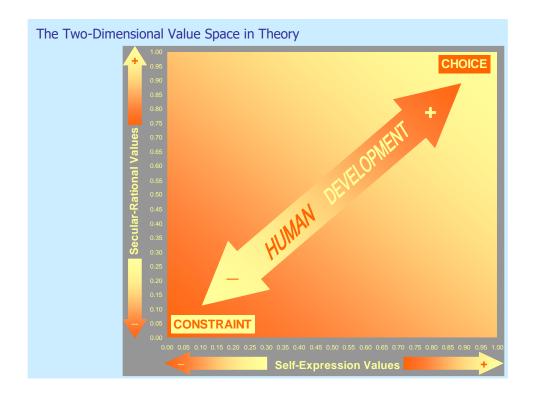
Models of change and agency can be interpreted as narratives which try to demonstrate or explain how agents experience or affect change in the system of conditions and how they may succeed or fail to achieve the visions of a "good life" and a "good society" defined by the model.

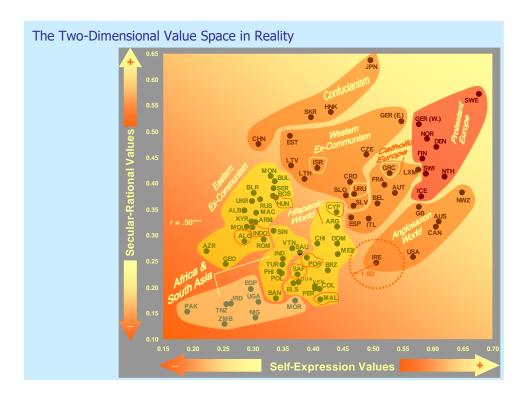
The three models of change and agency are:

Human Development Approach (HDA) – From Constraints to Choice

The HDA has been developed in the context of social development in developing countries. Perhaps its most convincing expression it has found in the research on world values as described in the figures below. The graph showing the scores of different countries makes it clear that the scores also reflect increasing levels of economic development from poor to rich countries. Cutting out the upper right hand quadrant, we see countries like Spain (strong tradition), USA (rational individualistic), Japan (collective-traditional but secularised) and Sweden (self-expressive but social-democratic) representing the four dimensions. This also helps to understand the vision of a "good life" and a "good society" in this approach. It has a distinct Scandinavian flavour in as much as religious secularity is combined with consensual and cooperative democracy of "self-expressing" individuals.







Source: Ch. Weltzel, A human development view on value change trends (1981-2006), www.worldvaluessurvey.org

To ease the comparison between the models we simplify the general graph with the triad as context above to the fourfold table of the four "slots" already introduced in the discussion on the model by Putnam and Fukuyama. Note that the model of the World Values Survey has to be rotated so that the "constraints" are in the upper left corner and the development occurs to the lower right corner of "choice".

Figure: The HDA model by Fukuyama

HDA model of Fukuyama and World Values Survey						
	traditional	secular		arational	Historical	Revealed
collective					tradition	religion
					Folk religion	Formal ethics
				rational	Economic	Soc-political
individualistic		· ·			markets,	engineering
	rational	modern			coord. interest	formal law
	materialistic	post-			Spontaneously	Hierarchically
		materialistic			generated	generated

To appreciate the correspondence between the World Values Survey model and Fukuyama it is important that Fukuyama also proposes a model which heavily relies on values and refers to the survey for indicators. Moreover, the dimension "spontaneously/hierarchically generated" is actually well-defined in the WVS model, because Fukuyama associates with modern "socio-engineering" exactly the application of secular and self-expressive values, while

"hierarchically generated" means that values are reflected – as in Max Weber's notion of a protestant ethic. But only in societies with an individualistic *and* post-materialistic orientation is the objective of human development achieved. This development actually implies the realisation of three objectives:

- the positive functions of traditional societies (social cohesion) have to be preserved; also developed societies can fail in this respect; this is the central criticism of Fukuyama and Putnam.
- the institutionalisation of (more) universal values in a code of human rights and laws and their integration into a modern concept of the free individual has to be achieved (upper arrow); as the human rights movement shows, even developed societies have here deficiencies, and
- the rational organisation of human life using (economic) science and technologies has to be integrated into a concept of the empowered or emancipated self (lower arrow); here the criticism of utilitarian liberalism claims that full human growth is missed without inclusion of all members of society.

The main features of the HDA model are:

- It describes development or human growth modelling a change from traditional societies to modern societies, but can also be applied to describe further human growth in developed societies.
- Full agency is achieved only when human growth has succeeded,
- The process is seen as more or less organic and self-organising and guided by the satisfaction of basic needs which are then further differentiated as the development proceeds; correspondingly, anthropological factors play an important role, especially the natural dispositions to value cooperation and freedom.
- The model derives its dynamics largely from the fact that the definition of the goals of growth will change and this change is "built in" because aspirations and hedonic experiences will change when higher levels of development are achieved.

Concerning the role of role of social cohesion and social empowerment or agency:

The model tends to be conservative because of the fundamental role of social cohesion (see Fukuyama and Putnam) and because empowered agency is a goal rather than the starting point. The human rights, however, have a prominent role exactly because freedoms have to be developed.

Concerning the meaning of social sustainability:

The model emphasises the fundamental role of social cohesion and civic society, because in the process of development of modern societies their structures are typically not fully developed. In developed societies societal structures may even be causes of social problems giving social cohesion an important role as stabilising factor.

The Human Empowerment Approach (HEA) – From Power to Social Equality

The Human Empowerment Model has been developed in the context of freedom and liberation movements and is historically closely related to a Marxist tradition. In this model there is no "good life" or "good society" which does not respect the dignity, liberty and self-determination of citizens and equality is seen as a necessary condition. The model typically interprets change and agency from the point of view of a specific collective striving for liberty and equality and protesting against the oppression by "the system". The HEA as proposed here is actually a more general version of the SQA which does not address the issue of social

change in this way. The model applies more generally to all situations where a conflict between social groups or between a group and the broader society or "system" determines social change. Examples are the

- generation conflict where the young ascertain their active role against the established old
- class conflict or centre/periphery conflict where either the upper/centre class exerts its influence (agency) or the lower class establishes its claims to influence (agency), both focusing on (in-)equality
- fundamentalism/liberalism conflict where normative/religious interpretations of the "right" way of life are in confrontation
- solidarity/individuality conflict where belonging to the social order is under pressure by ambiguous or eroding social bonding

In these conflicts — which again display a 4-dimensional structure - the HEA "takes a stand" and reflects on social change from the perspective of a concrete collective. This perspective of activism implies that the issue of social empowerment is in the focus of the model. The other dimensions are either important prerequisites for success or structures which have to be opposed and changed.

Thus the model introduces a focus on three "fronts" of conflict involving the dimension of social empowerment with each of other dimensions:

Figure: The Human Empowerment Approach and SQA

	SQA					
biographical development	—			biographical development	inclusion institutions	empowerment capabilities
societal development		<u> </u>		societal development	security resources	cohesion social relations
	systems	Communities Life world			systems	Communities Life world

The main features of the HEA are:

- The model assumes a concrete historical "subject" or agent of change; since it is not necessarily obvious which collective can legitimately claim that role or how the collective has to be defined, the formation of agency is a central issue and problem (within the Marxist tradition a large part of debates centres exactly on this "WHO?" of the movement).
- The formation of agency poses an organisational problem and this implies a strong focus on issues of political participation and democracy.
- The formation of agency poses also a social problem, because the movement needs a strong solidarity; this solidarity is a precarious issue, since, on the one hand, solidarity grows in the process of societal development placing certain groups in the position of effective agency; on the other hand, these groups must be somewhat marginalised, since otherwise they do not have the incentives to oppose the "system" (in Marx' famous formulation they must have nothing to loose but their shackles).

- The model emphasises equality; this follows from the opposition to inequalities which are suffered as well as from the prerequisite of equality for social cohesion or solidarity
- The legitimacy of the movement can not be derived from society, since its institutions are part of the "system"; values, rights and institutions have, therefore, to be developed or at least newly legitimised out of the movement; their status is thus historical-relative rather than universal. In the SQA this is expressed in the fact that institutions are considered under the perspective of "biographical development" meaning the biography of a social movement or collective subject.
- The model derives it dynamics from the struggle between the agents of change and the "system"; further change is "built in" the process, since social development creates new inequalities and new formations of potential agents. In modern society new conflicts arise between those marginalised by economic development and those who benefit, but the conditions for movements and solidarity have also changed in a globalised information society.
- The model incorporates an additional complication, since the perspective can be chosen differently. One can take the view of the "achievers" in the system who impose or defend their power; a typical case of this version is the relation of the urban centre elites and excluded (urban poor) or peripheral (rural) groups. Or one chooses the perspective of a social movement.

Concerning the role of *social cohesion* and *social empowerment*:

The model emphasises the role of empowerment and social cohesion, but it also tends to link the two concepts in a strong concept of participative and particularistic solidarity. Social empowerment receives a special normative connotation as the engagement for freedom and equality or the pursuit of a higher "just" cause. Social cohesion tends to be perceived as an internal source for motivation and commitment based on the experience of deprivation and common interests, but it remains in an ambiguous role. Social cohesion is structured by social developments which do not necessarily respect the affordances of empowerment. This can be the case because the boundaries of solidarity are too diffuse in an open "network society" or that the "natural" agents of change are too marginalised to play that role as in the case of the uneducated poor in modern urban environments.

Concerning the role of *social sustainability*:

The model is rather critical of the concept and prefers to utilise the problems of *environmental* sustainability for a movement toward social change. In the SQA (which is quite moderate and social-democratic in its political position) this is reflected in the fact that the concept of social quality is directed against existing inequalities within and between European countries and the emphasis on mediating processes is due to a recognised need for improvement. Social sustainability means in this context especially the production and reproduction of the (political, economical, cultural and social) capacities for influencing social development.

Pursuit of Happiness Approach (PHA) – From Integration to Happiness

As proclaimed in the revolutions of the 18th century the "pursuit of happiness" is the central goal of modern (Western) societies. The concept is to be understood in a broad sense. It encompasses not (only) subjective feelings of happiness, but rather a whole way of life which is distinctly social, on the one hand, in recognising the legitimate pursuit of happiness by

other people, and, on the other hand, by giving social relations between individuals, in the family and in the community a special place in the view of a "good life" and a "good society". The spirit of the model is in a sense timeless and pragmatic: timeless, since the realisation of the "good society" is envisioned to be achieved "now" by the organisation of society; pragmatic and productive, since the realisation of happiness is to be achieved by using the suitable "means" to achieve the "ends" of a happy life. Focusing on the design of a *society* which produces and reproduces for evermore *individual* happiness, the model introduces a clear distinction between the levels of social organisation and individual life. This, evidently, corresponds also to the birth of sociology in the aftermath of the revolutions. Not surprisingly, the model is drawing strongly on the AGIL – scheme of Parsons, a central theorist in the analysis of modern society. The PHA is the central approach in the SOLA model, but the other approaches may bre chosen for interpretation, too.

Figure: Th	e Pursuit	of Hannine	ss Approach	and AGII.
riguic. In	c i uisuii	οι τιαρριπο	ss ripproach	

	AGIL						
evaluative "ends"		1		evaluative "ends"	culture institutions rights	integration cohesion networks	
instrumental "means"	6			instrumental "means"	economy resources access	political power, capabilities	
	environment extern	agent/system intern			environment extern	agent/system intern	

The main features of PHA are:

The prerequisites of a stable and valued social organisation are the central focus. The social order is not a result of natural, physical-environmental or biological, conditions or forces, but produced by and through the action of persons. Still, the model of cybernetic control and organisation in multi-level systems is a strong element. However, like in cybernetics, there is a quasi-external guidance of the system ("quasi-" because values are seen as "transcending" the social organisation finding an interpretation as more or less "universal" in cultural institutions).

The relative stability is produced by a kind of "virtuous circle" which relates the 4 dimensions in a self-reproducing way: social integration is the general mechanism stabilising and it can be detected working in political, economic, cultural or social-civic organisations and networks. Being made and supported by human actors the circle is not free of failures causing social problems; because of the interdependences in the circle the circle can not be implemented and maintained from one part, say by social policies alone, but needs a coordinated effort from all sides. This constitutes one constant cause for change.

The model has a tendency toward conservatism with its emphasis on social integration; but conceptually it is a question open to analysis to what extent a given society has already reached a stable circle "worth living" and characterising a "good society". The "external" position of values makes them also amenable to new interpretations on the basis of new experiences and knowledge. This constitutes another cause of change.

Dynamic influences, finally, enter the model because human actors have to be socialised and this implies not only cognitive education, but also emotional integration. This is more important than in the other two approaches, because in the pursuit of happiness this emotional

dimension receives a strong normative connotation. A "dualism of ends" – normative values and hedonic happiness – is thus a central aspect of the PHA.

Concerning the role of social cohesion and social empowerment:

The model sees both dimensions as constitutive of the collective agent, of the set of capabilities and the set of dispositions for motivation and commitment. But the agent has "two souls in his/her chest": following the way of "hedonic" social cohesion or the way of "higher values". The temptation is great to just instrumentalise all means and capacities for short term gratifications (some critics will call this the "capitalist" approach).

Concerning social sustainability:

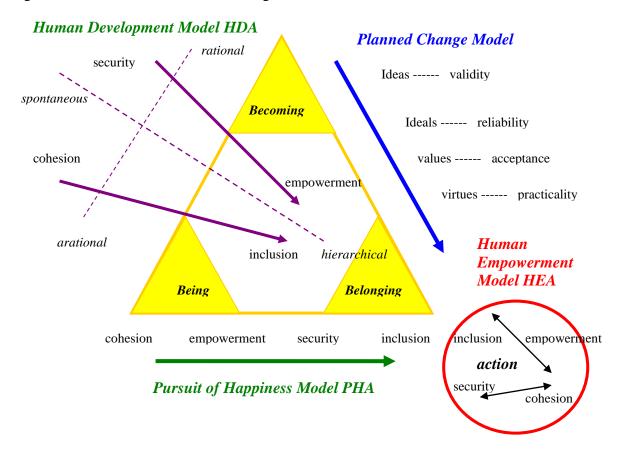
The model offers a strong, theoretically and empirically well-developed model of social sustainability. The problematic side of it is that it is too readily reduced to a one-dimensional model of social cohesion which in turn is then treated as functional for individual concepts of Quality of Life. To reiterate, social sustainability can not mean to sustain a life not "worth living" and its value implications can *not* be discussed and solved within the framework of individual happiness.

Models as reference frames for the interpretation of social change and agency

As already indicated, all three models may be chosen within the SOLA framework to highlight issues of particular interest. Not all societies pose the same problems or are at the same stage of development. It is obvious that the AGIL – scheme plays a central conceptual role in developing a comprehensive model of general sustainability and social sustainability. But the scheme also incorporates specific reductions from the more comprehensive framework of the triad which make it necessary to treat it as on option among others. The 4 dimensions have to be interpreted in a framework, but as the models of change demonstrate, their still is a lot of space for different views and empirical research on causal relations between the concepts and variables involved.

The 4 models are place again in the basic framework of the triad (developed in section 4) in the following figure. The figure should demonstrate how the models pick up different aspects of the dynamics incorporated in the relation of conditions vs. potentials and ecology vs. normativity. Interestingly, the figure also makes aware of a fourth model of "Planned Change" which actually describes the idealistic notion that the realisation of a "good society" is a matter of proceeding from good ideas to ideals and social values to "good practices". A central insight of the problem of social sustainability a described in section 2 should be that this procedure can guide practice but has to be pursuit in a concrete historical process of social change.

Figure: The Triad and Models of Change



6.2 Welfare regimes and "virtuous circles"

Welfare regimes can be understood as strategies of social policy to maintain a "virtuous circle". Models of social capital also try to describe the role it plays in sustaining the social order by feedback loops or as "virtuous circles". They are seen as supporting social development and social progress. Hagfors and Kajanoja (2010) have traced the concept back to Gunnar Myrdal (1957) and proposed that a "virtuous circle" involving social capital is at the heart of the success of the Nordic welfare system. They draw for their model on other analyses of Nordic countries assuming somewhat similar models (Kangas/Palme 2009; Castells/ Himanen 2002; Rothstein/Uslaner 2005; Rothstein 2008; van Oorschot/Finsveen 2008) and, of course, such models are proposed also in other research (not only) related to social cohesion (e.g. Dowling/Chin-Fang 2007). In the present context, their model is not only of interest because it addresses the Finnish welfare system, but also because it (and at least two of the models they refer to) contains four factors or stages which readily correspond to the SOLA model.

