

Social Indicators and Quality of Life Research: Background, Achievements and Current Trends

At the beginning of the 21st century, social indicators and quality of life research are well-established fields of social science in many countries around the world. Numerous book publications, entries in handbooks and encyclopaedias, specialised journals and newsletters, national and international professional organisations, conferences and congresses and not least regular courses taught within university curricula are some indications of the successful career of two rather new branches of social research. This article will summarise the background and objectives, the major approaches and applications and will discuss some of the recent developments as well as further prospects of these multidisciplinary research fields.

1. Background and Objectives of the Social Indicators Movement and Quality of Life Research

As a field of social science social indicators research was born in the United States in the mid-1960s. Actually it came into being as part of an attempt of the American space agency NASA to detect and anticipate the impact and side effects of the American space program on U.S. society. The project came to the conclusion that there was almost a complete lack of adequate data but also of concepts and appropriate methodologies for this purpose. Presumably it was Raymond Bauer, the director of this project, who invented the term and the basic concept of 'social indicators'. In his definition, social indicators were "statistics, statistical series, and all other forms of evidence that enable us to assess where we stand and are going with respect to our values and goals" (Bauer, 1966: 1).

Although the so called "social indicators movement" obviously is a child of the sixties and early seventies of the last century, there are several predecessors of modern social indicators research. Among the most important are the trend reports by W. F. Ogburn, in particular the well-known report on *Recent Social Trends in the United States*, which was published in 1933 by U.S. Presi-

dent Hoover's Committee on Social Trends. The research conducted by Jan Drewnowski and an expert commission of the United Nations is considered to be another root of social indicators research in as far as these research activities were supposed to improve the measurement of the level of living by identifying components of welfare and by constructing respective indicators.¹ Another important predecessor whose merits in this respect have not yet been sufficiently acknowledged is the Italian statistician and criminologist Alfredo Niceforo. In his book on *Les indices numérique de la civilisation et du progrès* (Niceforo, 1921), he made an important attempt to identify quantifiable symptoms of living conditions in a broad sense – indicators in our modern terminology – in order to measure and monitor levels and degrees of civilisation and social progress across time and space.² Not considering the much older tradition of social statistics in general, Niceforo thus may be considered the originator of an approach of comprehensive welfare and quality of life measurement as it is the concern of modern social indicators and quality of life research³.

The innovative ideas, concepts, and early approaches of social indicators research, which were first developed and discussed in the United States, spread out to European and other countries and were taken up by international organisations soon after. The OECD started its well known program of work on social indicators in 1970 (Bertrand, 1986/1987), and roughly at the same time, the Social and Economic Council of the United Nations initiated a project directed by the later Nobel-Prize laureate Richard Stone in order to develop the most ambitious *System of Social and Demographic Statistics*, in which social indicators were supposed to play a key role. The early stages of social indicators research did not only exert an enormous scientific influence, but these activities were also undertaken with a strong sense of commitment and a sense of mission and thus became well known as the 'social indicators movement'.

Obviously the rise and rapid diffusion of this 'movement' was related to the particular political climate of the late 1960s and early 1970s. It was a period of prosperity, when for the first time in some of the most developed Western societies doubts were raised about economic growth as the major goal of social progress. The 'social costs' of economic growth (Mishan 1967), 'public poverty' as well as the existence of 'isles of individual poverty' as the

¹ See Drewnowski (1970).

² By treating the topic of 'happiness' within the last chapter of his volume and discussing the question whether people subjectively perceive improvements of living conditions and social progress, Niceforo did also touch upon another essential topic of modern social indicators and quality of life research. This is the correspondence between objective conditions and subjective perceptions and evaluations. In his opinion, people are unlikely to become happier even if there is social progress and a betterment of living conditions from an objective point of view.

³ Since some of his works – for example, "È Possibile un Sistema di Indici Quantitativi" (Niceforo, 1916-17) – have been published before in several volumes of 'Rivista di Antropologia' (1916-1919) as well as in a book on 'La Misura Della Vita' (1919), these ideas were born even well before the 1920s. I thank my Italian colleague Filomena Maggino for her help to get access to the early publications by Niceforo.

dark side of general 'private affluence' were emphasised and received public attention in the political debates of the time. Against this background, it seemed to be arguable whether 'more' should continue to equal 'better', and it increasingly became a public claim to prefer quality to quantity. To some degree the changes towards 'post-materialism' (Inglehart, 1977) in value orientations and perspectives of social development did reflect the diminishing marginal utility of material wealth, but they were also due to the emerging characteristics of a post-industrial society. Thus, the concept of 'quality of life' was born as an alternative to the more and more questionable concept of material prosperity in an affluent society and was considered the new, multi-dimensional and much more complex goal of societal development. From this viewpoint, quality of life was considered the developmental goal of affluent, post-industrial societies concerned about their ecological basis and facing the limits of further growth (Glatzer, 1992).