Their model is, admittedly, rather exploratory, since they try to illustrate their basic arguments by a simple model based on available indicators for 23 OECD countries. Selecting indicators for four central factors described as social capital, well-being, inequality and state welfare effort, they are able to produce quite convincingly four types of welfare regimes which differentiate the well-known typology of Esping-Anderson. At this point, we do not want to embark on a detailed review of their model which, as stated, is exploratory. We rather want to pick up their very interesting and fruitful lead of analysing welfare regimes in terms of "virtuous circles". Some aspects of their approach are noteworthy in this context:

First, the "virtuous circle" contains four stages: (1) welfare efforts of social policy lead to (2) less inequality which increases (3) social capital and eventually increases (4) the population's well-being and strengthens the support for welfare efforts – thus closing the "virtuous circle" (2010, p.8). Considering the indicators chosen, i.e. institutional trust included for social capital and general satisfaction with life included for well-being, on the one hand, and the somewhat attached reference to "population's support", on the other hand, we suggest that the circle is better represented by a "narrative" like

- Support for welfare efforts indicates social empowerment, which
- Induces social policy to create more equality and *social security*, which
- Raises the general and institutional trust due to social inclusion, which in turn
- Supports *social cohesion* in personal networks, here indicated by the aggregated individual life satisfaction, which then increases the motivation and commitment for political support of the welfare efforts.

In this "narrative" the four dimensions appear in a circle as assumed in the PHA. Since we only opted for a modified *interpretation* of the stages, the further results of their study are not questioned but rather confirm the SOLA approach.

Second, the study identifies four types of relative stable welfare regimes which with a little stretch of the imagination can even be associated with a focus on each of the dimensions. But more important is the point that stability quite obviously does *not* imply that the four solutions represented by existing welfare regimes are equally desirable. In the type including the continental-corporate countries, for instance, gender inequality is above average and participation is low. In the regime including Australia, New Zealand and Canada the level of public education is somewhat below average, while income differences are somewhat above average, but people seem to be quite satisfied with their life. In a third type including diverse countries like the USA and the Mediterranean countries the human poverty index, gender

inequality and income differences are high while trust in institutions is low, accordingly dissatisfaction with life is at its highest. The fourth type consisting of the Nordic countries, however, just fares best on all accounts. It also appears to be most consistent, since its resists (methodological) attempts to regroup the countries in different clusters.

Again, the results should not be over-interpreted, but obviously the welfare regimes may all be rather stable, however, the circle seems to be more "virtuous" in the Nordic case than in the others.

Third, we might look for some further avenues for interpretation by projecting the results on the HDA. The Nordic countries once again emerge as the most developed societies, while continental Europe (e.g. Germany, France) might still be marching through the stage of enlightened Weberian bureaucracy. The Mediterranean countries still show the influence of traditions and form a rather stable cluster. The USA and UK leave this cluster on more detailed analysis quite in agreement with the HDA model to represent an own anglo-saxon welfare type. Their neighbours in the World Values Survey (Canada, Australia; see above) appear to have found a more favourable welfare variant.

Fourth, an interesting feature characterises the model: all four dimensions are included in the "optimal" solution of the Nordic countries, but the more liberal regimes in Canada and Australia also produce high life satisfaction, a variable actually measured at the level of individual quality of life. Moreover, the model chooses indicators like the degree of decommodification or the GDP per capita which describe societal *structures* rather than *processes* involved in a "virtuous circle". This suggests the – at this point certainly ambitious – hypothesis:

Sustainable welfare strategies have to realise a balanced combination of factors representing all 4 dimensions, but they may choose different levels for a certain dimension and still produce stable and to varying degrees also successful solutions.

To appreciate the hypothesis a look at the general SOLA model (see above section 3) or at the more detailed overview in the section on the SOLA indicators is helpful (see below section 8). For instance:

- An ideal-type "neo-liberal" welfare state combines a focus on *economy* with *technological* progress which is balanced by references to *social cohesion* (family; social capital) and the promotion of individual *capabilities*.

 The solution "dances" quite freely between the levels (and avoids a commitment to clear *political* responsibilities for welfare).
- An ideal type "socialist" welfare state would place more emphasis on state regulated economic welfare provision, political administration, human rights, and civic solidarity.
 The solution would focus on societal structures and neglect the integration of
 - The solution would focus on societal structures and neglect the integration of individual visions of a "good life".
- The "Social Investment" strategy adopted in Challenge Europe 2011 for European social policy essentially specifies 5 targets: a general target of developing individual human capital especially in children, and additionally: a target of work-leisure flexibility designed to strengthen the position of females and family life (social cohesion), a target of creating new flexible employment structures over the life course (social security), a target of strengthening the role of the welfare state and public service provision (political regulation), and the target of a "sharing society"

concerned with the integration of migration communities and ethnic subcultures (social inclusion) (EPC 2011). The target of social empowerment of the SQA is candidly avoided by assuming state responsibility.

- The Sustainable Development Model of UNRISD sees as social dimensions "social and ecological responsibility", especially corporate Social responsibility (policy), "equal access to basic services for all" (security), and "inclusive/non-discriminatory social institutions (inclusive culture), and "social development" integrating the three other factors in a broad concept of social cohesion (Wiman et al. 2007). As noted above, the perspective of the HDA in developing countries perceives the social dimension as the general base from which the development of the other three dimensions has to arise.
- The SOLA model (realised in the Nordic model?) would focus on the mediating processes, i.e. on social processes and practices supporting security, empowerment, inclusion and cohesion.

Traditional welfare concepts do not consider the problems of human ecology, but the SOLA model acknowledges that these factors have to be included in a wider concept of sustainability. For instance, Scenarios of sustainability as suggested by the Millennium Ecosystem Assessment (see Alcamo and Bennett 2003) focus especially on the ecological issues and distinguish four strategic options:

- Neo-liberal "Global Orchestration" combines in the terminology of the SOLA model a focus on economy with technology, social cohesion, and individual capabilities;
- "Order from Strength" relies on a strong polity and territorial integrity while providing social security and individual well-being;
- "Adapting Mosaic" (the environmentalist position) clearly focuses on environmental issues and expects civil society and social empowerment supported by individual identifications to solve the environmental problems; and,
- The "Technogarden" scenario describes the position that eventually technology and scientific creativity will solve environmental issues and that economical, political and social structures will somehow develop around these solutions.

Each scenario picks one factor from each dimension while choosing them from different levels of the SOLA model, as proposed by the hypothesis. These scenarios are designed explicitly not to project the future but to guide discussions about meaningful strategies. But – like the welfare state concepts – they make aware of the possibility that there well may be different pathways of sustainability which can be described by different "profiles" of concepts in the SOLA model. The reflection on such "pathways" with the help of the SOLA model is an important heuristic function.

6.4 Social problems and the SOLA model

The SOLA model is designed to monitor social change and social sustainability. This implies that it should be sensitive and informative concerning social problems. Many social problems are recognised by indicators of failed social inclusion in the model characterising them in a social theory perspective as deviation from normative standards. But social problems can also be directly related to the four dimensions of social quality using them as specific indicators for a more general cluster of problems. An – admittedly only exploratory – analysis with this strategy has been done with data from a survey on health and social welfare in Finland (see

the ATH survey in section 8). The data and methods are described in more detail in the annex to this report.

The analysis was triggered by the observation that three major problems in social and health care in Finland, namely obesity, drinking and smoking turned out in a factor analysis as related distinctly to different dimensions:

Obesity – related to social inclusion

(e.g. low general trust in institutions; low general participation)

Smoking – related to social security

(e.g. low unemployment; working after education)

Drinking – related to social cohesion

(e.g. lone homeless high; using cultural services high)

A fourth factor described a group with only moderately smoking problems, but indicated as a problem a only moderate disposition to give help to other people. Thus:

No-helping – related to social empowerment (e.g. voting high, high income)

These first results clearly need more rigorous empirical testing, but we want to exploit them in the present context to demonstrate how models of social quality and social change can be used for different ways to analyse empirical information. This shows the link between social quality and social problems and even opens avenues for reflection on the causes of social problems and may suggest adequate social policies.

First, we should acknowledge that all three problems have primarily a social character and are associated with certain social conditions and life styles developed in a social context. But beyond this insight, there seem to be presently no really convincing models around explaining the genesis and distribution of the problems. So let us try to shed some light on the problems from the perspective of the three models of social change.

Social problems: an effect of social development – the HDA

The HDA places the social problems in a framework of development from more traditional, rural regions to developed secularised and urban regions. On their path of development the may take the economic route through industrialisation, or they may develop as cultural and administrative centres before going on to modern fully secularised stages (see figure above). Projecting the four social problems into this model, we would first group the regions of Finland into this frame and distinguish traditional rural areas, say in Northern Finland, from the modern urbanised South around Helsinki. Furthermore, we would distinguish industrialised regions like Jyväskylä from old administrative regions like Turku. The expectation of the model would then be that excessive drinkers prevail in traditional regions, heavy smokers are prominent in industrialised regions and obesity should be observed mainly in old administrative regions. Relatively low levels of all three problems – besides a somewhat "egoistic" focus on one's own welfare – should be observed in modernised regions. This is an empirical question for further analysis of the information.

Assuming that the empirical distribution actually confirms, at least tentatively, this prediction, there would be explanations based on the model:

- In the case of drinking, we would assume that the social practice of drinking, especially in the Finnish tradition, is strongest in traditional communities and carries with it the danger of addiction, thus, producing high levels of excessive drinking.
- In the case of smoking, we would interpret smoking as early acquired "vice" expressing established status of workers in a class society.

- In the case of obesity, we would see obese persons as victims of a cultural context with high normative standards and, failing to comply, they are driven into isolation and fixation on their own bodies.
- In the case of no-help, we would just see a confirmation of the danger of loosing sight of one's neighbour under conditions of welfare and power.

The four dimensions are, thus, interpreted as so many ways social development can create typical problems of adjustment which are located in the mediating processes.

Social problems as maladjusted lifestyles – the Pursuit of Happiness Approach (PHA) The PHA draws very much on a "virtuous circle" of social integration. But for any number of contingent reasons this circle may fail; processes of life-long socialisation are subject to disturbing influences. Again we assume that the relationships between the four dimensions and the four social problems can be confirmed. The explanation under the PHA model would then claim that certain life styles prevail if integration fails at one point or another:

- In the case of drinking, we would assume that social cohesion, especially on the level of personal networks and social relations, is at the same time considered important and precarious (see Room 1976 for a model using Parsons' theory). "Erosion" of family and neighbourhood in social strata depending on solidarity are a likely cause. Solidarity has to be established and defended in everyday life, and social drinking is (not only) in the Finnish tradition a preferred lubricant of solidarity. Combined with the known dangers of addiction, this "social hedonism" would lead to above average consumption of alcohol.
- In the case of obesity, we would assume that basic integration may work, but that persons are confronted with rather strict and/or rather diffuse normative expectations. This situation may be observed especially in lower middle classes which orient themselves toward established moral standards or even "post-materialistic" life styles transported by the media. Those who can not live up to the expectations may again be in danger of anomic loss of life orientation and turn to their own body exercising isolated consumption.
- In the case of smoking, we would interpret it as a way of expressing self-esteem in a materialistic social environment. It is a historical fact that smoking, at least in Western societies (supported by the cinema) became a rather cheap way of signalling status that one has established oneself in the social hierarchy in spite of inequalities.
- In the case of no-help, the explanation would assume that the empowered and achieving part of the population will have experienced a lot of competition. Many will have learned to look for their own benefit rather that respecting the common good, an orientation that would close the "virtuous circle" by supporting social cohesion.

The model would describe thus different ways of "dropping out of the circle".

Social problems as effects of social conflict – the Human Empowerment Approach (HEA) The model of HEA takes a less harmonious look at local or regional social arrangements. The assumption is that important conflicts characterise the situation and that an analysis has to choose the perspective of the collective agency trying to solve the conflict by a new social arrangement. Social problems, in this view, are characteristic especially of those social groups who have *not* (yet) found their role in the conflict.

• In the case of drinking, we have to realise that social conflict always questions solidarities. These solidarities – in the HEA – are preconditioned by forms of social cohesion which are structured by societal developments. They are *not* necessarily in accordance with the forms of solidarity needed for the social movement to be empowered and wield effective influence. Everyday life solidarity will be constantly questioned by the latent "class conflict". The solidarity conflict will find its expression in social drinking and lead to addiction and excessive drinking especially in those groups who find themselves excluded from the social movement.

- In the case of obesity, we would assume that conflicts always imply a conflict of values and norms. The social movement will generally question existing norms and propose their own standards. In this situation the legitimacy of values and institutions is curtailed and especially those groups who do not find new orientations in a social movement will experience a loss of orientation. Obesity will be one way to cope with the conflict of normative orientation by those excluded from new values and norms, especially in a consumer society.
- In the case of smokers, the model will draw again on the historical explanation of smoking as signalling status in the lower classes. In the context of modern society the centres of social movement, however, have moved away from the traditional class structures. The established working class, actually, finds itself in a rather precarious situation. Smoking is actually banned by most progressive movements and smoking tends to signal that one is *not* belonging to the empowered groups forming social opposition. Smoking would characterise local or regional contexts where the old class conflict is still influential.
- In the case of no-help, we would assume that in the perspective of the empowered agency or movement the support of "opponents" is not really meaningful, solidarity is practiced within. An interesting example for the constitutive social conflict in this case may be the generation conflict which cuts across all social groupings. Local and regional situations which are strongly influenced by demographic change may exhibit this problem in a special way because there is limited solidarity even within the social group of the younger generation on the basis of their generational position. There is certainly a lot of solidarity on other grounds which then would be interpreted as the reason why the other three social problems are not prevalent in communities characterised by social movements.

An other interesting example should be the re-analysis of the findings of Wilkinson and Pickett (2009). The authors of "The Spirit Level" describe a claose relationship between social inequality and social problems. Mapping indicators both of social arrangements and social problems in the SOLA model might lead to fruitful insights or hypotheses on the causal relations involved as Vaarama just recently suggested in a contribution to a workshop on "Inequalities and the Nordic Welfare Model" at THL. Unfortunately, this the pursuit of this suggestion is not possible in the confines of this report.

7. Conclusions: The SOLA model as integrating alternative approaches

Summarising the theoretical part we will highlight the distinct features of the SOLA model in comparison to alternative approaches.

First, the model introduces a distinctly *social* approach to social sustainability and places the concept in the context of other concepts of sustainability, especially environmental and economical sustainability. The model treats social sustainability not as a residual category, but defines the concept within an own theoretical framework. This feature is shared with the SQA. At the heart of the model we find the grounding in action theory and the 4-dimensional structure of action, but also a rejection of functionalistic system theory and an option for a more open concept of social organisation as a creation of human actors.

Second, in distinction from QoL approaches the model the focus is not on the psychology of persons as a special level of social life, although the model includes this level and focuses on the interface with this level, because mediating processes *between* individuals and social organisations are the essential characteristic of the SOLA model.

Third, in distinction from the Capability Approach its focus is exactly on the social processes which appear together with economical, political, cultural and social structures in the ill defined and little elaborated *opportunity* side of the CA relating individual competencies ("functionings") to the scope of opportunities or choices. The SOLA model distinguishes between social processes and social structures and puts the focus on the processes promoting a view which treats social organisations as contingent solutions to problems of coordinated and cooperative action. Moreover, it emphasises the necessary prerequisites on the level of processes, namely social security, social empowerment, social inclusion and social cohesion. The SOLA model shares with CA a focus on Human Rights and human dignity which is a major reason to include normative issues explicitly in the model and incorporate the individual level in its own rights (as opposed to the SQA).

Fourth, in distinction from the Social Capital approaches the SOLA model has a focus on the mediating processes between individual actors and social organisations (vertically in the model) across all functions or interaction systems – economical, political, cultural and social-civic systems. The SCA tends to look at social networks and civic society as special sphere of society next to the economical, political or cultural sphere rather than as a mediating process.

Fifth, in distinction from the Social Quality Approach the model chooses a theoretical framework

- a) which distinguishes three levels of social organisation and acknowledges, thus, a level
 of the person, a level of mediating interactions and a level of social structures,
 institutions and organisations,
- b) which acknowledges the level of the person as essential for the introduction of human dignity and human rights into the normative base of the model,
- c) which integrates different approaches to social change rather than focusing especially on the empowerment of human agency in movements for change,
- d) which is compatible with general systems theory and therefore facilitates interdisciplinary approaches which are necessary to cope with economical and environmental problems,
- e) which allows for a practical approach using the model as a heuristic strategy and methodological tool in social policy and social development.

With this summary of distinctions we have also checked the list of needs for theoretical grounding as listed at the beginning of the theoretical part. What is left to describe is the model on the practical level of a strategy and a tool. We have to show that the model can function as an integrative model across theoretical approaches and disciplines and as bridging the gap between theory and practice by offering a "dash board" for monitoring social sustainability in the context of human ecology sustainability.

PART III: The Instrument

8. Social sustainability: concepts and measurement

A general "dash board" for indicators of sustainability with special focus on indicators of social sustainability has been laid out on the conceptual level with the general SOLA model. Also an elaborate theoretical grounding has been provided demonstrating, moreover, its relevance for models of social change and social problems. In the following section the concepts will be further detailed and supported by social indicators. The research on indicators is rapidly growing and it is beyond the scope of this report to evaluate all suggestions even for the narrower concept of social sustainability. Some influential research has been reviewed above with a focus on concepts; some additional research will come into view which starts on the rather practical level of new indicators "beyond greening the GDP".

8.1 The state of the art: Current approaches to the development of social indicators in Finland, Europe and beyond

A good starting point for a review of initiatives and literature on sustainable social development is the 6th European Social Development Network Workshop in Berlin in December 2010 (ESDN 2010). The ESDN was created in 2002 to promote and to coordinate initiatives in the EU on sustainable development. The workshop aimed to contribute to the debate on "Beyond GNP". On the one hand, it had a more comprehensive perspective than the present report placing the issue of social sustainability in the broader context of ecological sustainability. On the other hand, the thematic focus of the workshop was on measurement and practical issues of implementation rather than theoretical frameworks and concepts, and therefore, narrower then the perspective of this report.

Altogether representatives from 14 European states participated in the workshop.

Finland

Finland – together with Austria, Belgium, France, and Germany – was selected to present the state of the art of the national approach to measurement of SD for discussion underlining the advanced state of Finnish policy as well as the aim of the Finnish initiatives to integrate their efforts into the broader context of European (and global) developments. In a globalising world, measurement and monitoring of SD has to proceed comparatively learning from the experiences from other countries.

Finland was an early adopter of strategies for sustainable development going back to 1990 (see the website for sustainable development http://ymparisto.fi; and for social development www.findikaattori.fi; the List of Findicators is contained in the Annex). Still, the current debate sees the need for substantial improvement of the measurement and monitoring of sustainability including the development of the conceptual framework and the theoretical underpinning of strategies.

The Finnish representative, Ulla Rosenström (Prime Minister's Office), summarised the future challenges as follows:

- A better conceptual framework for the indicators
- More indicators that focus on human wellbeing

- Improvement of environmental indicators
- Better use of the system of national accounts
- Consideration of the use of subjective indicators
- Increasing dissemination and communication efforts. (Workshop Report 2010)

The concept of social sustainability has been discussed most extensively by Alila et al. (2011) (see section 5). Their list of indicators (53 indicators) is also included in the SOLA model. And their concept consists of themes that are essential elements of current Finnish social politics: "Sustainable development consists of economical, social and ecological sustainability." (STM, 2010) and (STM, 2011). Already the national development plan for social and health services covering the period 2008-2011 (STM 2009) specifies:

- municipal inhabitants' social inclusion will increase and levels of social exclusion will be reduced,
- the municipal inhabitants' wellbeing and health will increase, inequalities in wellbeing and health diminish, and
- the quality, effectiveness and availability of services for the municipal inhabitants will improve and regional inequalities will be reduced.

Similarly, the strategies in 2010 and 2011 (STM, 2010; 2011) state that a socially sustainable society

- treats all members of society fairly,
- reinforces participation and a sense of community,
- supports health and functional capacity,
- provides the security and services required by its members.

In summary, the demographical development and the financial crisis and their impact on the sustainability of the welfare system is clearly in the foreground of the debate, thus, focusing the concern of sustainability on economic sustainability and financial sustainability (see Aging Report 2009). Environmental sustainability is firmly anchored in the Finnish accounting system for sustainable development (Ministry of the Environment) and in the key indicators for social development "Findicator" (Prime Minister's Office), but the concept and measurement of social sustainability and social indicators is not yet adequately represented in "Findicator". A most recent and ongoing project "New dimensions for the measurement of wellbeing" by the Prime Ministry's Office is expected to recommend better environmental indicators along with improved and extended indicators for personal well-being. The commission has submitted recently a report summarising the state of the art for the ministry recommending essentially the further development of the Findicator system (POM, Bkt ja kestävä hyvinvointi 2011). The commission focused on social sustainability continuing the work on sustainable growth (PMO 2010), but without so far recommending a new detailed list of indicators. The current indicators are included in the recommended list of indicators for the SOLA model (see below and annex). The commission has not yet provided a more elaborate theoretical grounding for Findicators; the SOLA model is suggested here to fill this gap. It would also furnish a framework for the integration of Findicators and the set of environmental indicators developed by the Ministry of Environment (see website above).

Other Northern European countries: Denmark, Norway and Sweden

The state of the art in other Scandinavian countries is assessed in a separate literature review attached in the annex to this report. Denmark and Norway appear to lack at this point a (published) list of social sustainability indicators; the emphasis is presently on environmental problems and economic growth. Sweden has proposed a quite differentiated instrument for

sustainable development featuring a special category on "social cohesion" (see annex). The category contains a list of social indicators which are, unfortunately, grouped without reference to any more theoretical grounding. The term "social cohesion" embraces 25 indicators ranging from risk of poverty to loneliness, in effect representing all four dimensions with at least one indicator. Thus, the indicators are a valuable pool for practical measurement (in Sweden) which is therefore integrated into the recommended list for the SOLA model.

On the level of the Nordic Council of Ministers all Nordic countries are cooperating in the further development of indicators for monitoring sustainability. It is recommended that the exchange of products and experiences is intensified to achieve a more integrated instrument supporting also cooperation in social policies.

Europe

The initiatives in Europe are collected and briefly described in the country profiles of the ESDN (see www.sd-network.eu), unfortunately the profiles are not updated comprehensively and reliably. Currently 30 country profiles are available with very different stages of sophistication of the national measurement instruments for social development including typically only few social indicators suitable for social sustainability in a more narrow non-economic and non-environmental sense.

The most recent developments are summarised in the Workshop Background & Discussion Paper of the 6th ESDN Workshop in Berlin (ESDN 2010b); it is therefore cited here (the comments on the situation in Finland (see above) are not included):

"Several EU Member States – in particular Austria, Belgium, Finland, France and Germany – have been very active in defining indicators which best measure wellbeing and societal progress in the context of 'beyond GDP'. The majority of these countries have recognized the weakness of GDP for measuring overall societal progress, but also the impossibility and challenge to measure well-being or sustainable development with a single synthetic indicator. Therefore, they find it most useful to apply a broad indicator set on sustainable development or well-being and use only some synthetic indicators alternatively to GDP for communication reasons.

Austria has developed its first SDI set in 2003. In 2006, the first monitoring report was published that outlined the approach of measurement and the set of indicators (Austrian Ministry of Environment, 2006). Welfare, health and well-being are explicitly specified as domains for measurement. The approach of Austria is very systemic and holistic in the measurement, so that inter-linkages of "Man/Society" and "Environment" spheres, as defined in the monitoring report, are well reflected in the indicators. A recent study in Austria proved the appropriateness of SDIs in measuring not only welfare aspects but also well-being (Austrian Ministry of Environment, 2010).

Belgium has been also very active in measuring and improving its SDI set with well-being indicators. The Task Force Sustainable Development of the Federal Planning Bureau (FPB) has also contributed to measuring the progress of society in the context of sustainable development with its fifth federal report on sustainable development, published in October 2009. Belgium has recommended to add four synthetic indictors to their SDI set (environmental satellite accounts (ESA), Human Development Index, ecological footprint (EF) and bio-capacity (BC), Indicators related to government spending on SD) (FPB, 2009). Furthermore, the Belgian Federal Science Policy Office is looking into theoretically sound and democratically legitimate indicators of well-

being in Belgium (WellBeBe). The aim is to construct an alternative indicator to GDP, based on a dynamical conception of well-being which considers the individual in his whole life-cycle and which includes the notion of the social structure through the concept of 'life chances'. (...)

In *France*, President Sarkozy has called for an immediate implementation of the Stiglitz Commission's recommendations. One year after the publication of the Commission's report, the French National Statistical Institute (INSEE) and the General Commission on Sustainable Development have undertaken specific efforts in implementing the recommendations based on critical issues of GDP, quality-of-life and especially on the third part of the Stiglitz Commission final report. "

More detailed information on the various national measurement approaches can be found in the ESDN Case Study No. 4 on the ESDN homepage." (ESDN 2010b, p.13-14)

An intensive discussion is also taking place in *Germany* about the adequacy of GDP as a parameter of social welfare. The most recent initiative in this context is the development of a new indicator intended to be a complementary source of information to GDP, entitled "National Welfare index" (NWI). The NWI is composed of 21 variables, taking account for welfare services neglected up-to date by GDP, such as non market services (e.g. voluntary work and domestic work), on the one hand, and environmental damage and the cost of compensation for environmental damages, on the other hand (Diefenbacher & Ziehschank 2008). Somewhat independently, a Joint French-German commission JFGC (2011) has followed up on the Stieglitz-Commission and discussed a new set of indicators based on its Recommendations. Additionally, there is also ongoing work of an Enquete Commission "Growth, Welfare, Quality of Life." (initiated in September 2010), which is specifically requested to report on the importance of individual subjective well-being and social life styles in work and consumption, but the role of subjective indicators is evaluated critically. The Enquete Commission seems to follow to a large extent the lead of the JFGC while setting more emphasis on the environmental dimension and quality of life especially in the domain of work and consumption (reflecting the fact that it was based on an initiative by opposition parties – SPD, Die Grünen, Die Linke).

Excursion: Comments on the Stieglitz-Commission (2009) and the JFGC (2011)

The influential role of the Stieglitz-Comission report (2009) for many international initiatives and research projects on sustainability justify some comments from the perspective of *social* sustainability.

First, social quality is not introduced as a special issue but subsumed under the discussion of quality of life. In addition to material (economic) well-being seven features are identified to be important: health, education, personal activities (work, leisure), political voice and governance, social connections, environmental conditions (health hazards, amenities, natural disasters), and insecurity and risky (safety, unemployment, illness, old age). The list is admittedly not due to theoretical considerations, but reflects a perceived state of the literature on social relations and networks. All seven features can be included in a concept of social quality as well as of QoL and are included in the SOLA model. Interestingly, within the domain of *social connections* 6 sub-domains are listed which further differentiate this feature of the social dimension (social trust, social isolation, informal support, workplace engagement, religious engagement, bridging social capital). All sub-domains together constitute "social capital" with the "core insight that, like tools (physical capital) and training (human capital), social connections have *value* for QoL" (Sieglitz-Report 2009, p.182).

Again, these sub-domains are introduced into the SOLA model, mainly under the concept of *social cohesion*.

Second, on the issue of sustainability, the report is less conclusive focusing on environmental sustainability and delegating most problems to a follow-up study. Social sustainability receives only limited attention. This seems due to the fact that the theoretical framework places the individual person as actor and decision maker in the centre – quite in the tradition of the rational agent in economic theory. To be sure, the political dimension of freedom to choose and the capacities to produce well-being according to ones own preferences is in the forefront of the "capability approach", but still it is the liberal actor which is dominating the argument. Social relations are, in this perspective, a "capital" or a "stock" which may be instrumental in the "pursuit of happiness", they do not appear as essential processes which convey meaning and value onto individual lives, "binding and bonding" the individual into a social context.

The follow-up Joint French-German Commission JFGC (20011), taking are more methodologically oriented perspective, strongly argues for a "bottom-up" approach, i.e. starting with domains of social welfare and quality of life, identifying relevant dimensions and finding lead indicators by empirical analysis of sets of indicators assumed to be characteristic for the dimensions. The JFGC is even more critical of subjective indicators, which are interpreted to imply a "top-down" strategy from a theoretical subjective utility concept. The strategy would create considerable theoretical (necessary assumptions), methodological (aggregation of individual utilities) and practical (influence of interested manipulation) problems which can be more readily surmounted when starting with more objective individual preferences revealed in actual choices and behaviour. Basically, the capability approach (Sen and Nussbaum 1993, Stieglitz-Commission 2009) is seen as the approach most fitting to a "bottom-up" strategy. Consequently, the basic dimensions of QoL (8 dimensions) follow the suggestions of the Stieglitz-Commission, and a comparison of France and Germany is made with a set of indicators for those dimensions selected from the recommendations of the Stieglitz-Commission and combined with other national (SOEP-Panel) and international (especially OECD; see Giovanni et al. 2009) indicators.

The JFGC demonstrates the power of their approach on the level of methodology, but it is interesting to note that it does not attempt to solve issues on a more conceptual and theoretical level. Specifically, the selection of dimensions is admittedly considered to be "subjective" or better theoretically ungrounded – and implicitly delegated to a theoretical development of the capability approach (p. 68). The JFGC does not discuss the fact that the capability approach does imply rather strong assumptions on the theoretical level by structuring life domains not only by individual preferences ad behaviour, but also by opportunities for freedom and choice which are contextual conditions for individual choices. Like in the Stieglitz-Commission these issues appear mostly in the disguise of aggregation problems for individual preferences and are acknowledged by recommending more research on the interdependencies of indicators within and between dimensions. The JFGC also follows the recommendation for a multi-dimensional "dashboard" and not integrating the dimensions into on single index. The need for communication and discussion of the multi-dimensional results in emphasised (p.101) and Radar-Charts recommended to facilitate understanding and evaluation of the necessarily complex QoL index especially in more political and public contexts.

Important for the present report is the fact that the JFGC did not find for their comparison a meaningful and available set of indicators for the dimension of social connections. It delegated the problem to further research and development on the European level. Not

surprisingly, the issue of sustainability of QoL or social sustainability is also submitted to further research and only environmental and ecological sustainability is pursued. It is also made clear that sustainability implies not only the estimation of the development of resource availability under current conditions, but also information about future technologies and preferences. This kind of scenario, while certainly important for political decision making, should not, according to JFGC, be part of national accounting and forecasting. Although the report is very informative for the construction of a new National Welfare Index, it does not contribute much to the issues of social sustainability.

International/Global

The ESDN workshop has also provided an overview on the international level:

"At the international level, the OECD Global Project on measuring societal progress and well-being, initiated in 2007, has endeavoured to provide a network for the many initiatives aimed at "going beyond GDP". Lately, the focus has shifted in also engaging more technically in measuring well-being. In addition to the OECD efforts, three activities of the United Nations must be mentioned: The UNEP hosts the initiative on The Economics of Ecosystems and Biodiversity (TEEB) that aims to highlight the growing costs of biodiversity loss and eco-system degradation and gathers expertise from the fields of science, economics and policy to enable practical actions. The United Nation Development Program with the Human Development Index (HDI), started in the 1990s, challenges the hegemony of growth-centric thinking. The third important initiative is the Joint UNECE/Eurostat/OECD Working Group on Statistics for Sustainable Development that focuses on developing sustainable development indicators, including the measurement of well-being. The majority of these initiatives still consider GDP as a useful indicator for measuring economic growth, but clearly point out the shortcomings of GPD in measuring general societal progress. They recommend, therefore, supplementing GDP with environmental, social and sustainability information. The majority of the initiatives recommends, at the environmental level (...). The other level of supplementing GDP is the societal level with indicators on well-being and quality-of-life. The initiatives show the following methodological similarities in their approaches and

- understanding of well-being:
 (1) well-being is considered as a multi-dimensional concept which should include not
- only the standard of living (based on national income measures), but also other aspects such as health, education, social relatedness, etc.;
- (2) well-being should be measured with objective and subjective indicators;
- (3) as well-being is multi-dimensional, the initiatives propose not to offer a composite indicator but an indicator set;
- (4) all initiatives Workshop integrate distributional and inequality indicator development for measuring disparities among, nations, regions, societal groups or gender. Sustainable development is seen as a concept which needs complementary indicators to well-being indicators as it includes inter- and intra-generational aspects (temporal questions). Initiatives such as UNECE, Stiglitz Commission, European Commission's "GDP and beyond", and the OECD Global Project explicitly recommend to further develop sustainable development indicators based on the "wealth or stock-based approach."

More detailed information on the various international measurement approaches can be found in the ESDN Case Study No. 3 on the ESDN homepage (ESDN 2010b).

To summarise, there is an impressive amount of research and development currently on the way in Europe as well as on an international level and new recommendations are published at least on a monthly basis. Correspondingly, the development of a national "dashboard" for Finland has to keep constant touch with this development, a task clearly beyond the scope of a single report. But the review reveals also that the lack of theoretical grounding stated by Ulla Rosenström (see above), still characterises the debate and developments. So it is telling that a very interesting report of Nisida Gjoksi and Michael Sedlacko (2010) to the ESDN workshop in December 2010 refers to the "Triangle of Sustainability" suggested by Daly in 1973 (!) as the theoretical framework which should structure the debate (p.7). There definitely is a need.