The optimistic idea that societal structures and processes could be comprehensively modelled and actively guided by politics used to be another characteristic of the specific political climate of this period. Concepts like the 'active society' and an active social policy promised a transition from reactive politics of 'muddling through' to a new and much more rational, knowledge-based and efficient model of governance. However, a model of policy making which aims at such goals needs to be based on information that enables decision makers to recognise problems early in order to set priorities and to monitor and evaluate the impact, efficiency and success of programmes and measures.

Given this background, the rise of social indicators and empirical quality of life research was to a considerable extent a result of the formation of new goals of societal development, reflecting changes in value orientations. At the same time, it was a response to the increased demand for information created by an active social policy and by the challenge to operationalise and to quantify its core formula 'quality of life'.

2. Definitions, Properties and Functions of Social Indicators

Among the numerous definitions of social indicators, two more recent ones are particularly significant and worth mentioning. The first stems from the Australian Bureau of Statistics: "Social indicators are measures of social well-being which provide a contemporary view of social conditions and monitor trends in a range of areas of social concern over time" (McEwin, 1995: 314-315). The second one appears in a United Nations document: "Social indicators can be defined as statistics that usefully reflect important social conditions and that facilitate the process of assessing those conditions and their evolution. Social Indicators are used to identify social problems that require action, to develop priorities and goals for action and spending, and to assess the effectiveness of programmes and policies" (United Nations, 1994).

Both definitions stress the focus of social indicators on living conditions in areas of social concern and the function of monitoring these conditions over time. The definition by the United Nations is much more ambitious than the first one, since it considers the uses of social indicators not merely in description and trend monitoring, but also in identifying problems, priority setting and the assessment of programs and policies. Under which conditions and to which extent social indicators may fulfil these latter purposes seems to be controversial, however.

Depending on their specific uses, social indicators are supposed to show certain properties. In general, social indicators should reflect a particular social idea, be valid and meaningful, be sensitive to the underlying phenomenon, be summary in nature, be available as time series, be able to be disaggregated, be intelligible and easily interpreted, and relate where appropriate to other indicators (McEwin, 1995: 315). Beyond the more general properties of social indicators, which are rather broadly agreed upon, Judith Innes has developed "criteria about what makes a good indicator to use in public decisions" (Innes, 1990: 110). According to her considerations, "the measure must be pertinent to questions of concern; the concepts underlying the measures must be clear and agreed upon; the measure must relate to the concept which it is assumed to, and do so in a well understood way; the methods to produce the measure must provide reliable results, measuring what they purport to without hidden or unexpected bias; and the measure must be understandable and understood in its concept and limitations" (Innes, 1990: 110). Also "major parties to discussion on opposite sides must accept the measure" and it should "relate to more complex analytical models" (Innes, 1990: 110).

Beyond the general goal of improving the information base of societies, two basic functions of social indicators have to be distinguished: monitoring of social change and measurement of individual and societal welfare.

In the broadest sense, social indicators are regarded as instruments for the regular observation and analysis of social change. The notion of social indicators as 'indicators of social change' (Sheldon and Moore, 1968) can be traced back to Ogburn and has mainly been stressed by scholars in his tradition (Smelser and Gerstein 1986). From this point of view, social indicators are - according to Wolfgang Zapf - "all data which enlighten us in some way about structures and processes, goals and achievements, values and opinions" (Zapf, 1977b: 236). Within this approach, the focus is on developing standards to register and monitor progress in modernisation of a society and the related problems and consequences. Tasks deriving from those functions are in particular: the description of social trends, the explanation of these trends, the identification of relevant relationships between different developments, and the investigation of the consequences of those changes in time series of indicators (Land, 1983). In this sense, the primary function is not the direct guidance and efficiency control of political programmes, but the broad societal enlightenment and the provision of an information base which supports the policy making process in an indirect way. Policy makers need to be in-

formed about trends of social change, as for example changes in value orientations and life styles, even if these changes are not the target of specific programmes and political measures. The volumes on *Recent Social Trends* in the United States, France, Quebec, Germany, Italy, Russia and Bulgaria, as they have been published by the international research group on *Comparative Charting of Social Change*, may be regarded as recent examples of trends in monitoring general social change within this tradition.⁴

The primary function of social indicators may however be regarded as the measurement of levels, distributions and changes in individual and societal welfare. Welfare development has been considered a specific dimension of the comprehensive processes of modernisation (Zapf, 1993). As measures of welfare or quality of life, social indicators are required to display specific characteristics. The indicators should (1) be related to individuals or private households rather than other social aggregates; (2) be oriented towards societal goals; and (3) measure the output or outcome rather than the input of social processes or policies. As welfare indicators, social indicators always have a direct normative relationship and one should be able to interpret changes in indicators unequivocally as improvement or deterioration of welfare or the quality of life. It is in this sense that Mancur Olson has in his well-known definition called a social indicator “a statistic of direct normative interest which facilitates concise, comprehensive and balanced judgements about the condition of major aspects of a society. It is in all cases a direct measure of welfare and is subject to the interpretation that if it changes in the ‘right’ direction, while other things remain equal, things have gotten better, or people are ‘better off’” (Department of Health, Education and Welfare, 1969: 97).