8.2. Indicators for monitoring societal progress: A systematic overview

The following tables provide a first overview over concepts and a selection of indicators for monitoring social progress and social development to achieve social sustainability (SS), social quality (SQ) and QoL. The selection of indicators has to be discussed further and in too many cases adequate indicators are missing; and obviously, the indicators need empirical research to clarify their interrelations, validity, reliability and practicality. At this stage three objectives are to be achieved:

- Organising concepts and indicators from readily available Finnish sources and from some other sources which furnish examples for indicators missing in the Finnish data sets should demonstrate that the general SOLA model does provide a comprehensive "dash board" for monitoring sustainability incorporating "slots" for environmental as well for economic, political, cultural and social indicators. It goes without saying, that within the confines of this report only recommendations for social sustainability can be made. Most other topics in the general SOLA model have to be filled in by experts of other disciplines. But the indicators demonstrate that the indicators from the instruments of the three Finnish ministries find their place in the model.
- The concepts and categories structuring the model certainly need further specification. Providing examples of indicators from different sources should help to interpret the concepts. Especially the table of indicators for social sustainability or mediating processes in designed to explicate the empirical content of the concepts.
- Indicators of social sustainability are still missing or incomplete in existing instruments as well as in the SOLA model. The table is designed as a starting point for empirical research to validate indicators and to fill the gaps in the "dash board".

The overview presents a summary table with central concepts of the general model. A second table presents only the central indicators and concepts and indicators for social quality (mediating processes). In the annex is added a detailed overview of all indicators selected for scrutiny from the different sources above.

The overview table is designed not only as an overview, but also as a methodological instrument.

As already stated in the section on welfare strategies and social change, the table can guide in the interpretation of alternative concepts or strategies, e.g. in evaluating the emphasis placed on certain concepts or indicators. The table can also support heuristic strategies for the development of research projects or social policies.

Sources of indicators

For a number of concepts (cells) in the table, there are at this point no or no satisfying indicators. For many concepts there are currently only national-level data from national and international sources available.

The selection for the overview (tables below) is taken from

- official Finnish registers: Findicators (Prime Minister's Office), Finnish Key Sustainable Development Indicators (Ministry of the Environment), STM (Ministry of Social Affairs and Health), and the SOTKANET
- other Finnish research in the field of social sustainability: Alila et al. (2011), Hagfors/Kajanova (2010), Vuori/Gissler (2004), Regional Health and Well-Being 2010 (THL), and Hypa-Questionnaire 2009 (THL)
- selected other international sources: OECD Social Indicators (2010), Colantonio (2007), Indices of Social Development (www.indsocdev.org), Kaufmann et al.(2009), Swedish Sustainable Development Indicators (2006).

Indicators are identified by their source with an abbreviation (see table below). The sources listed are not all included in the table for social quality; most indicators are only listed in the complete table in the annex.

The structure of the tables

The structure of the overview follows the SOLA model, but puts the information in one condensed table. The normative module has been left out, since it provides only a reference for evaluation of the quality dimension involved in each concept. Eventually for each concept there needs to be defined at least a threshold which indicates that the indicator measures a satisfactory level of a given factor. Typically, the concepts will be represented by an index combining several indicators.

The tables are structured by the SOLA-framework, i.e.

- in a hierarchy of human ecology (basis conditions), societal systems (with welfare regimes as special case), mediating social processes (producing and reproducing social organisation, institutions and communities) and defining Social Quality, and individual QoL (objective and subjective perspectives to be distinguished when appropriate).
 - A somewhat similar structure is also suggested by the ordering of Sustainable Development Indicators by the Ministry of Environment (E).
- in a 4-dimensional framework (adapted from social action and system theory see above) which distinguishes between *conditions*
 - resources and access or *structures*, inputs, investments, and "stocks"
 - aims or *values* for evaluation

potentials

- potentials or *functions*, capacities for achievement and goal-attainment
- organic basis or *processes of integration* in the social case

The overview table combines:

- A cross-tabulation of 4 dimensions with 4 levels of hierarchy resulting in 4x4=16 major cells.

- An iterative application of the 4 dimensions *within* each major cell creating the total tableau with 4x16=64 cells.

The 4-fold arrangement within in each of the 16 cells follows the 4-dimensional table used all through the SOLA-framework.

It should be noted that somewhat modified definitions and concepts are used to characterise the 4 dimensions. A scheme which is applicable on different levels requires some adjustment of the concepts to a *given* level to facilitate understanding what they mean on *that* level. Especially the environmental level or "Human Ecology" requires more general concepts for the dimensions. Still, *the basic theoretical meaning or the "basic logic" remains always the same as described in the theoretical sections.*

The table below summarises the 4 dimensions again and uses the colours to identify the dimensions:

Table : General description of the 4 dimensions

	Means / instrumental perspective	Ends / evaluative perspective
Environmental Conditions (related to system)	Utilisation resource selection/ access	Values/ meaning aims//identification
System/person Potentials (reference system)	Capabilities / Production Potentials/functions	Basic unit integration Cohesion/interaction

The 4 colours consistently refer to the 4 dimensions where ever employed in order to facilitate their recognition in the interpretation of concepts.

The 4 colours should/could also be used for the sub-cells *within* the 16 major cells in the overview table. In this case they are only slightly shaded, because the table might be distractingly colourful. In the definitions of the concept of social quality (in section 3 above) the colours are also used for the within-structure.

Sources of indicators and abbreviations

Lists in the annex:	Reference:
(with abbreviations)	
Findicator (F)	http://www.findikaattori.fi/indicatorlist_en/
	http://www.findikaattori.fi/
Key Sustainable Development	http://www.environment.fi/default.asp?node=15131&lan=EN
(E)	http://www.environment.fi/default.asp?node=12314&lan=fi
Social and Health Ministry	Sosiaali- ja terveysministeriö (2011). Sosiaalisesti kestävä
(M)	Suomi 2020. Sosiaali- ja terveyspolitiikan strategia.
	Julkaisuja 2011:1, Helsinki.
Alila et al. 2010 (A)	Alila A, Gröhn K, Keso I, Volk, R. Sosiaalisen kestävyyden
	käsite ja mallintaminen. Sosiaali- ja terveysministeriön
	raportteja ja muistioita 2011:1, Helsinki .
	http://www.stm.fi/julkaisut/raportteja-ja-
OFCD : 11 I' (O)	tyoryhmamuistioita/nayta/ julkaisu/1557082
OECD social Indicators (O)	OECD (2011). Society at a Glance 2011: OECD Social
	Indicators. OECD Publishing.
Hagfors/Kaianaia (II)	http://dx.doi.org/10.1787/soc_glance-2011-en
Hagfors/Kajanoja (H)	Hagfors R, Kajanoja J (2009). Hyvinvointivaltio ja sosiaalinen pääoma sosiaalisen kestävyyden perustana. In
	Näkökulmia sosiaaliseen kestävyyteen. Valtioneuvoston
	kanslian raportteja 2/2009.
Colantonio (C)	Colantonio A (2007). Measuring Social Sustainability. Best
Columbino (C)	Practice from Urban Renewal in the EU. Social
	Sustainability: An Exploratory Analysis of its Definition,
	Assessment Methods, Metrics and Tools. EIBURS Working
	Paper Series 1/2007. Oxford Brookes University.
Swedish sustainable	Indicatorer för hallbar utveckling, Regeringsknasliet 2006
development (SE)	Regieringens Skrivelse 2003/4: 129
SOTKA NET (S)	http://uusi.sotkanet.fi/portal/page/portal/etusivu
Regional Health and Well-	http://www.thl.fi/fi_FI/web/fi/tutkimus/hankkeet/ath
Being 2010 (RH)	
Hypa-questionnaire (HP)	http://groups.stakes.fi/HYRY/FI/Hypa/index.htm
incl. WHO-QoL	http://groups.stakes.fi/NR/rdonlyres/F88F22C4-2EC6-48C4-
	B4AE-EA35BA022FE2/16906/HYPA09puhelinlomake.pdf
Sources evaluated:	W. 'M.C' I M.(2004) I I'
Vuori/Gissler (V)	Vuori M, Gissler M (2004). Indicators of Social Quality.
	Finland National Report, European Network on Indicators of
Indices of Social	Social Quality ENIQ, STAKES
	Indices of Social Development, The Hague,
Development (I) Ministry of Social and Health	http://www.indsocdev.org Sosiaali- ja terveysministeriö (2009). Kaste-ohjelman
(STM)	valtakunnallinen toimeenpanosuunnitelma vuosille 2008 -
(51111)	2011. Sosiaali- ja terveysministeriön selvityksiä 2009:9,
	Helsinki.
Kaufmann et al. (K)	Kaufmann D, Kraay A, Mastruzzi M (2009). Governance
	Matters VIII. Aggregate and Individual Governance
	Indicators 1996–2008. Policy Research Working Paper 4978.
	The World Bank 2009.
<u> </u>	

Overview: Concepts and Indicators for Monitoring Societal Progress

	Human eco	ology	Societal (sub-) systems			Mediating processes			Individual QoL	
	Environmen	t (natural)	Economy			Social Security			Living Standard	
Resources	Material Resources Energy	evolution biodiversity	Distributive Markets assets	Welfare Provision ("state")		Disposable Income/transfer services	Inequalities Class structure		Income, housing, services	Supportive Social relations
Access	Regulation of ecosystems	Biolog. Self- organisation	Supply Productivity Human capital	Demand Re-production consumption		Professional education, experience	Employment security		Education health care utilisation	safety/soc environm. trust
	People (demo	ography)	Polity			Social Empowe	rment		Capabilities	
Potentials	Population Size, density	Generational/ age structure	recruitment, territory, econ. regulation/inst.	Legitimation Legal institutions		Political support, Public space	Ideology base Welt- anschauung		opportunity utilisation	identifi- cation, orientation
	Physical/ mental health	Life expectancy Fertility, morbidity	Capacities for decision administration	Democracy Public support Inst. for loyalty		Political participation	Commitment Motivation		production partici- pation	Interaction communication
	Technology /	Artefacts	Culture	<u> </u>		Social Inclusion	<u>-</u>		Life Valuati	on
Aims	Transport Housing urbanisation	Information communication	Investments/ Infrastructure access	Values Human rights religious instit.		Access, usage of cultural ressources	Non-discrimn. minority/regio. inclusion		Social utility of life	Meaningful -ness of life
	Production, Medical technology	Consumption media	Productivity education Creativity	Culture consumption	L	(sub-) cultural participation	Institutional trust/distrust, deviance		Life achieve- ment	Emotional life satisfaction
	Organisation	(in time-space)	Civil Society / Social Care			Social Cohesion	- i		Affective W	ell-being
Organic	Migration mobility	Segmentation, Segregation of social groups	Non-market/ non-profit production	Subculture Ethnic communities		Work ties/ Economical clientelism	Bridging ties Institutional linking		Comfort feelings, Env.stress	Social joy, hopeful- ness
Basis	Functional (work) mobility	Integrated Household/ org. Structures	Non-governm. Organisation, lobbying	Caring solidarity socialisation		Binding ties facilitating coop.	Bonding ties Communal ties		Pride, Frustration, anger	Peaceful- ness, sex, anxiety

On interpreting the overview table

As stated above, the exercise of filling in all the indicators of sustainable development suggested in the literature is a kind of test for the adequacy of the model. The table is the result of this "test" with the sources listed above. The result should be discussed, but it appears that, in fact, all indicators included in important indicator systems can be regrouped to fit into the table. Thus, the ordering suggested here seems to be more satisfactory, comprehensive and theory-grounded than alternative systems. Although the result is quite convincing, we should keep in mind that this exercise also involves a (re-)interpretation of the concepts and indicators which might to some extent do violence to the theoretical framework of their origin. On the other hand, we have observed that most indicators do not have an explicit theoretical base and are desperately in need of gaining conceptual precision in a more explicit and comprehensive framework.

Some important indices are placed into certain cells following the general intentions of the index, although they combine heterogeneous indicators and are designed to measure some comprehensive aspect of societal sustainability, e.g.:

- **Human Development Index** is designed to emphasise human capabilities or potentials (blue)
- **Environmental Performance Index** relates economical productivity to environmental impacts (green)

Eventually, they may be substituted by more suitable combined indices or supplemented by other combined indices emphasising different aspect. For instance, social sustainability will need a combined index (or a profile) using other parts of the table.

The table can be read and employed in different ways:

1. The succession of the columns as the dominant "production of welfare" process

First, we might look at the columns and follow up how ecological conditions are the basis for societal systems which in turn are the frame conditions for mediating processes which eventually produce individual QoL. This focus is basically on the causal processes leading to individual QoL as the final outcome of interest for us as human beings.

In this reading, we have to keep in mind that the ecological conditions are, in fact and in this scheme, produced by an *interaction* of society with the environment. The human ecology column contains aspects which already demonstrate the effects of human development on the planet. They constitute the material substrate of society.

The term "mediating processes" should make aware that societies and individuals also interact. Individuals and their QoL are produced by society in a sense, but they also change society through their activities. Thus the society is also the product of individual initiatives. The concept of social quality is constituted by the mediating processes which characterise the *interaction itself*, or, in other words, they show *both* society and the individuals as products or outcome of cooperative actions (and conflicts).

2. The rows as specifying four fundamental functions on each level of analysis

Second, we might look at the rows which distinguish the 4 fundamental functions of social systems. Thus, on each level (column) we can distinguish the 4 major functions. The functions suggest causal interdependencies *within* each column, since the functions must interact to maintain the given level (e.g. on the level of society we expect an interaction between economy, polity, culture, and civil society). As explained in theoretical sections,

theses function are not working just naturally, but have to implemented and sustained by policies and institutions. To the degree that the functions are successful, we should observe a corresponding level of quality. What constitutes success (or a sufficient threshold) has to be defined (typically by political agencies).

As discussed above, the 4 rows can also be associated with 4 debates on social sustainability. The first row addresses mainly the economic debate on social security and basic needs; the second row addresses mainly the issue of governance and political administration; the third row addresses themes of cultural diversity, education and discrimination; the fourth row addresses most aspects of social capital.

3. Understanding major functions as constituted themselves by 4 sub-dimensions

Here it is of interest that the typical lists of indicators found in the literature for each of the major 4 dimension suggest to introduce an iterative application of the 4 functions *within each major cell*. This feature is described in the section on definitions in the model. As we recall, conceptually this implies that the 4 major aspects/functions of each level should be understood as comprising again (at least) 4 different internal aspects following the "logic" of the SOLA model. This *systematic* differentiation of the major concepts by 4 indicators is designed to produce a *comprehensive measurement* and is an important feature of the SOLA-framework. It allows for systematic checks whether important aspects of a concept are neglected.

For example, *social inclusion* (see major box in violet row "aims") refers to the processes that integrate individuals with their life valuations into cultural structures of society, especially into the central features of values and human rights (= violet box *within* the violet box of culture); this mediating process itself needs resources and spaces (green), active cultural participation (blue), non-discriminating procedures (violet), and a basic trust into institutions (red). Measurement of the degree of successful social inclusion should contain all 4 aspects (and possibly some additional information especially from violet boxes within other major cells).

4. The interpretation of the 16 major concepts and corresponding cells

All 16 concepts can be interpreted as describing a *system performance*, i.e. the indicators measure the degree to which certain functions are fulfilled. Ideally, there should be a performance curve defining an optimum or at least a critical threshold defining a measurement of relative quality.

In the following each column and its 4 sub-cells are described in more detail.

Human Ecology

This column refers to the interaction of human living systems with the natural environment. Conceptually it picks up suggestions from the POET model (Duncan and Duncan 1959; see section 3 above) and the Millennium Ecosystem Assessment model (Alcamo et al. 2003; Williams and Patterson 2008) as well as the instruments provided by the Finnish Ministries (see below and annex).

(The natural environment systems itself, e.g. eco-systems on earth under the influence of the sun) are not part of the table, but - in as much as they have system properties - they could be included by a separate column.)

The 4 dimensions follow the POET model:

Environment (natural) as resource

Environmental impact (footprint) of human living systems:

This function can be divided following the concept of ecosystem services, i.e. the ecosystem provides conditions as resources and evolution of biodiversity and requires potentials as regulations of ecosystems (e.g. pollution) and maintenance of biological self-regulation

People (demography) as active potential

Features of the human population, especially health:

This function can be divided into conditions of population size and generational structure and potentials of health and fertility/life expectancy

Technology/Artefacts

Human-made material/cultural environment incorporating human aims:

This function can be divided into conditions housing/urbanisation and information technology and potentials of production technology and consumption technology/media.

Organisation in space-time as organic basis

The formation of human living especially in households with locations:

This function can be divided into conditions set by migration/mobility and spacial segmentation/segregation and potentials generated by functional (work) mobility and integrated households/organisations (the former enables division of labour, the latter integrates labour in units).

Note: This categorical scheme makes a difference between human beings as organisms or bodies and human beings as social actors. As a consequence the demographic indicators and states of physical and mental health appear in this column. This does *not* mean that the vital importance of health, for instance, is downgraded. Obviously, social life is impossible when you are dead or seriously ill. The causal relevance of variables is not reflected by the position in the table! It also does not conflict with a broad definition of health as proposed by the WHO. Health influences, for instance, all aspects of individual quality of life; in fact, the 4-dimensional structure of individual QoL was developed first on the basis of research on quality of life by the WHO (see Pieper/Vaarama 2006). More comprehensive concepts of health are, therefore, better conceptualised within the frame of quality of life, which is increasingly the case in research on "health-related quality of life".

Note: The column of Human Ecology suggests defining special ecological environments or to specify ideal types of human environments to cluster relevant variables. In the case of Finland that could mean to distinguish the urbanised South from the arctic North and the Baltic Sea West from the Continental East.

Societal (sub-) systems

This column refers to the 4 major sub-systems of (developed) societies. It should be noted that only in developed societies economy, polity, culture, and civil society are differentiated as relatively independent structures; in less developed societies the first three sub-systems are closely interwoven with civic society; or in other words, only in developed societies the civic society is distinguished as relatively independent from economy, polity, and culture.

Economy

Economic performance traditionally measured by GNP and human capital: This function can be divided into the conditions distributive markets/orders/investments and collective ("common good") provisions (typically but

not necessarily organised by the "state") and the potentials of supply (productivity/human capital/organisation) and demand (consumption/re-production)

Polity

Political structures and institutions for decision making and administration: This function can be divided into conditions provided by policies on structures (population, territory, econ. institutions) and legal institutions (legitimation) and potentials for decision making/administration and mobilisation of public support and loyalty (organisation of democray).

Culture

Orgnisations/institutions producing world views and institutionalising values and rights:

This function can be divided into conditions as cultural investments (educational/cultural infrastructure/access) and institutions of Human rights/religions and potentials of productivity/creativity (education/science/arts) and of consumption (festivals, exhibitions)

Civil society

Local/regional communities and "informal" organisations complementing the services of "formal" systems:

This function can be divided in conditions providing non-market/non-profit production of good and services (i.e. not provided by markets of state) and institutions/communities providing orientation (i.e. not provided by "formal" institutions/churches) like subcultures /ethnic communities and potentials generated by non-governmental influence groups (influencing formal politics) and "informal" institutions of socialisation, care and solidarity (e.g. typically the family institution)

Mediating processes - the 4 dimensions of Social Quality and Social Sustainability

This column refers to interactive processes placing individuals into the system and changing the system through individual activities. As described in more detail in the section of the model and its definition, these concepts together define the central concept of *Social Quality*. In the perspective of social development these concepts and indicators define and measure *Social Sustainability*.

Ideally, all indicators should be measuring the actual efficacy of processes, but in many cases only the "proxy" of existence/availability of processes or services will be registered (i.e. registers on the availability of un-employment consultations, not of successful consultations).

Social security

Processes ensuring a sufficient income, typically through employment or transfers, based on professional education and "fair" access to the markets.

Social empowerment

Processes ensuring an effective influence on political-administrative decision making in all domains of social life

Social inclusion

Processes ensuring the integration into all relevant institutions, especially ensuring social and political and human rights regulating the position of minorities and cultural deviants, generating institutional trust and motivating identification

Social cohesion

Processes ensuring the integration (vs. isolation) through membership in relevant groups, networks and social relations, including "informal" relationships at work, with political associations, to other communities, and

within private networks (family, close friends), and generating cooperative dispositions and trust in social relations

Individual Quality of Life

This column refers to the measurement of individual QoL. As discussed in the section on quality of life, in this column the information on "objective" and "subjective" individual quality of life should be represented. The instruments available are divers, ranging from information from public registers on the individual life situation and living standard to surveys on different aspects of life satisfaction and affective well-being usually described as Subjective Well-Being (SWB).

i.e. the physical and social environment features are/should be relative to the life style of a specific individual. It is meaningful to distinguish and measure both objective and subjective indicators,

Following the SOLA model we should distinguish again conditions and potentials (see definition in section 3). The indicators should include "objective" indicators - in the sense of being observable by a third person/expert -and "subjective" indicators - in the sense of reporting the view of the individual. Both have their advantages and disadvantages in the monitoring of the "final outcome" of policies. Combining both types is the usual and state of the art recommendation. However, methodologically sound procedures still prefer to specialise on one type only. This is not the least due to the fact that the instruments for objective measures (usually public registers) and for subjective measures (usually survey questionnaires) are employed in different organisational settings; moreover, surveys usually are conducted only on a sample which is not a problem on a national level, but raises the problem of representative sub-samples when more disaggregated units (like municipalities) are to be analysed. Another problem is that there are practically no objective indicators (like observational data) on life satisfaction and affective well-being available which poses problems for a combination. A widely used instrument for the measurement of subjective QoL which is extensively validated and can therefore be considered as a good proxy for QoL (rather than only SWB) is the WHO-QoL-Bref; the instrument is compatible with the SOLA model and extensively tested also in Finland.

For the SOLA model we suggest a methodology developed for international comparisons of information on social capital (see below) which combines several sources and can (within certain limits) also cope with missing data. The cells in the overview table indicate, therefore, "slots" into which suitable data should be filled in and combined. This would result "ideally" in 16 indices which could/should be further combined into 4 complex indicators, on for each dimensions. As suggested in the table, these complex indicators could then be used as information and indicators for the cell for "valued dispositions and motivations" within each dimension of social quality.

The 4 dimensions of individual Quality of Life are:

Conditions:

Living standard

Resources and access to goods and services relevant to a "decent" QoL Life valuation

Interpretations, orientations and identification of one's life as meaningful leading to a basic or overall satisfaction with life (longer term perspective)

Potential:

Capabilities

Set of competencies and skills enabling the pursuit of personal goals (and utilising opportunities including the availability of options/choices *not* chosen at a given moment)

Affective well-being

Experiences of one's life as characterised by positive (vs. negative) feelings typically measured over a shorter period of life, but not with reference to the immediate situation of measurement.

Measurements can be aggregated over individuals and/or social or regional units either within the 4 dimensions to measure different aspects of QoL or over sum-scores of each individual to characterise the general satisfaction of individuals with the performance of policies.

In Finland the Regional Health and Well-Being Study 2010 (abbrev. ATH) and the Finnish well-being and health and social services survey 2009 (abbrev. HP) have provided detailed data also relevant for the measurement of social quality and quality of life based on the WHO-QoL-Bref. The following tables list the items chosen from the ATH survey. The indicators are based on subjective responses to questionnaires. Actually, some indicators can be used also as indicators for Social Quality measured by a subjective proxy; this has been done in the preliminary analysis of social problems also measured in ATH (see section 6 above). These indicators are:

Social security	Social inclusion
Satisfaction with income	Trust in institutions
Receiving services	Use of cultural opportunities
Home ownership/no. rooms per Person	Satisfaction of cultural opportunities
Satisfaction with home environment	Hobbies
Trust in reliability of family support	Experience of violence (negative)
Social empowerment	Social cohesion
Functional ability	Meeting friends
Voting	Frequency of contacts
Internet use	Helping others
Participation in public activities	Family cohesion
General health	Loneliness (negative)
	. 5

The following items in ATH are selected from the twelve items of the WHO-QoL-Bref which are included in the survey (WHO-dimensions in brackets):

Resources (environmental)	Life evaluation (Social)
Conditions of living place	Satisfaction with personal relationships
Enough money to meet needs	Feeling of life as meaningful
Capabilities (physical)	Affective Well-Being (psychological)
Satisfaction with abilities in everyday life	Satisfaction with oneself
Enough energy for everyday life	Frequency of positive/negative feelings

The indicators have to be further empirically tested and analysed for their validity and reliability. But their use in a nation-wide survey demonstrates already that a relatively short and practical instrument should be possible allowing the assessment of individual QoL for monitoring social sustainability.

Indicators for Social Capital

As discussed in section 3, the SOLA model suggests distinguishing conceptually and empirically different aspects often subsumed under the heading of social capital. A number of different concepts should be distinguished:

Social Capital as personal Social Capital

Within the SOLA model a clear distinction is made between three levels of social organisation and action. The description of the network of person-centred social relations belongs to the level of individual QoL. On this level we may speak of *personal Social Capital*. If social relations are measured in order to characterise the social fabric, this would mean the measurement of *social quality* in the terminology of the SOLA model, albeit with quite distant indicators.

Social Capital as measurement of Social Cohesion

The core of the glue of society – as social capital is often characterised – are the social relations and networks included in the category of social cohesion in the SOLA model. We suggest to use the more precise concept of social cohesion in this case.

Social Capital as measurement of Social Quality

Social Quality requires conceptually the measurement of process indicators and relational data between persons and between persons and social structures. Especially, if relational data are not available (which is typically the case), we may suffice with estimating the structure and density of networks from the distribution of personal Social Capital. As the strategy of using the relations of persons to positions demonstrates (see above), this implies some information or assumptions about relevant structures (e.g. of the occupational system). For instance, the character of the positions selected for the measurement determines which dimension of social quality (economic security, political empowerment, cultural participation, "leisure" social relations) is, in fact, measured.

Social Capital as measurement of Civil Society

Especially in the tradition of Putnam (see above) and with the functions of the civil society for the welfare state and societal integration as reference point, social capital is connected to the category *civil society/social care* in the SOLA model. Since many cases of social support are exercised in social relations below the level of self-organising groups and associations it is meaningful to combine the indicators of *social cohesion* with *civil society/social care* for a concept of social capital within the SOLA model. As suggested in section 3, the concept would combine categries and indicators *horizontally* in the model across the dimension of *organic basis/social integration*. Indicators of *affective well-being* are usually difficult to obtain, but it would follow this logic to also include them in the concept of social capital.

Social Capital as measurement of institutional trust

It is more difficult to propose a systematic role for institutional trust under the heading of social capital, as it is used especially in the model of Fukuyama (see above) and included in unsystematic fashion in many concepts of social capital. One option is to just introduce the more precise of *social inclusion* and distinguish it from social capital as suggested above. This would be in compliance with the SOLA model. A second option is to combine *social inclusion* and *societal culture* and obtain this way a concept of *cultural capital* within the SOLA framework. This variant has been suggested also in section 3; it would correspond to a further distinction of *economic capital* and *political capital* as *horizontal* concepts in the SOLA model.

The second option also reminds us of a third option which is always possible within the SOLA model, namely, the free combination of cells in the table for specific research or social policy purposes. After all, the SOLA model is also intended as a methodological tool. Choosing this way explicitly means that one still preserves the conceptual precision of the concepts combined. One option in this spirit is the construction of a broad "social dimension" by combining the cells of both *social capital and cultural capital* as defined above. One has to be careful, though, not to loose again the conceptual clarity which was one of the main aims of the SOLA model from the start.

8.3 Indicators of social sustainability: Concepts and indicators

The following tables display a selection of indicators which should serve to understand the dimensions and sub-dimensions of Social Quality. As stated in the definitions in section 3, for each dimension there is a "leading" sub-dimension corresponding to the dimensions (same colour); this dimension may receive an extra weight. In the sub-dimension of access (green) there is a reference to the corresponding societal structures. If available, indicators describing the access to structures should be placed here. In the sub-dimension of integration (red) there is a reference to aggregated information on the corresponding dimension of individual QoL. The "logic" is that general satisfaction in this dimension should help to generate integration. Generally, the preference is for indicators of process efficacy, but most indicators are proxies because the reflect available indicators in public registers.

Most indicators are selected from the sources described above, but some are suggestions. All indicators certainly need empirical confirmation within the framework. The complete list of indicators with their sources is found in the annex.

Indicators of *social security* are rather frequent in the literature which speaks for the importance of the economic dimension in modern societies.

	Mediating processes - Social Quality					
	Social Security					
Resources Access	Disposable Income/transfer services/housing At-risk-of-poverty rate Disposable household income Household in need of housing Availability of social and health care Access to economical institutions (see structures)	Inequalities, Class structure Income differentials Gini-Index Children /Old age poverty Income differences between sexes Average life expectancy for a person aged 35 by educational attainment Regional differences				
Potentials	Professional education, experience Immediate placement of 9 th grade students in further studies main activities one year after higher education Continuing education on/off job Difficult recruitment of qualified staff Processing times of employment agencies	Employment security/self-reported living standard Long term unemployed Part-time and fixed-term employment Absences from work due to illness Satisfaction with employment services Trust in social assistance and pension system Average QoL of living standard (see indivQoL)				

Indicators of *social empowerment* are comparatively scarce, especially in the dimensions of conditions. This may reflect the fact that collection of these indicators implies a possible criticism of the political framework and/or the fact that the agents of collecting registers tend to be the agents of social policy and do not look at themselves. Concerning the potentials, the voter turn-out is a very frequent indicator, as are the indicators of self reported efficacy and health. Health issues enter in this sub-dimension as hindrances to commitment and motivation; they are independently represented in the category of population/demography.

	Mediating processes - Social Quality						
	Social Empowerment						
Potentials	Political support/public space access to public media freedom of press openness for petitions provision of public space for conventions	Ideology base, Weltanschauung diversity of political parties % party membership of minorities representation of different political/religious positions in public education					
Conditions	access to political institutions (see structures)	concentration of media					
Potentials	Political participation Voting turnout/voting activity (F,E,O, IN) Membership in employee organisations (F) Participation of 10-14-year olds in social/political organisational work (E) Civic activism Participation in demonstrations/coverage	Commitment, Motivation/self-reported capabilities trust in municipal and national politics satisfaction with democracy/polity Political apathy % party membership Perceived self-efficacy Self-reported health Average QoL capabilities (see indivQoL)					

	Mediating processes - Social Quality					
	Social Inclusion					
Aims	Access, usage of cultural resources Access to cultural/educational centres (outside public schools) Access to cultural/religious centres Access to institutions of arts and sciences	Non/discrimnation,. minority/regional inclusion Intergroup cohesion Tolerance Actualisation of generation pact Sense of regional identity				
Conditions	Access to free legal advise Access to cultural institutions (see structures)	Gender equity Ethnicity related crimes				
Potentials	(sub-) cultural participation average active participation in cultural activities in arts, music, literature average participation in ethnic/religious activities average cultural participation in information networks internet users work/family life balance	Institutional trust/social problems / self-reported life evaluation General trust Trust in institutions Trust in politics and justice Trust in media Social problems per capita (delinquency, addictions, health) Self-reported safety in regions of residence				
		Average QoL life evaluation (see indQol)				

Indicators of *Social Inclusion* are typically reduced to indicators of inter-group discrimination and general trust. The more objective-instrumental side of available access and active participation is usually neglected. This dimension is important on the normative-evaluative side. On the one hand, the possible social conflicts between generations, ethinicities/religions, and gender groups should be represented in the indicators. On the other hand, social problems as indicators of failing social inclusion should be represented as "erosions" of basic mechanisms of normative inclusions (as described in a long tradition of sociological deviance theory and research; see also section 6).

Social Cohesion may be regarded as the central dimension of Social Quality in some respects, because of the strong overlap with the concept of Social Capital. The basic character is also reflected in the placement of suicide rates as indicator of (lacking) cohesion; in a sense suicides are indicating existential crises rather than (only) normative crises. But it should be recognised that in the concept of Social Quality and the SOLA model a mediation between individuals and structures occurs in all dimensions apparent in the participation and identification associated with the potentials in each dimension.

Mediating processes - Social Quality		
	Social Cohesion	
Organic Basis Conditions	Work relations/ economic. clientelism Number of relations at work "black labour" ties / networks neighbourhood support jobs found/allocated through personal ties trust in support from friends/neighbours	Bridging /Institutional linking Interpersonal safety and trust trust in local services Participation in different social networks Marriages/partnerships across class/ethnic/religious boundaries Unwanted neighbours
Potentials	access to civic society (see structures) Coop. facilitating binding ties Average time for network integration after mobility/change of job Friendship ties /networks Clubs and associations % Solidaristic attitudes average time budget with friends and neighbours	Communal bonding ties self-reported affective well-being average trust in family support frequency meeting with relatives Trust in closest helper Loneliness of children and youth Identification with neighbourhood/local community Suicide rate Average affective well-being (see indivQoL)

8.4 Methodological suggestions

The SOLA model is intended as methodological tool as well as instrument for systematically relating indicators to a theoretical framework. Here we should acknowledge that indicators, in many cases, can be assigned to different cells depending on the conceptual framework. Also, empirical research will demonstrate that indicators, in fact, cluster differently and should be included under a different common concept.

But one should keep in mind that indicators in any given cell will not necessarily correlate with each other more strongly than with indicators from other cells. There may be strong empirical causal relations between certain indicators which do not always imply membership in the same category. One example is the causal relationships between levels which may imply a strong causal relation between, say, physical health and unemployment – we still want to call the doctor in the first case and the labour office in the second.

In general, the model at this stage at least, does not describe causal relations and does not yet weigh indicators by their causal relevance on certain other indicators. To clarify these relationships is task for research and some theoretical models are available in the social sciences which will help in the interpretation.

Typically, The SOLA model will be used for three strategies:

- Evaluation of "final outcomes" of social policies and interventions, i.e. focusing on individual QoL as effect,
- Evaluation of Social Quality as cause and effect in the mediating processes to monitor social sustainability

• Comparative analysis of pathways of Social Quality either within a region or nation or between regions and nations. Especially the latter analysis also supports the normative evaluation of states as describing "good life" and "good society" with reference to standards and should allow for a choice between alternative options.