The assessment and monitoring of well-being is also the major focus of the broader field of quality of life research. But beyond the construction and application of indicators for social monitoring and reporting, quality of life research is also concerned with more general problems of welfare measurement, conceptual considerations and the analysis and explanation of interrelations between the various ‘objective’ and ‘subjective’ components and dimensions of the complex phenomenon of quality of life.

3. Approaches and Research Directions

Since social indicators and quality of life research are essentially concerned with measuring and monitoring welfare and quality of life, the notions and theoretical underpinnings of these concepts are of crucial importance: “In order to measure quality of life, one must have a theory of what makes up a good life” (Cobb, 2000: 6).⁵ There is a variety of such theories and notions of

⁴ See the respective book series published by McGill-Queen’s University Press.

⁵ See also G. Esping-Andersen (2000: 1): “What does it mean to enjoy good or bad welfare? What kind of welfare should be optimized?”

what constitutes a 'good life' or a 'good society' and correspondingly different concepts of welfare and quality of life have been developed. Various approaches and operationalisations are to be distinguished, each of which reveals a different notion of welfare and thus highlights different components and dimensions. Moreover, the kind of indicators chosen for empirical measurement also largely depends on the underlying conceptualisation. In particular, the distinction between so-called 'objective' and 'subjective' social indicators goes closely together with the respective conceptual frame of reference. While objective social indicators are statistics which represent social facts independent of personal evaluations, subjective social indicators are measures of individual perceptions and evaluations of social conditions (Noll, 2000b).

3.1. Notions of Welfare and Approaches of Quality of Life Measurement

Among the various efforts to operationalise welfare in general and the quality of life concept in particular, two polar approaches are to be distinguished, which define the two extreme positions on a broad continuum of concepts currently available (Noll/Zapf, 1994): the Scandinavian level of living approach (Erikson, 1993; Uusitalo, 1994) and the American quality of life approach (Campbell/Converse/Rodgers, 1976). As two distinctive conceptualisations and operationalisations of welfare and quality of life,⁶ the Scandinavian approach focuses almost exclusively on resources and objective living conditions. The American approach emphasises the subjective well-being of individuals as a final outcome of conditions and processes.

The level of living approach as it has been developed by Scandinavian welfare researchers, following the tradition set by Jan Drewnowski and Richard Titmus, bases welfare measurement exclusively on objective indicators. Within this tradition, welfare is understood as the "individual's command over, under given determinants mobilisable resources, with whose help he/she can control and consciously direct his/her living conditions" (Erikson, 1974: 275; Erikson, 1993: 72 ff.). This notion of welfare departs from the perception of the individual citizen "as an active, creative being, and the autonomous definer of his own end. The resources are mere means to the latter" (Thålin, 1990: 166). Resources are defined in terms of money, property, knowledge, psychic and physical energy, social relations, security and so on (Erikson/Uusitalo, 1987: 189). The focus is on the objective living conditions, life chances and their determinants: "We ... try to assess the individual's level of living in a way which makes it as little influenced as possible by the individual's evaluation of his own situation" (Erikson, 1993: 77).

⁶ "... the word 'welfare' in all the Scandinavian languages also stands for well-being, and it relates to both level of living and quality of life" (Allardt, 1993: 88).

A more recent and to some respect similar concept of welfare and quality of life is that of 'capabilities', which has been developed by Amartya Sen, the Nobel laureate in economics. This approach is "based on a view of living as a combination of various 'doings and beings', with quality of life to be assessed in terms of the capability to achieve valuable functionings" (Sen, 1993: 31). Functionings "represent parts of the state of a person – in particular the various things that he or she manages to do or be in leading a life.... Some functionings are very elementary, such as being adequately nourished, being in good health, etc. ... others may be more complex, but still widely valued, such as achieving self-respect or being socially integrated" (Sen, 1993: 31). This notion of welfare and quality of life has been elaborated within the 'Human Development Approach', the conceptual framework of the series of 'Human Development Reports' published by the United Nations Development Program.

The American quality of life research bases welfare measurement primarily on subjective indicators. In the tradition of utilitarian philosophy, 'mental health research' and strongly influenced by social psychologists like W. I. Thomas known by his dictum that "if men define situations as real, they are real in their consequences" (Thomas 1928: 571-572), this approach ultimately defines welfare as subjective well-being. The representatives of this approach underline that welfare and quality of life are supposed to be subjectively perceived and experienced by the individual. Seen from this point of view, the subjective well-being of the individual citizen is considered to be the ultimate goal of societal development and the yardstick to be used for measuring the quality of life: "The quality of life must be in the eye of the beholder" (Campbell, 1972: 442).⁷ Accordingly, the "common man himself" is considered to be the best expert to evaluate his quality of life in terms of subjective well-being. The most important indicators of subjective well-being used actually are measures of satisfaction and happiness.

During the last three decades, subjective human well-being has been the subject of numerous studies developing theoretical models and empirical measures, describing and comparing levels and changes of well-being for various populations and suggesting explanations for the findings.⁸ The empirical correlates and explanatory factors of life satisfaction as an overall indicator of general subjective well-being are at the centre of a research field, which during recent years has attracted much interest and attention all around the world.⁹

⁷ For a conceptualisation of quality of life in terms of subjective well-being see also Argyle (1996).

⁸ Reviews of the vast literature and overviews over this field of research are provided for example by Diener (1984), Diener et al. (1999), Heady/Weary (1992) and Veenhoven (1996).

⁹ Many findings of this kind of research have been published in the international journal *Social Indicators Research* (edited by Alex Michalos). The *Journal of Happiness Studies* (edited by Ruut Veenhoven) is another more recent periodical, devoted to subjective well-being. Many researchers working in the field of subjective well-being are organized within The International Society for Quality-of-Life Studies

3.2. Objective and Subjective Indicators

The use of objective indicators starts from the assumption that living conditions can be judged to be favourable or unfavourable by comparing real conditions with normative criteria like values, goals or objectives. An important precondition, however, is that there is a societal or even political consensus about three key issues: *first*, about the dimensions that are relevant for welfare considerations; *second*, about good and bad conditions; *third*, about the direction in which society should move. This may sometimes be the case, but it is certainly not always ensured. Probably there is a consensus that we would consider a reduction of unemployment or crime and an increase in the average income or educational level as improvement and progress. We could perhaps be less sure, when it comes to indicators like the age of retirement; and it might indeed be debatable whether a reduction of income inequality should in general be regarded as social progress, given the fact that there may be a trade-off between equity and efficiency or fairness and economic growth (McMurrer/Sawhill, 1998: 25).

In contrast to that, using subjective social indicators is based on the premise that welfare, in the final instance, must be perceived by individual citizens and can be judged best by them. This position, too, is not undisputed and has caused a deep controversy about the principles of welfare measurement. Particularly Scandinavian welfare researchers have criticized this subjective quality of life approach and the use of subjective indicators. One of their concerns “with an approach based on people’s own assessment of their degree of satisfaction is that it is partly determined by their level of aspiration” (Erikson, 1993: 77).¹⁰ Looking at how satisfied people are, from this point of view is being criticized as “measuring how well they are adapted to their present conditions” (Erikson 1993: 77). According to R. Erikson - one of the most eminent proponents of Scandinavian welfare research – “people’s opinions and preferences should go into the democratic political process through their activities as citizens, but not through survey questions and opinion polls” (1993: 78). Contrary to this position, others have underlined that policy makers need to use subjective indicators along with objective indicators: “.subjective indicators are indispensable in social policy, both for assessing policy success and for selecting policy goals” (Veenhoven, 2000: 6).

are organized within The International Society for Quality-of-Life Studies (ISQOLS), which is an association promoting and encouraging research in the field of quality of life studies in general with a focus on subjective well-being.

¹⁰ For a recent scepticism about ‘subjective indicators’ see Cobb (2000: 5f): “Treating self-reported measures as adequate representations of QOL presupposes that people are conscious of and able to articulate nuances of feelings, that transitory feelings represent durable conditions, that feelings are equivalent to values, that happiness or other reported feelings fully account for valued conditions, and that feelings can be quantified on an absolute scale. In addition, there is a pronounced difference between what people say they want and what they actually do, which causes some researchers to ignore survey-based indicators altogether.” For a general discussion of the ‘Qualms About Subjective Indicators’ see Veenhoven (2000).

In addition to the general doubts concerning the use of subjective indicators, questions have been raised concerning the validity and reliability of this kind of information. However, there is not much reason to believe that subjective indicators are less valid and reliable than other survey data, which always are affected by measurement errors: "Subjective indicators measure, what they ought to measure and they react sensitive to societal developments" (Habich/Zapf, 1994: 30).

Today, the overall consensus of opinion is to base welfare measurement on both objective and subjective indicators, given the fact "that similar living conditions are evaluated quite differently, that people in bad conditions frequently are satisfied and privileged persons may be very dissatisfied" (Zapf, 1984). Such a broader notion of welfare and quality of life was for example taken as the basis of Erik Allardt's *Comparative Scandinavian Welfare Study* as early as in the beginning of the 1970s. This approach distinguishes between three classes of basic needs of human beings - having, loving and being (Allardt, 1993).¹¹ For each category, objective as well as subjective dimensions of need satisfaction are considered. Within the predominant approach of German welfare research, individual welfare or quality of life is defined as "good living conditions which go together with positive subjective well-being" (Zapf, 1984). Within this frame of reference, the co-variations between objective and subjective indicators are of particular interest, since subjective well-being is supposed to be only partially determined by external conditions.