But the model also offers a number of more specific strategies:

The SOLA model as framework for Meta-Analysis

As stated above, the model as a tool can be employed quite eclectically as a framework to organise information and to analyse it under different theoretical or practical considerations. The models of change incorporated in the framework are not the only models which may be meaningful. Especially, the meat-analysis of existing research and data can be guided by the framework.

Designing a "dash board"

From a methodological point of view we have already emphasised the option to use the model as a "dash board". Especially the overview table can be used to design a more sophisticated instrument:

- Indicators can be used to develop more complex indicators resulting in a reduced "dash board" with 64 cells.
- Averages can be computed over territorial units (regions, nations) and be used for evaluation of the index in each cell for a given region or nation.
- Thresholds or critical standards can be defined by social policy and compared with given indices for a region.
- Both strategies are easily realised in an interactive IT-solution which shows the information of interest on a "click".
- Additionally, it is very helpful if missing data are represented as some "blanks" in the "dash board" to alert the decision maker. Moreover, the validity and reliability of the information can be indicated as well as further information to guide the interpretation of an index by less experienced users.

An important methodological problem for the strategy suggested here is that information from very different sources are to be combined in the "dash board". Promising solution for this problem has been proposed by the Indicators of Social Development project (ISD Handbook 2010). Essentially, the method suggests a procedure of step by step introducing indicators for a particular dimension and control for the plausibility of the effects that has on the information as a whole. The procedure may appear to be rather "rough and ready", but so are the data in most practical cases. An advantage is that it can also handle missing data problems within reasonable limits.

Designing intervention strategies

In section 6 we sketched out strategies to use the model to develop interpretations of given profiles of indices and/or to design intervention strategies on some hypothesis of causal relations between levels or clusters of indices. A hypothesis worth testing might be that effective strategies have to employ all dimensions to support possible "virtuous circles" in a given field of interest. Which clusters/cells of a dimension are especially relevant is essentially an empirical question, but there may be good theoretical or practical knowledge available to guide the choice.

Regions and target groups as reference cases for analysis

The interpretation of profiles in the data from particular sources (regions, populations) can be facilitated considerably by providing a set of "ideal cases" by theoretical and empirical research. In Finland, for instance, certain districts may be especially representative for arctic conditions, other districts may be clearly urbanised. Regional analyses are supported if the similarity of a given profile of Social Quality in the data with a set of "ideal types" can be easily determined. An analogous strategy can be used for special target groups of social policy. Certain groups may turn out in research or practice to be characteristic for certain social problems or certain strategies with a special profile of sub-dimensions may be effective for particular groups. Systematically combing profiles of strategies and social problems for a larger number of units (e.g. municipalities) will turn the "dash board" into an instrument for evidenced-based learning. It appears meaningful, for instance, to look at cultural minorities as special cases of social inclusion, of youth as special cases of capabilities, participation and social empowerment, of the poor as obvious cases for social security, and of care in old age as special case for social cohesion.

Defining "ideal cases" on theoretical grounds will also help to validate indicators as belonging to certain dimension of the model.

Using individual QoL information

The sub-table for Individual Quality of Life is designed to contain subjective and objective indicators which are describing the situation of the individual *relative to his/her specific way of life* (e.g. if the person is a child than services for the elderly are only relevant because of own caring grandparents; if the person sits in a wheel chair a barrier-free environment is crucial; etc.). This criterion is often not fulfilled, since the relevance of aspects of the social and physical environment and/or the relevance of certain observable activities for QoL is simply assumed rather than established in each case.

Indicators or instruments which aim at a use on aggregate levels are not included here for Individual OoL, but may be included on other levels.

For instance, some indicators in the tables are "subjective" in the sense that they describe individual responses to questionnaires/surveys aggregated to characterise a collective state of society or community. Typically, the validity of the individual response is not put into question, since only the average is considered relevant. Given that the questions produce sufficiently valid and reliable indices they may as well be treated as "objective" indicators of the collective state. These indicators are included on the societal level or in mediating processes.

Objective indicators of Individual QoL (in this narrower sense) are available in public registers only for limited aspects, although a wealth of information may be available, technically, in the documentations of public and private services (even in facebook). Typically, indicators of standard of living, publicly documented capabilities (e.g. education, health, voting) and utilisations (e.g. consumption of goods and services) are measured, which are "obviously" relevant. If indicators are not publicly registered (yet), they require typically extensive research (e.g. welfare surveys).

Subjective indicators are especially used for the dimensions of life valuation and affective wellbeing, because objective indicators would typically involve extensive research on individual activities (and still suffer from the imperfect correlation of attitudes and behaviour). Subjective evaluations of objective aspects are often a useful short-cut, but suffer from imperfections of subjective evaluations and preference articulation (e.g. problems of social comparison and social acquiescence).

Two strategies are suggested as optional at this point:

- Individual QoL is measured by subjective evaluations only and these evaluations are structured with reference to the mediating processes, i.e. as individual evaluations of *social security, social empowerment, social inclusion,* and *social cohesion*. Ideally, at least 4 items capturing the 4-dimensional aspects within each mediating process are evaluated. The QoL profile would represent the "subjective viewpoint" on society's performance.
- Individual QoL is measured as a 4-dimensional profile combining subjective *and* objective indicators within each dimension; in this strategy entire instruments and/or subscales of instruments (e.g. WHO-QoL) may be used to form an index for each dimensions. The QoL profile would represent the "objective outcome" on the individual level.

Given sufficient subjective and objective indicators, both profiles can be used. The state of the art and the debate certainly is that a single measure is not adequate; at least a 4-dimensional profile is necessary.

The SOLA model as reference frame for normative issues

A final methodological note should be made on the necessity of normative evaluations of profiles over the 4 dimensions. As is most obvious in the case of defining thresholds for "sufficient performance" or "best practices" the model requires transparent ways of determining the relevance of the 4–dimensional value framework for the interpretation of Social Quality and empirical results. This can not be solely the task of experts, but has to involve politicians, practitioners and the people described by the indicators. Fortunately, Finland has a remarkable tradition of developing participative strategy for research and policy which can be implemented also in the practical context of the SOLA model.

9. In conclusion: next steps

There should be no need to summarise the systematic arguments and the description of the model in this final section. Let us rather point out some aspects which define tasks for further research and development.

First, we readily concede that although the theoretical framework tries to provide a theoretical grounding it certainly is in need of critical discussion and further development. We hope that the SOLA model triggers such a debate and criticism which then can be constructively used to improve the model.

Second, it is obvious that the model needs grounding in empirical research which demonstrates the validity, reliability, acceptability and practicality of the indicators and confirms the conceptual framework. Most indicators presented in section 8 are already part of other instruments and have some empirical standing, but others are only suggested by the framework and others still have to be developed to fill in existing gaps.

Third, the model offers to integrate other approaches and instruments and this certainly should be done in collaboration with other disciplines and agencies engaged in the development of indicators of social sustainability. The model is not a "stand alone" solution but rather an offer for cooperation. Cooperation is most obviously needed with those agencies which would have to provide the information for indicators and indices and/or would have to conduct, finance and politically legitimise surveys.

Fourth, the model intends to provide guidance and strategies for the interpretation of indicators – e.g. the models of social change – but this feature clearly has to be worked out more explicitly to be of practical value. At this point the model is "too theoretical" to be readily used in more practical contexts.

Fifth, the model is in need of further methodological development especially in form of rules and methods to create meaningful profiles of social sustainability for territorial units or communities. These profiles have to be compared and evaluated against some standard of sufficient (threshold) or "good" social sustainability. The methodology for multi-dimensional comparisons has to be utilised and adapted for the SOLA model.

Finally, the task of creating a set of graphical or visual representations of the concepts and methods of the model has to be addressed. As indicated in the report, a successful strategy of implementation in an interdisciplinary context involving experts and practitioners needs a medium supporting communication which should not rely on language alone.

We hope to have done a small first step with this report, and we hope that others will join to do the next steps.

References and Links

Alcamo J, Bennett,EM (2003). Ecosystems and Human Well-Being: A Report of the Conceptual Framework Working Group of the Millennium Ecosystem Assessment. Island Press, Washington.

Alila A, Gröhn K, Keso I, Volk, R (2011). Sosiaalisen kestävyyden käsite ja mallintaminen. Sosiaali- ja terveysministeriön raportteja ja muistioita 2011:1. Sosiaali- ja terveysministeriö, Helsinki.

Alkire S. (2002). Valuing Freedoms: Sen's Capability Approach and Poverty Reduction. Oxford University Press, New York.

Allardt E (1973). Individual Needs, Social Structure, and Indicators of National Development. In: Eisenstadt S, Rokkan S. Building States and Nations. Models and Data Sources. Vol. 1. Sage Publications, London. pp. 259-273.

Allardt, E. (1996). Having, Loving, Being: An alternative to the Swedish Model of Weffare Research, in: Nussbaum, M., Sen, A. (eds.) The Quality of Life, New York: Oxford University Press

Anand P, Hunter G, Carter I, Dowding K, van Hees M (2009). The Development of Capability Indicators. Journal of Human Development and Capabilities: 10, 125-52.

Anand P, Hunter G, Smith R (2005). Capabilities and well-being. Social Indicators Research 74: 9-55.

Anand P, Santos C and Smith R (2009). The Measurement of Capabilities in Arguments for a Better World. In Essays in Honor of Amartya Sen, Basu K and Kanbur R (eds.). Oxford University Press, Oxford.

Anttiroiko, A.-V. (2009). Local strategies in a global economy. In Perkiö M (ed.) Perspectives to global social development. Tampere University Press 2009.

Arrow KJ (1951). Social Choice and Individual Values. Wiley, New York.

Arrow KJ, Dasgupta PS, Mäler KG (2003). Evaluating projects and assessing sustainable development in imperfect economies. Environmental and Resource Economics 26: 647—685.

Astleithner F, Hamedinger A (2003). The Analysis of Sustainability Indicators as Socially Constructed Policy Instruments: benefits and challenges of "interactive research". Local Environment 8(6):627-640.

Baines J, Morgan B (2004). Sustainability Appraisal: A Social Perspective. http://www.iied.org/pubs/pdfs/G02181.pdf

Basu K, Lopez-Calva L (2011). Functionings and Capabilities. In Arrow KJ, Sen AK, Suzumura K (eds.). Handbook of Social Choice and Welfare, vol. 2. North-Holland, Amsterdam.

Beck U (1992). Risk Society: Towards a New Modernity. Sage, London.

Beck U (1999). World Risk Society. Blackwell, Oxford.

Beck W, Laurent J, Van der Maesen L, Thomese F, Walker AC (2001). Social Quality: A Vision for Europe. Kluwer Law International, The Hague, Netherlands.

Beck W, van der Maesen L, Walker, AC (1997)(eds.). The Social Quality of Europe. Studies in Social Policy. Kluwer Law International. The Hague, Netherlands.

Beck, W, van der Maesen L, Walker AC (1997) (eds.). The Social Quality of Europe. Studies in Social Policy. Kluwer Law International. The Hague, Netherlands.

Becker E, Jahn T, Stiess I (1999). Exploring uncommon ground: sustainability and the social sciences. In Becker E, Jahn T (eds.). Sustainability and the Social Sciences. A Cross-Disciplinary Approach Integrating Environmental Considerations into Theoretical Reorientation, pp.1-22. Zed Books, London.

Becker J (2004). Making sustainable development evaluations work. Sustainable Development 12: 200–211.

Bourdieu, P. (1983). The Forms of Capital. In: Richardson, J.G. (ed.), Handbook of Theory and Research for the Sociology of Education Westport, CTd: Greenwood Press

Braakmann A, Zieschank R, Diefenbacher H, Brachinger HW, Wagner GG, Leggewie C, Sommer B (2009). Wie lässt sich Wohlstand messen? Wirtschaftsdienst 89 (12): 783 – 804. http://dx.doi.org/10.1007/s10273-009-1007-7

Brown, I., Brown, R.I. (2003). Quality of life and disability. An approach for community practitioners, Kingsley: New York

Bucher AA (2009) . Psychologie des Glücks. Ein Handbuch. Basel.

Bundesministerium für Wirtschaft und Technologie, Sachverständigenrat zur Begutachtung der Gesamtwirtschaftlichen Entwicklung; Conseil d'Analyse Economique (2010): Wirtschaftsleistung, Lebensqualität und Nachhaltigkeit: ein umfassendes Indikatorensystem: Expertise im Auftrag des Deutsch- Französischen Ministerrates. Paris; Wiesbaden, 2010 http://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/Expertisen/2010/ex10_de.pdf:

Canadian Council on Social Development (2003). Personal Security Index. A Reflection of how Canadians Feel. Five Years Later.

Castiglione, D, van Deth, J.W, Wolleb, G (eds.) (2007). The Handbook of Social Capital, Oxford University Press, New York.

Colantonio Andrea (2007). Measuring Social Sustainability: Best Practice from Urban Renewal in the EU. Social Sustainability: An Exploratory Analysis of its Definition, Assessment Methods, Metrics and Tools. EIBURS Working Paper Series 1/2007. Oxford Brookes University.

 $\underline{http://www.brookes.ac.uk/schools/be/oisd/sustainable_communities/resources/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommunities/SocialSustainable_tommuniti$

Coleman, J. (1988). Social Capital in the Creation of Human Capital, in: American Journal of Sociology, 94: 95-121

Costanza R (2000). Visions of alternative (unpredictable) futures and their use in policy analysis. Conserv Ecol 4 (1):5.

Costanza R et al. (2007). Quality of Life: An Approach Integrating Opportunities, Human Needs, and Subjective Well-Being. Ecol Econ 61: 267–276.

Costanza R, Hart RM, Posner S, Talberth J (2009). Beyond GDP: The Need for New Measures of Progress. The Frederick S. Pardee Center for the Study of the Longer-Range Future. Boston University.

Cummins R A (1997). Comprehensive Quality of Life Scale-Adult (5th ed. ComQol-A-5). Deakin University, School of Psychology, Melbourne.

Cummins R A et al. (2003). Developing a national index of subjective wellbeing. The Australian UnityWellbeing Index. Soc Indic Res 64: 159–190.

d'Ercole M, Marco, Salvini A (2003). Towards Sustainable Development: the Role of Social Protection. OECD Social, Employment and Migration Working Papers 12. OECD, Paris 2003.

Daly H (1973). Towards a steady state economy. Freeman, San Francisco.

Daly H (1996). Beyond Growth: The Economics of Sustainable Development. Beacon Press, Boston.

Daly M, Rose, R (2007). First European Quality of Life Survey: key findings from a policy perspective. EFILWC, Dublin.

DGINS (2010). Sofia Memorandum - Measuring progress, well-being and sustainable development. http://dgins-sofia2010.eu/pdocs/Sofia%20Memorandum_11October.pdf.

Di Tella R, MacCulloch R (2006). Some use of happiness data in economics. The Journal of Economic Perspectives 20 (1): 25 – 46. http://dx.doi.org/10.1257/089533006776526111

Diefenbacher H, Zieschank R (2008). Sustainability and growth – towards the description of an area of conflict on the basis of national indicator. Contributions for the Political Ecology Magazin, München.

Diefenbacher H, Zieschank R (2008). Wohlfahrtsmessung in Deutschland - Ein Vorschlag für einen neuen Wohlfahrtsindex (Welfare measurement in Germany – A suggestion for a new welfare index). R&D review – research index. FKZ 3707 11 101/01.

Diefenbacher H, Zieschank R (2010). Wohlfahrtsmessung in Deutschland: ein Vorschlag für einen nationalen Wohlfahrtsindex. Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit, Dessau-Roßlau.

Diener E (1994). Assessing subjective well-being: Progress and opportunities. Social Indicators Research 31: 103—157.

Diener E (2000). Subjective well-being: The science of happiness and a proposal for a national index. American Psychologist 55: 34—43.

Diener E, Lucas RE (1999). Personality and subjective well-being. In Kahneman D, Diener E, Schwarz N (eds). Well-Being: The Foundations of Hedonic Psychology. Russell Sage Foundation, New York, pp. 213–229.

Diener E, Suh EM (1999). National differences in subjective wellbeing. In: Kahneman D, Diener E, Schwarz N.(eds) Well-Being: The Foundations of Hedonic Psychology. Russel Sage Foundation, New York, p. 593

Diener E, Suh EM, Lucas RE, Smith HL (1999). Subjective well-being: Three decades of progress. Psychological Bulletin 125: 276—302.

Diener E. (2009). The Science of Well-Being, New York: Springer

Duncan OD, Schnore LF (1959). Cultural, Behavioral and Ecological Perspectives in the Study of Social Organisation. American Journal of Sociology 65: 132-153.

Duncan, OD (1959). Human Ecology and Population Studies. In Hauser PM, Duncan OD (eds.). The Study of Population. University of Chicago Press.

Easterlin RA (1974). Does economic growth improve the human lot? Some empirical evidence. In David PA, Reder MW (eds.). Nations and Households in Economic Growth: Essays in Honour of Moses Abramovitz. Academic Press, New York.

Easterlin RA (1995). Will raising the incomes of all increase the happiness of all? Journal of Economic Behaviour and Organization 27: 35-48.