More recently, Lane (1996) defined quality of life not only as a state, but also as a process which includes subjective and objective elements. In his approach, he particularly emphasizes the active role of personal experience and the capacity of individuals – in his terms the 'quality of persons' - as a constitutive element of life quality: "Quality of life is properly defined by the relation between two subjective or person-based elements and a set of objective circumstances. The subjective elements of a high quality of life comprise: (1) a sense of well-being and (2) personal development, learning growth.... The objective element is conceived as quality of conditions representing opportunities for exploitation by the person living a life" (Lane, 1996: 259).

3.3. *Utility Versus Agency*

There is a multitude of current conceptualisations of welfare and quality of life following the one or the other tradition. The predominant use of objective or subjective indicators is of course only one distinctive feature. According to Clifford W. Cobb (2000), the various notions might be assigned to 'utilitarian' as opposed to 'capabilities or human development' approaches. Similarly, Esping-Andersen distinguishes approaches based on needs as opposed

¹¹ The 'loving' category would - by the way - cover many of the dimensions which in our more current terminology are referred to by the concept of social cohesion.

to resources (2000). According to the dominating utilitarian or needs-based approaches, “quality of life involves the satisfaction of the desires of individuals, and the good society is defined as one that provides the maximum satisfaction or positive experiences for its citizens” (Cobb, 2000: 9). Conceptualisations following a resources approach or capabilities / human development theory on the other hand emphasize ‘human action’ or ‘agency’. From this point of view “a society that enables its citizens to aspire to greatness, to develop virtues and loyalties, to become skilled and artistic, and to attain wisdom is far better than a society that merely provides the means to satisfy desires” (Cobb, 2000: 10). According to Cobb (2000:13), utilitarian approaches are in Erik Allardt’s terms, “limited to ‘having,’ whereas the human development idea includes ‘having,’ but also encompasses ‘doing’ and ‘being’”.

3.4. Individual Versus Societal Quality of Life

A common feature of most of the current quality of life approaches is the more or less implicit or explicit conceptualisation of quality of life as concerning *individual* characteristics and life circumstances. Although they have been part of the early versions of the quality of life concept, dimensions of welfare related to *societal* characteristics and qualities such as equality, equity, freedom, or solidarity – which affect the welfare situation of individuals directly or indirectly - have been rather neglected, at least as far as empirical measurement and research are concerned. In contrast to this, some of the more recent welfare concepts put the focus explicitly on aspects concerning the quality of societies, the distribution of welfare and social relations within societies (Noll, 2000a).

Social cohesion and sustainability are two major examples of notions of the good society stressing relational and societal rather than individual characteristics. In recent years the concept of social cohesion received great attention not only within academic debates, but also within policy making processes at national and supranational levels. The increasing popularity of the concept is most likely due to various aspects of economic and social change, which are currently considered to threaten the social cohesion of societies such as rising income inequality, poverty, unemployment, and crime. As a detailed review of the literature reveals (Berger-Schmitt/Noll, 2000; Berger-Schmitt, 2000), the concept of social cohesion incorporates mainly two dimensions of societal development, which may be related to each other but should be distinguished analytically. The first dimension concerns the reduction of disparities, inequalities, fragmentations and cleavages, which have also been denoted as ‘fault lines’ of societies. The concept of social exclusion is covered by this notion too. The second dimension embraces the forces strengthening social relations, ties and commitments to and within a community. This dimension is also stressed by the concepts of social inclusion and social capital. Although both of these dimensions emphasised within the social cohesion discourse are supposed to represent major components of indi-

vidual and societal well-being, they have been rather neglected within mainstream quality of life research.

During the 1990s, the concept of sustainability has become a popular and most important model of societal development and a 'better society'. From a general point of view, the concept of sustainability can be seen as a new answer to the traditional concern with a balanced and harmonious society and societal development (Noll, 2000a). The concept became popular in 1987 as the central message of the so-called Brundtland-Report *Our Common Future* of the World Commission on Environment and Development, where it was defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987: 43). Usually three dimensions of sustainable development are being distinguished: the environmental, the social and the economic dimension; which are supposed to be linked to each other. Thus, sustainability has been defined "as a continuous striving for the harmonious co-evolution of environmental, economic and socio-cultural goals" (Mega/Pedersen, 1998: 2). Among the various attempts to conceptualise and to operationalise sustainable development;¹² the World Bank's Multiple Capital Model (World Bank, 1997) is one of the best known and popular approaches.

Within this approach, sustainable development is conceptualised with reference to national wealth and denotes the maintenance or enhancement of wealth for future generations. The World Bank approach distinguishes between four components of wealth: natural capital, produced/man-made capital, human capital and social capital. From this perspective, the goal of passing on to the next generation at least as much natural, economic, human and social capital as the current generation has at its disposal is at the centre of the idea of a sustainable development. While the view of traditional quality of life research is mainly focused on the well-being of present generations, sustainability considerations put the emphasis on intergenerational equity and thus are being essential for ensuring the quality of life of future generations. In this sense, "sustainable development has become a widely accepted term to describe the goal of achieving a high, equitable and sustainable quality of life" (Eckersley, 1998: 6).

4. Applications and Uses of Social Indicators and Quality of Life Research

The innovative ideas developed within the social indicators movement and several decades of quality of life research have been documented in all kinds

¹² An overview can be found in OECD, 1998; Moldan/Billharz/Matravers, 1997; Hardi/Barg/Hodge, 1997. See also U.N. Commission on Sustainable Development 1996.

of academic publications, including numerous book volumes, handbooks, articles as well as specialised journals and newsletters, like *Social Indicators Research*, the *Journal of Happiness Studies*, *INDICATORS*, *Social Indicators Network News* and the German *Informationsdienst Soziale Indikatoren*. Moreover, these ideas and findings have also found their way into regular university curricula and into the policy making at various levels - supranational, national, regional and local. Academics and practitioners working in these fields have organised themselves in professional working groups, associations and societies like the working group 'Social Indicators and Social Reporting' within the International Sociological Association or the 'International Society for Quality of Life Studies'.

The results of social indicators and quality of life research in terms of concepts, methodologies, monitoring tools, indicator selections and the like are being used by many observatories around the globe for continuous social measurement and monitoring. However, few systems of social indicators have been developed so far (Berger-Schmitt/Jankowitsch, 1999). Among them are the Swedish survey based ULF system¹³ and the German System of Social Indicators, which comes also as an electronic information system (DISI 2.0).¹⁴ Both of these tools for systematic social monitoring have originally been developed in the seventies.

A recent example of a social indicator system is the 'European System of Social Indicators', which has been developed as part of the "EuReporting-Project," funded by the European Commission from 1998 to 2001.¹⁵ This system is considered to be an instrument to continuously monitor the 'social situation' and societal changes in Europe (Noll, 2002b). The indicator system covers 14 life domains altogether. Within each life domain, the dimensions of measurement and indicators address different aspects of individual quality of life, as well as dimensions of social cohesion and sustainability as two mayor components of the 'quality of society' (Berger-Schmitt/Noll, 2000). Moreover, also basic dimensions of the social structure as well as attitudes and value orientations are covered. The indicator system not yet finalized shall include 20 European countries, but also the U.S. and Japan as two important reference societies. As part of this research an electronic 'European Social Indicators Information System' is under development, which will provide an innovative and easy to use tool to query, retrieve and display the data either in tabular or graphic formats at the PC screen and to transfer this information into other applications.

¹³ For detailed information see (all weblinks checked by September 2002):
http://www.scb.se/eng/befovalfard/levnadsforhallanden/centrala_indikatorer/ulf/ulf.asp

¹⁴ For detailed information see:
http://www.gesis.org/en/social_monitoring/social_indicators/index.htm

¹⁵ Detailed information on this indicator system is available at:
http://www.gesis.org/en/social_monitoring/social_indicators/EU_Reporting/eusi.htm

4.1. Social Reporting: A Major Application

Regular social monitoring and reporting is by far the most important and most successful application of social indicators and quality of life research. Social reporting - according to an early definition by Wolfgang Zapf - aims at providing "information on social structures and processes and on preconditions and consequences of social policy, regularly, in time, systematically, and autonomously" (Zapf, 1977a: 11). In a less ambitious way, one may define social reporting simply as a more or less institutionalised collection and presentation of data, which enable the evaluation of living conditions and well-being of the population and their changes over time. Thus, social reporting generates quantitative information and empirically based knowledge to be used for the purposes of self-reflection of a single society or a group of societies like the European Union. As a specific mode of production, dissemination, and presentation of socially relevant knowledge, social reporting today is well established within the information systems of many nation states and within international and supranational organisations like the OECD, the European Union and the United Nations.

In Europe there are now only very few countries left, which do not conduct any sort of comprehensive and regular social reporting at the national level (Figure 1). Some of the most well known reports, e.g. the British *Social Trends*, the Dutch *Social and Cultural Report*, and the French *Donnés Sociales* - are already been published for approximately 30 years. On the other hand, in some countries like Portugal, Switzerland or the Czech Republic, comprehensive social reports have been published only recently.

Interestingly enough, the United States as the society where the social indicators movement evolved and some of the first social reporting activities took place, has failed so far in establishing a regular and continuously published national social report. Although *Towards a Social Report* prototype of an American social report had been developed by Mancur Olson on behalf of the Department of Health, Education and Welfare and was published as early as 1969, the American President did not take up the idea of establishing a regular annual report as it was requested as part of the so-called 'Mondale Initiative' (Booth, 1992). Also, the series of reports published under the title *Social Indicators* has been discontinued after the latest issue in 1981. Today there are several non-official publications serving the demand for social reporting in the U.S. as for example the report *Social Health of the Nation* (Miringoff/Miringoff, 1999) or *Calvert-Henderson Quality of Life Indicators* (Henderson/Lickerman/Flyn, 2000).¹⁶

¹⁶ In a recent article the Fordham Institute for Innovation in Social Policy has announced to regularly publish an annual social report for the U.S. in the future (Miringoff et al. 2001/2002).

Table 1: National social reports for European countries

Country/Institution	Title	First Edition	Latest Edition	Period
Austria Statistisches Zentralamt	<i>Sozialstatistische Daten</i>	1977	1990	4/5 years
Czech Republic Institute of Sociology (J. Vecernik/P. Mateju (eds.))	<i>Ten years of rebuilding capitalism</i> <i>Czech society after 1989</i>	1999	1999	?
Denmark Danmarks Statistics / Socialforskningsinstituttet	<i>Levelikår I Danmark</i>	1976	1997	-4 years
Germany Statistisches Bundesamt with WZB and ZUMA	<i>Datenreport</i>	1983	2002	2 years
France Institut Nationale de la Statistique et des Economique	<i>Données Sociales</i>	1973	1999	3 years
Great Britain Central Statistical Office	<i>Social Trends</i>	1970	2001	1 year
Hungary Tarki	<i>Social Report</i>	1990 English 1992	2000 English 1998	2 years
Italy Istituto Nazionale di Statistica	<i>Sintesi della Vita Sociale Italiana</i>	1990	1990	
CENSIS	<i>La situazione del paese</i> <i>Rapporto sulla situazione sociale del paese</i>	1992	2000	1 year
Luxembourg CEPS/Instead	<i>Recueil D'Etudes Sociales</i>		1997	?
Netherlands Social and Cultural Planning Office	<i>Social and Cultural Report</i>	1974	2000 English 1998	2 years
Norway Statistics Norway Norges Offentlige Utredninger	<i>Sosialt Utsyn</i> <i>English Edition</i> <i>Levekå i Norge</i>	1974	2000	2 years
Portugal Instituto Nacional de Estatistica Instituto de Ciencias Sociais, Universidade Lisboa	<i>Portugal Social 1985-1990</i> <i>Situacao Social em Portugal, 1960/1992</i> 1996	1992	1992	?
Spain Instituto Nacional de Estadistica	<i>Indicadores Sociales</i> <i>Panoramica Social</i>	1991	1999	?
Sweden Statistics Sweden	<i>Perspectiv på Välfärden</i> <i>Välfärd och Ojämlighet</i>		1987	Erratically
Switzerland Ch. Suter (ed.)	<i>Sozialbericht 2000</i>	2000	2000	?

Canada has become a centre of diverse social monitoring and reporting activities in recent years, although a regularly published comprehensive social report does not yet exist at the national level.¹⁷ However, there are not only reporting activities at the local and provincial levels, such as the *Portrait Social du Quebec* (Institut de la Statistique Quebec, 2001), but also recent initiatives to promote social reporting and quality of life measurements and research by organisations like the Canadian Policy Research Networks and the Canadian Council on Social Development, leaving out diverse academic activities.¹⁸

But even outside Europe and North America social reporting is well established by now. In recent years Australia saw several new initiatives in social reporting. In 1994 the Australian Bureau of Statistics published *Australian Social Trends* as the first edition of an annual series, which aims to monitor changes in Australian social conditions over time. In 2001 the Australian Bureau of Statistics issued a publication on *Measuring Wellbeing* (Australian Bureau of Statistics, 2001), which is supposed to provide a framework for Australian social statistics in each area of social concern. Also New Zealand has released a first national social report in 2001 (Ministry of Social Policy New Zealand, 2001). Starting in the early nineties a *Social Panorama of Latin America* has already been published several times by the United Nations Economic Commission. *Indicator South Africa: The Barometer of Social Trends* is a quarterly publication by the Center for Social and Developmental Studies of the University of Natal, monitoring the far reaching transformations of the South African society. There are also some interesting social reporting activities in Japan, mainly by the Economic Planning Agency of the Japanese government. Even in China some projects focusing on quality of life monitoring have been established recently. Of course, these are only some examples, which by no means are supposed to form a complete list of such reporting efforts.