Easterlin RA (2003). Explaining Happiness. Proc Natl Acad Sci 100 (19): 11176–11183

Ehrlich PR, Kennedy D (2005). Millennium assessment of human behaviour. Science 309 (5734): 562–563.

Ellisaari J (1999). Suomi ja sosiaalinen kestävyys. In Niemenmaa V toim.). Näkökulmia sosiaaliseen kestävyyteen. Paikallinen Agenda 21 -projektin julkaisu. Suomen Kuntaliitto, Helsinki.

Erikson, R., Description of Inequality: The Swedish Approach to Welfare Research, in: Nussbaum, M., Sen, A. (eds.) The Quality of Life, New York: Oxford University Press

European Commission (2010). Europe 2020 – A strategy for smart, sustainable and inclusive growth. COM (2010)2020.

European Policy Centre EPC (2011) (eds). Growth, Wellbeing and Social Policy in Europe: Trade-off or Synergy. Challenge Europe issue 21, European Union.

Ewing B et al. (2008). Calculation Methodology for the National Footprint Accounts. 2008 Edition, Oakland CA.

Eyles J, Willians J (2008). Sense of Place, Health and Quality of Life, Aldershot: Ashgate

Fayers PM, Machin D (2007). Quality of Life. 2nd edition. Chichester: John Wiley & Sons

Finnish Ministry of Environment (2009): National Assessment of Sustainable Development. Helsinki.

Fleurbaey M (2008). Beyond GDP: is there progress in the measurement of individual well-being and social welfare? Commission on the Measurement of Economic Performance and Social Progress, August 2008.

Fleurbaey M (2008). Fairness, Responsibility, and Welfare. Oxford University Press, Oxford.

Fleurbaey M (2008). Individual well-being and social welfare: notes on the theory. Commission on the Measurement of Economic Performance and Social Progress, August 2008.

Fleurbaey M (2009). Beyond GDP: the quest for a measure of social welfare. The Journal of Economic Literature 47: 4:1029 – 1075 http://dx.doi.org/10.1257/jel.47.4.1029

Franzen, A, Freitag, M (2007) (eds). Sozialkapital, Grundlagen und Anwendungen. Kölner Zeitschrift für Soziologie und Sozialpsychologie 47: 113-140.

Frederick S, Loewenstein G (1999). Hedonic adaptation. In Kahneman D, Diener E, Schwarz N (eds.). Well-Being: The Foundations of Hedonic Psychology. Russell Sage Foundation, New York.

Frey BS, Lüchinger S (2007). Concepts of happiness and their measurement. In: Soziale Nachhaltigkeit pp. 219-237, Marburg.

Frey BS, Stutzer A (2001). Happiness and Economics: How the Economy and Institutions Affect Human Well-being. University Press of California.

Friedman, TL (2006). The World is Flat. A Brief History of the Twenty-First Century. Farrar, Straus and Giroux

Fukuyama F (1995). Trust: The Social Virtues and the Creation of Prosperity. Free Press, New York.

Fukuyama F (1999). The Great Disruption. Human Nature and the Reconstruction of Social Order. Profile, London.

Giddens, A (1984). The Constitution of Society. Outline of the theory of structuration. University of California Press, Berkeley and Los Angeles.

Giovannini E, Hall J, Morrone A, Ranuzzi G (2009). A Framework to Measure the Progress of Societies. Draft OECD Working Paper, September 2009.

Gjoksi N (2010). International approaches to measure wealth and well-being in the context of sustainable development. ESDN Case study No. 3.

http://www.esdn.eu/pdf/case%20studies/03_ESDN%20Case%20Study%203_FINAL.pdf

Gjoksi N (2010). National approaches to measure wealth and well-being in the context of sustainable development. ESDN Case study No. 4.

http://www.esdn.eu/pdf/case%20studies/04_ESDN%20Case%20Study%204_FINAL.pdf

Gjoksi N (2010). Reforms for Measuring Welfare and Wealth in the Context of Sustainable Development. Workshop report, 6th ESDN Workshop Berlin, 2-3 December 2010. http://www.esdn.eu/pdf/case%20studies/04_ESDN%20Case%20Study%204_FINAL.pdf.

Gjoksi N, Sedlacko M (2010). The 'Beyond GDP' Debate and Measuring Societal Progress in the Context of Sustainable Development. ESDN Quarterly Report, December 2010.

Gjoksi N, Sedlacko M, Berger G (2010). National Sustainable Development Strategies in Europe: Status quo and Recent Developments. ESDN Quarterly Report – September 2010. http://www.esdn.eu/quarterly%20reports/report%20files/pdf/2010-September-National Sustainable Development Strategies in Europe.pdf

Gullone E, Cummins RA (2002) (eds.). The universality of subjective wellbeing indicators. Social Indicators Research Series. Kluwer, Dordrecht.

Habermas, J (1984, 1987). Theory of Communicative Action. Polity, Cambridge.

Hagfors R, Kajanoja J (2009). Hyvinvointivaltio ja sosiaalinen pääoma sosiaalisen kestävyyden perustana. In Näkökulmia sosiaaliseen kestävyyteen. Valtioneuvoston kanslian raportteja 2/2009.

Hagfors R, Kajanoja J (2010). Welfare states and social sustainability. An application of SEM and SOM in a virtuous circle environment, Kela/Fpa, Online working papers 15/2010

Häkli, J, Minca, C (2009) (eds.). Social Capital and Urban Networks of Trust. Farnham. ??? Hall J, Giovannini E, Morrone A, Ranuzzi G (2010). A Framework to Measure the Progress of Societies. OECD Statistics Working Papers 2010/5, OECD Publishing.

Helliwell JF (2003). How's Life? Combining Individual and National Variables to Explain Subjective Well-Being. Economic Modelling 20 (2): 331 - 360.

Helliwell JF, Barrington-Leigh CP (2010). Measuring and Understanding Subjective Well-Being. http://www.nber.org/papers/w15887.bib (accessed 2010-04-14).

Herrmann, P., van der Maesen, L.J.G. (2008). Social Quality and Precarity: Approaching New Patterns of Societal (Dis)Integration, MPRA Paper No. 10245, http://mpra.ub.uni-muenchen.de/10245

Höffe, O. (2009). Lebenskunst und Moral. Oder macht Tugend glücklich. Beck Verlag, München.

Holzmann R, Sherburne-Benz B, Tesliuc E (2003). Social Risk Management: The World Bank's Approach to Social Protection in a Globalizing World. Social Protection Department, World Bank.

Huysman M, Wulf V (2004) (eds.). Social Capital and Information Technology. MIT Press, London.

Inglehart R, Welzel C (2005). Modernization, Cultural Change, and Democracy: The Human Development Sequence. Cambridge University Press, Cambridge.

ISS (2011). Institute for Social Studies, Indices of Social Development, The Hague, available at http://www.IndSocDev.org

IUCN (2006). The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century. Report of the IUCN Renowned Thinkers Meeting, 29–31 January 2006. http://cmsdata.iucn.org/downloads/iucn_future_of_sustanability.pdf

Jackson T (2009). Prosperity without Growth – Economics for a Finite Planet. Earthscan, London.

JFGC (2009), Wirtschaftsleistung, Lebensqualität und Nachhaltigkeit: Ein umfassendes Indikatorensystem Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung, Statistisches Bundesamt (ed.), Expertise im Auftrag des Deutsch-Französischen Ministerrates

Joas, H., Knöbl, W. (2009). Social Theory. Twenty introductory lectures. Cambridge University Press, Cambridge.

Jonas H (1979). Das Prinzip Verantwortung. Frankfurt am Main 1979

Kahneman D, Diener E, Schwarz N (1999). Well-being: The Foundations of Hedonic Psychology. Russell Sage Foundation, New York.

Kahneman D, Krueger A, Schkade D, Schwarz N, Stone A (2004). Toward national wellbeing accounts. American Economic Review 94(2): 429—434.

Kahneman D, Krueger AB (2006) . Developments in the measurement of subjective well-being. The Journal of Economic Perspectives 20 (1): 3-24. http://dx.doi.org/10.1257/089533006776526030

Kahneman D, Krueger AB, Schkade D, Schwarz N, Stone A (2004). A survey method for characterizing daily life experience: the day reconstruction method. Science 306: 1776—1780.

Kalmijn W, Veenhoven R (2005). Measuring Inequality of Happiness in Nations. Journal of Happiness Studies, Special Issue on Inequality of Happiness in nations 6: 357-396.

Kaufmann D, Kraay A, Mastruzzi M (2009). Governance Matters VIII. Aggregate and Individual Governance Indicators 1996 – 2008. World Bank Policy Research Working Paper 4978.

Kaufmann, F-X (2005). Sozialpolitik und Sozialstaat: Soziologische Analysen. VS Verlag für Sozialwissenschaften, Wiesbaden.

Kauppinen T (1999). Kestävä kehitys ja sosiaalisten vaikutusten arviointi. In Niemenmaa V (toim.). Näkökulmia sosiaaliseen kestävyyteen. Paikallinen Agenda 21 -projektin julkaisu. Suomen Kuntaliitto, Helsinki.

Kautto M, Metso L (2008). Sosiaalinen kestävyys – uusi poliittinen horisontti? Yhteiskuntapolitiikka 73:4.

Kautto M, Salonen J, Hytti H, Lassila J, Pirttilä J, Rantala J, Risku I, Suoniemi I, Vanne R (2009). Eläketurvan sosiaalinen kestävyys. In näkökulmia sosiaaliseen kestävyyteen. Valtioneuvoston kanslian raportteja 2/2009.

Kessl, F, Otto H-U (eds.) (2004). Soziale Arbeit und Soziales Kapital. Zur Kritik lokaler Gemeinschaflichkeit. VS Verlag für Sozialwissenschaften, Wiesbaden.

Kohl J (2006). Sosiaalinen ulottuvuus tulevaisuuden voimavarana. Avauksia rajapintakeskusteluille. Sosiaali- ja terveysministeriön julkaisuja 2006: 26. Helsinki.

Kroll C (2008). Social capital and the happiness of nations: the importance of trust and networks for life satisfaction in a cross-national perspective. Lang, Frankfurt am Main.

Kropp, M. (2009). Overview of Alternative Indicators measuring societal progress, Background paper for the second session of the TURI seminar 'European responses to the crisis and alternatives to GDP as an element of a paradigm shift', 29 June 2009, ITUH Brussels

Landolt P (2004). Eine Abwägung der Grenzen sozialen Kapitals. In: Kessl F, Otto H-U (eds.) Soziale Arbeit und Soziales Kapital. Zur Kritik lokaler Gemeinschaflichkeit. VS Verlag für Sozialwissenschaften, Wiesbaden.

Lawton, M.P. (1991). A multidimensional view of quality of life in frail elders. In Birren J, Lubben J, Rowe J, Deutchman D (eds.). The Concept of Measurement of Quality of Life in Frail Elders. Sandiego: Academic Press; p. 3-27.

Layard P (2005). Happiness: Lessons from a New Science. Penguin Press, New York.

Lin, N, Erickson, H (2010) (eds.). Social Capital. An international research program. Oxford University Press, Oxford.

Littig B, Griessler E (2005). Social sustainability: a catchword between political pragmatism and social theory. International Journal of Sustainable Development 8:1/2: 65 - 79. http://esdp-network.eu/attachments/File/Course_Description/Social_sustainability_-a_catchword.pdf

Luhmann N. (1973) Vertrauen, Stuttgart

Luhmann, N. (1984). Soziale Systeme. Grundriß einer allgemeinen Theorie (Social Systems), Frankfurt: Suhrkamp

Luhmann, N. (2002). Theories of Distinction. Redescribing the Descriptions of Modernity. Stanford University Press, California.

Lyytimäki J, Rosenström U (2008). Skeletons out of the closet: effectiveness of conceptual frameworks for communicating sustainable development indicators. Sustainable Development 16(5): 301–313. http://onlinelibrary.wiley.com/doi/10.1002/sd.330/pdf

MacIntyre, A.A. (1994). Partial response to my critics. In Horton J, Mendus S (eds.). After MacIntyre. Critical Perspectives on the Work of Alasdair MacIntyre. Cambridge University Press, Cambridge.

Maeseen, L.J.G. v., Walker, A.C., (2005). Indicators of Social Quality: Outcomes of the European Scientific Network, European Journal of Social Quality, Vol. 5, 1/2:8-24

Maesen, L.v.d., Walker, A., (2009). Explorative comparison of quality of life, social capital, human security, social capability theory and social harmony with some principles of the social quality approach, Working Paper Nr. 5, Nov. 1rst

Marks N, Abdallah S, Simms A (2006). The Happy Planet Index. An Index of Human Wellbeing and Environmental Impact, nef 2006.

Maslow A (1954). Motivation and Personality. Harper, New York

McMahon DM (2006). Happiness. A History. New York 2006.

Mead, G.H. (1934). Mind, self and society, University of Chicago

Melnick D et al. (2005). Environment and Human Well-being: A Practical Study. UN Millennium Project. Task Force on Environmental Sustainability. Earthscan, London. http://www.unmillenniumproject.org/documents/Environment-complete-lowres.pdf.

Miegel M (2010). Exit: Wohlstand ohne Wachstum. Propyläen-Verlag, Berlin.

Ministry of Environment (2006). Monitoring Sustainable Development in Austria. Indicators for Sustainable Development. http://www.nachhaltigkeit.at/article/articleview/72274/1/25770

Ministry of Environment (2010). Wohlbefinden der Österreichischen Bevölkerung. http://www.nachhaltigkeit.at/article/articleview/84924/1/25770

Ministry of Social Affairs and Health (2011). Socially sustainable Finland 2020. Strategy for social and health policy. Publications of the Ministry of Social Affairs and Health 2011:6, Helsinki.

Monnickendam, M., Berman, Y., (2008). An Empirical Analysis of the Interrelationship between Components of the Social Quality Theoretical Construct, Soc. Indic. Res. 86:525-528

Niemenmaa V (1999). Sosiaalista kestävyyttä etsimässä. In: Niemenmaa V (toim.). Näkökulmia sosiaaliseen kestävyyteen. Paikallinen Agenda 21 -projektin julkaisu. Suomen Kuntaliitto, Helsinki.

Noll, H.H. (2002). The European System of Social Indicators: An Instrument for Social Monitoring and Reporting. Mannheim: ZUMA

Nussbaum MC (2000). Women and Human Development: The Capabilities Approach. Cambridge University Press, Cambridge.

Nussbaum MC (2008). Who is the happy warrior? Philosophy poses questions to psychology. Chicago Law Review (forthcoming).

Nussbaum MC (2010). Not For Profit. Why Democracy Needs the Humanities. Princeton University Press, Princeton.

Nussbaum MC (2011). Creating Capabilities. Harvard University Press, Cambridge, Massachusetts.

Nussbaum MC, Glover J (1995). Women, Culture and Development: a study of human capabilities. Oxford University Press, Oxford, p. 481.

Nussbaum MC, Sen A (1993) (eds.). The Quality of Life. Clarendon Press, Oxford.

OECD (2008). Global project on measuring the progress of societies. Towards a strategic action plan. STD/CSTAT(2008)8.

OECD (2008). Handbook on Constructing Composite Indicators. OECD Publications, Paris.

OECD (2011). Society at a Glance 2011: OECD Social Indicators. OECD Publishing. http://dx.doi.org/10.1787/soc_glance-2011-en

OECD Statistics Directorate (2008). Global Project on Measuring the Progress of Societies. Strategic Action Plan

Parsons T. (1951). The social system, Routledge & Kegan Paul: New York

Parsons T (1963). On the concept of political power, Proceedings of the Amercan Philosophical Society. Vol. 107/3, pp.232-262

Parsons T (1978). Action Theory and the Human Condition. Free Press, New York.

Pawson R (2006). Envidence-based policy. Sage publication, London.

Peirce, Ch.S. (1931-1935). Collected Papers, I-VI, Harthorne, Ch. & Weiss, P. (eds.), Harvard University Press

Perkiö, M. (2009) (ed.). Perspectives to global social development. Tampere University Press.

Pessi AB (2009). Selvitys altruismista ja sosiaalisesta kestävyydestä. In Näkökulmia sosiaaliseen kestävyyteen. Valtioneuvoston kanslian raportteja 2/2009.

Philips D (2006). Quality of Life. Concept, Policy and Practice. Routledge, London.