In addition to social reports presenting a comprehensive view of living conditions and quality of life in a society, there are also domain or group specific reports, which are being published in many countries regularly. Such reporting activities include reports on family life, the health situation, education or poverty and on social groups like the elderly, young people, women and children. If one regards the successful spread of national social reporting as a process of diffusion of an innovation within the system of societal information, certain regularities may be detected. Looking at Europe, it seems that the establishment of national social reporting obviously was promoted best under the preconditions of an articulated welfare-state policy, an interventionist orientation of government, innovative statistical agencies, and geo-

¹⁷ Statistics Canada publishes the quarterly *Canadian Social Trends*, which reports on diverse topics of the social conditions in Canada, but not a comprehensive social report.

¹⁸ The Canadian Policy Research Networks (2002) just recently has published its first 'Citizens' Report Card' on 'Quality of Life in Canada'.

graphical centrality (Rothenbacher, 1993; Habich/Noll, 1994). In addition, the European integration and processes of economic integration and political cooperation in other parts of the world have had a significant impact on the further development of social reporting. As we can notice by looking at the publication of social reports in Hungary, the Czech Republic and other former socialist countries, it seems that with political liberalisation and the transition to market economies, the development of social reporting has gained additional momentum in those countries as well.

Supranational organizations took up social reporting early and today they still continue to be among the most important actors in this field. The OECD Programme for Work on Social Indicators (OECD, 1982) and the System of Social and Demographic Statistics of the United Nations (1975) have heavily influenced modern social reporting. The OECD, however, failed to convert its ambitious concepts into a regular reporting system. The early OECD programme on social indicators was cancelled in the mid-1980s after the first and final publication of the report *Living Conditions in OECD Countries*. However, the OECD has again taken up its social indicator activities in the meanwhile and recently has published a new report *Society at a Glance – OECD Social Indicators* (OECD, 2001a). Related reporting activities by the OECD concern the measurement and monitoring of human and social capital (OECD, 2001b) as well as sustainable development (OECD, 2001c).

At present, the diverse activities of the United Nations and its special organisations are concentrated on global observations of social or human development. In addition to the World Bank Reports, the Human Development Reports of the United Nations Development Program are of particular interest (UNDP, 2001). Especially the effort to use the Human Development Index as a summary measure of societal development, offering an integrated view across different dimensions of the level of living, has attracted attention and has triggered a new academic debate on the general possibilities, but also the advantages and shortcomings of composite measures of quality of life and social development (Hagerty et al., 2001; Noll, 2002a).

In contrast to the United Nations and the OECD, the European Community has taken up social reporting at least in the beginning in a rather pragmatic manner. The series *Social Indicators for the European Community* published by Eurostat in three editions from 1977 to 1984 was replaced in 1991 by the annual report *Social Portrait of Europe*. Since 1998 Eurostat publishes a pocketbook on *Living Conditions in Europe*, presenting a selection of 'key indicators'. Even closer to the ideal of a social report comes the *Social Situation Report*, an annual collaborative report by Eurostat and the European Commission, published for the first time in the year 2000. This report attempts to provide "a holistic view of population and social conditions as a background to social policy development and establishes links with community policies in the social field such as the European Employment Strategy" (Eurostat/European Commission, 2000:5). There is clear evidence that the authorities of the European Union are giving new priority to social

indicators and social reporting not least as a consequence of the stronger emphasis that is placed on the social dimension as part of the processes of European integration. The improvement of living conditions and the quality of life in its member states is among the main concerns and policy goals of the European Union, as has been stated for example in the Maastricht Treaty.¹⁹ Accordingly, the availability of appropriate knowledge and systematic information on individual and societal well-being within and across European societies is of crucial importance to enhance the European integration and cohesion between member states and thus to create the Social Europe of the 21st century.

The available reports demonstrate that social reporting is characterised by a variety of conceptual approaches, reporting schemes, actors, and institutional solutions. Obviously, there is not just one generally agreed-upon model, but a variety of more or less successful and convincing variants. The agents of social reporting are for the most part statistical offices, but also include special planning agencies, ministries, associations (e.g. trade unions), and professional institutions. The available reports thus differ in analytical depth, sophistication of methods, and style of presentation.

4.2. Uses of Social Indicators and Social Reporting: Enlightenment and Information for Policy Making

As seen in retrospect, the success of social indicators research and social reporting is more striking in the field of general enlightenment than in the production of technical expert knowledge or the provision of special planning intelligence for policy makers. The ideas of using social indicators and social reporting to contribute to a rationalisation of the political process, to set goals and priorities, to evaluate political programmes, and to develop early warning systems have at least partially proven to be too ambitious. According to a recent suggestion by Brown and Corbett, five basic policy-relevant uses of social indicators may be distinguished, which they consider as a “hierarchical typology of uses which incur progressively exacting demands: description, monitoring, setting goals, outcomes-based accountability and evaluation” (Brown/Corbett, 1997: iii). While social indicators and social reports have quite successfully been used as description and monitoring tools, their application and use in the latter fields is still insufficient if not problematic.²⁰

In the early stages of social indicators and quality of life research, the complexity of the policy making processes has been underestimated and the relevance of empirical information on the changes of societies