Phillips, D., Berman, Y., Social quality and ethnos communities: Concepts and indicators (2003). Community Development Journal, Vol 38, 4: 344-357

Pieper R (1987). Region und Regionalismus. Zur Wiederentdeckung einer räumlichen Kategorie in der soziologischen Theorie (Region and Regionalism. On the rediscovery of a spacial category in sociological theory), Geographische Rundschau, 10, 1987:534-539

Pieper, R (1997). Technology and the social triangle of home care: ethical issues in the application of technology to dementia care. In: Björneby, S., van Berlo, A. (eds.), Ethical issues in the use of technology for dementia care. Knegsel: Akontes

Pieper R (2004a). Integrated care: Concepts and theoretical approaches, in: Vaarama, M., <u>Pieper, R.</u> (eds.), Managing Integrated Care for Older People – European Perspectives and Good Practices, STAKES and EHMA, Helsinki

Pieper R (2004b). Integrated organisational structures, in: Nies, H., Berman, P. (eds.), Integrating Services for Older People: A Resource Book for Managers, Dublin 2004

Pieper R, Vaarama, M. (2008). The Concept of Care-related Quality of Life. In: Vaarama, M, Pieper, R, Sixsmith, A. (eds.). Care-Related Quality of Life in Old Age: Concepts, Models and Empirical Findings. Springer, Berlin.

Portes, A, Landolt, P (2000). Social Capital: Promise and pitfalls in of its role in development, Journal of Latin American Studies 32: 529-550.

Prime Minister's Office (2006). Towards sustainable choices. A nationally and globally sustainable Finland. The national strategy for sustainable development. Prime Minister's Office Publications 7/2006, Helsinki.

Prime Minister's Office (2009). Ageing report. Overall assessment of the effects of ageing and the adequacy of preparation for demographic changes. Prime Minister's Office Publications 4/2009.

Prime Minister's Office (2010). Sustainable growth - towards well-being and better quality of life. Interim report by the Growth Initiative working group. Prime Minister's Office Reports 2/2010.

Prime Minister's Office (2011), Bkt ja kestävä hyvinvointi, Prime Minister's Office Reports 12/2011

Putnam RD (1993). Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press, NJ.

Putnam RD (1995). Tuning in, Tuning out – the Strange Disappearance of Social Capital in America. Polit Sci Polit 28 (4): 664–683.

Putnam, R. (2000), Bowling Alone: The Collapse and Revival of American Community, New York: Simon & Schuster

Rapley, M. (2003). Quality of Life Research: A critical introduction. Sage Publication, London.

Rask EE (2006). Riosta Lahteen. Kestävä kehitys ja sen sosiaalinen ulottuvuus Paikallisagenda 21 -työssä 1992–2002. Pro gradu -tutkielma. Helsingin yliopisto, 2006.

Rawls J (1971). A Theory of Justice. Harvard University Press, Cambridge Massachusets.

Rawls J (1982). Social unity and primary goods. In Sen AK, Williams B (eds.). Utilitarianism and Beyond. Cambridge University Press, Cambridge.

Renwick, R. & Brown, I. (1996). The Centre for Health Promotions conceptual approach to quality of life: Being, Belonging, and Becoming. In: Renwick, R., Brown, I. & Nagler, M. (eds.) (1996). Quality of life in health promotion and rehabilitation: Conceptual approaches, issues, and applications, Thousand Oaks: Sage

Robeyns I (2006). The capability approach in practice. Journal of Political Philosophy 14: 351—376.

Robeyns I, van der Veen RJ (2007). Sustainable quality of life: Conceptual analysis for a policy-relevant empirical specification. Bilthoven and Amsterdam: Netherlands Environmental Assessment Agency and University of Amsterdam.

Room, R. (1976). Ambivalence as a Sociological Explanation: The Case of Cultural Explanations of Alcohol Problems, *American Sociological Review*, Vol. 41, 6: 1047-1065

Rosenström U, Mickwitz P (2004). Social and cultural indicators supporting the measurement of eco-efficiency in the Kymenlaakso Region. Documentation Report 3 of the ECOREG project. Finnish Environment 699en. Finnish Environment Institute, Helsinki.

Rosenström U, Kyllönen S (2007). Impacts of a participatory approach to developing national level sustainable development indicators in Finland. Journal of Environmental Management 84(3): 282-298.

Rosenström U, Palosaari M (eds.) (2000). Signs of Sustainability. Finland's Indicators for Sustainable Development 2000. Finnish Environment, Environmental Policy, Helsinki. Rothstein B (2010). Die Gleichheit, das Glück und der Wohlfahrtsstaat. Berliner Republik 12 (3): 39 – 41.

Rothstein, B, Stolle, D. (2007). Political Institutions and Generalized Trust. In Castiglione, D., van Deth, J.W., Wolleb, G. (eds.). The Handbook of Social Capital, Oxford University Press.

Ruuskanen P. (2001). Sosiaalinen pääoma - käsitteet, suuntaukset ja mekanismit, VATT-tutkimuksia nro 81. ???

Ryan RM, Deci EL (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. Annual Review of Psychology 52:141–166.

Ryff CD (1989). Happiness is everything, or is it? Explorations on the meaning of psychological wellbeing. Journal of Personality and Social Psychology 57:1069–1081.

Ryff CD, Keyes CLM (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology 69: 719–727.

Saltelli A, Jessinghaus J, Munda G (2007). Well being stories: contribution to the Experts. Workshop at the Beyond GDP Conference, EU Parliament, Brussels 19 - 20 November 2007.

Schimmack U (2009). Well-being: measuring wellbeing in the SOEP. Schmollers Jahrbuch 129 (2): 241 – 249. http://dx.doi.org/10.3790/schm.129.2.241

Scruggs L, Allan J. (2005). Welfare state decommodification in eighteen OECD countries: A replication and revision. Available at: http://sp.uconn.edu/~scruggs/jesp06.pdf

Second OECD World Forum (2007). Measuring and Fostering the Progress of Societies. Conference Papers and Presentations. 27-30 June 2007, Istanbul 2007.

Sedlacko M, Gjoksi N (2009). Sustainable Development and Economic growth. ESDN Quarterly Report. http://www.esdn.eu/?k=quarterly%20reports&report_id=15

Sen AK (1993). Capability and Well-being. In Nussbaum MC, Sen AK (eds.). The Quality of Life. Oxford University Press, Oxford, pp. 30-53.

Sen AK (1999). Commodities and Capabilities. Oxford University Press, Oxford.

Sen AK (1999). Development as freedom. Anchor Books.

Sen AK (1999). The possibility of social choice. American Economic Review 89: 349—378.

Sen AK, Suzumura K (1997) (eds.). Social Choice Re-examined, vol. 1. International Economic Association, New York; St Martin's Press and Macmillan, London.

Sen, A (2009), The Idea of Justice, New York: Penguin Books

Sieglitz-Commission - Stiglitz J, Sen A, Fitoussi J-P (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf.

Simmel, G. (1950) (eds and translated by Kurt H. Wolff). The Sociology of Georg Simmel, Glencoe, II.: Free Press

Simon H, (1962), The Architecture of Complexity, Proceedings of the American Philosophical Society, Vol. 106, No. 6. (Dec. 12, 1962), pp. 467-482.

Skevington, S.M., Lofty, M. & O'Connell, K.A. (2004). The World Health Organisation's WHOQOL-BREF quality of life assessment. A report from the WHOQOL group, Quality of Life Research, 13, p. 299-310.

Smits, Hoekstra (2010). The Measurement of Welfare, Wellbeing and Sustainable Development. http://encina.ine.cl/IAOS2010INGLES/Smits-Hoekstra%20Paper--final.pdf.

Sosiaali- ja terveysministeriö STM (2009). Kaste-ohjelman valtakunnallinen toimeenpanosuunnitelma vuosille 2008 - 2011. Sosiaali- ja terveysministeriön selvityksiä 2009:9, Helsinki.

Sosiaali- ja terveysministeriö STM (2011). Sosiaalisesti kestävä Suomi 2020. Sosiaali- ja terveyspolitiikan strategia. Julkaisuja 2011:1, Helsinki.

Stolle, D, Rothstein, B (2007). Institutionelle Grundlagen des Sozialkaptials. In Franzen A, Freitag M.. Sozialkapital. Grundlagen und Anwendungen. Kölner Zeitschrift für Soziologie und Sozialpsychologie 47: 113-140.

Taylor-Gooby P (ed.) (2004). New risks, new welfare—the transformation of the European welfare state. Oxford University Press, Oxford.

UN (2001). Indicators of Sustainable Development. Guidelines and Methodologies. United Nations, New York.

UNCED (1992). Agenda 21. United Nations, New York.

UNDP (2006). About the MDGs: Basics What are the Millennium Development Goals? http://www.undp.org/mdg/basics.shtml

Vaarama, M. (2004). Ikääntyneiden toimintakyky ja hoivapalvelut. Nykytila ja vuosi 2015. (Independent living and QoL in Old Age, and the role of care. State of the Art in Finland and prospects up to the year 2015). In: *Ikääntyminen voimavarana. Tulevaisuusselonteon liiteraportti 5.* (Ageing as a resource). Valtioneuvoston kanslian julkaisusarja 33/2004. Helsinki: Edita Prima Oy.

Vaarama M (2009). Poliittisesta kestävyydestä. In Vaarama M (ed.). Ikääntyminen riskinä ja mahdollisuutena. Poliittisen kestävyyden alaryhmän raportti. Valtioneuvoston kanslian raportteja 3/2009, Helsinki.

Vaarama, M, Pieper, R, Sixsmith, A. (eds.) (2008). Care-Related Quality of Life in Old Age: Concepts, Models and Empiricl Findings. Springer, Berlin.

Valtioneuvoston kanslia (2009). Ikääntymisraportti. Kokonaisarvio ikääntymisen vaikutuksista ja varautumisen riittävyydestä. Valtioneuvoston kanslian julkaisusarja, 1/2009, Helsinki.

Valtioneuvoston kanslia (2010). Kestävästä kasvusta hyvinvointia ja elämänlaatua. Kasvutyöryhmän väliraportti. Valtioneuvoston kanslian raporttisarja 1/2010, Helsinki.

van der Maesen, Laurent JG, Walker AC (2005). Indicators of Social Quality: Outcomes of the European Scientific Network. European Journal of Social Quality 5, (1-2):8-24(17).???

van der Maesen, Walker AC, Keiger M (2005). European Network Indicators of Social Quality. Social Quality, the final report. European Foundation on Social Quality.

Van Praag BMS, Ferrer-i-Carbonell A (2007). Happiness Quantified. A Satisfaction Calculus Approach. Oxford University Press, Oxford.

Veenhoven R (1996). Happy Life-Expectancy. A comprehensive measure of quality of life in nations. Social Indicators Research 39:1-58.

Veenhoven, R. (2000). The four qualities of Life. Ordering concept and measures of the good life. *Journal of Happiness Studies*, 1, 1-39.

Vemuri AW, Costanza R (2006). The Role of Human, Social, Built, and Natural Capital in Explaining Life Satisfaction at the Country Level: Toward a National Well-Being Index (NWI). Ecol Econ 58: 119–133.

Von Wright (1963). The Varieties of Goodness, Routledge & K. Paul, London

Von Wright G H (1971). Explanation and Understanding, Cornell University Press, New York

Von Wright G H (1984). Of Human Freedom, The Tanner Lectures on Human Values, University of Helsinki, May 16 and 17, http://www.tannerlectures.utah.edu/lectures/documents/von_wright85.pdf

Vuori M, Gissler M (2004). Indicators of Social Quality. Finland National Report, European Network on Indicators of Social Quality ENIQ, STAKES

Walker, A.C., v.d. Maesen, L. (2003). Social Quality and Quality of Life, European Foundation for Social Quality, Amsterdam

Wallace, C., Abbott, P. (2009). Social Quality in Europe, University of Aberdeen

Waterman AS (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. Journal of Personality and Social Psychology 64: 678–691.

WGSSD (Joint UNECE/OECD/Eurostat Working Group on Statistics for Sustainable Development) (2008). Statistics for Sustainable Development: A Framework for Sustainable Development Indicators (SDI). Draft report for the third meeting of the 2007/2008 Bureau. ECE/CES/BUR/2008/FEB/12/Add.1

Wilkinson R, Pickett K (2009). The Spirit Level. Why Equality is Better for Everyone. New York

Williams D R, Patterson M E (2008). Place, leisure and well-being, in: Eyles J, Williams J, Sense of Place, Health and Quality of Life, Aldershot: Ashgate

Wiman R, Voipio T, Ylönen M (eds.) (2007). Comprehensive Social Policies for Development in a Globalizing World, Ministry of Foreign Affairs and STAKES, Helsinki

Wiman, R. (2009). Challenges of social policy in the development context. In Perkiö M (ed) Perspectives to global social development. Tampere University Press.

WWF, Global Footprint Network, NC-IUCN (2005). Europe 2005: the ecological footprint. Brussels, 2005.

Yee J, Chang D (2009). Social quality as a measure for social progress. The 3rd OECD World Forum on "Statistics, Knowledge and Policy". Charting Progress, Building Visions, Improving Life. Busan, Korea, 27-30 October 2009.

Yeung AB (2004). Individually Together. Volunteering in Late Modernity: Social Work in the Finnish Church. STKL, Helsinki.

Links:

http://www.environment.fi/default.asp?node=15131&lan=EN

http://www.environment.fi/default.asp?node=12314&lan=fi

http://www.findikaattori.fi/indicatorlist_en/

http://www.findikaattori.fi/

http://www.socialquality.org

http://www.indsocdev.org/

Links to further information:

Brundtland-Report "Our Common Future", Executive Summary (1987): http://www.un-documents.net/ocf-ov.htm (For the usually quoted definition see chapter 2, paragraph 1: http://www.un-documents.net/ocf-02.htm)

Commission proposes bold EU strategy for sustainable development (press release IP/01/710 of 16/05/2001):

http://europa.eu/rapid/pressReleasesAction.do?reference=IP/01/710&format=HTML&aged=0&language=EN&guiLanguage=en

Commission Communication "A sustainable Europe for a better world: A European strategy for Sustainable Development" COM(2001) 264 final: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52001DC0264:EN:NOT

Commission Communication "Towards a global partnership for Sustainable Development" COM(2002) 82 final, adding a global dimension to the EU Sustainable Development Strategy: http://eur-

<u>lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52002DC0</u>082:EN:NOT

Commission Communication "The World Summit on Sustainable Development one year on: implementing our commitments" COM(2003) 829 final: http://eur-lex.europa.eu/LexUriServ/LexUriServ/do?uri=CELEX:52003DC0829:EN:NOT

Commission Communication "On the review of the Sustainable Development Strategy - A platform for action" COM(2005) 658 final: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005DC0658:EN:NOT

Commission Communication "Draft Declaration on Guiding Principles for Sustainable Development" COM(2005) 218 final, 25.5.2005: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52005DC0218:EN:NOT

Commission Communication "The 2005 Review of the EU Sustainable Development Strategy: Initial Stocktaking and Future Orientations" COM(2005) 37, 9.2.2005: http://eur-lex.europa.ew/LexUriServ/LexUriServ.do?uri=CELEX:52005DC0037:EN:NOT

The European Commission sets a positive agenda for the 2005 review of the Sustainable Development Strategy (press release IP/05/156 of 09/02/2005): http://europa.eu/rapid/pressReleasesAction.do?reference=IP/05/156&format=HTML&aged=0&language=en&guiLanguage=en

The EU sustainable development strategy: http://ec.europa.eu/sustainable/docs/sec2005_0225_en.pdf

Sustainable Development Strategy for an enlarged EU: http://register.consilium.europa.eu/pdf/en/06/st10917.en06.pdf

Gothenburg strategy of 2001: http://ec.europa.eu/sustainable/sds2001/index_en.htm

European Commission's site on Sustainable Development: http://ec.europa.eu/sustainable/

Research for Sustainable Development: http://ec.europa.eu/research/sd/index_en.cfm

European Council conclusions 14 December 2007 (§ 56): http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/97669.pdf

Eurostat Sustainable Development Indicators: http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators

2009 Review of EU SDS: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52009DC0400:EN:NOT

European Sustainable Development Network (ESDN): http://www.sd-network.eu/

ESDN site on national SD strategies: http://www.esdn.eu/?k=country%20profiles

First Progress Report (October 2007): http://eur-lex.europa.ew/LexUriServ.do?uri=CELEX:52009DC0400:EN:NOT + Staff Working Paper : http://ec.europa.ew/sustainable/docs/sec_2007_1416_en.pdf

Publication of a Handbook for the Peer Review of National Sustainable development Strategies: http://ec.europa.eu/environment/pdf/nsds.pdf

Eurostat 2007 monitoring report: http://ec.europa.eu/sustainable/docs/estat_2007_sds en.pdf

UN Commission on Sustainable Development (CSD): http://www.un.org/esa/dsd/csd/csd_aboucsd.shtml

United Nations Conference on Environment and Development (UNCED, Rio de Janeiro, 1992): Rio-Declaration, Agenda 21 and other documents http://www.un.org/esa/dsd/agenda21/?utm_source=OldRedirect&utm_medium=redirect&utm_content=dsd&utm_campaign=OldRedirect

UN CSD site on national SD strategies: http://www.un.org/esa/dsd/dsd_aofw_ni/ni_index.shtml

World Summit on Sustainable Development (WSSD, Johannesburg, 2002): Johannesburg Declaration on Sustainable Development:

<u>http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POI_PD.htm</u> and Johannesburg Plan of Implementation:

http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm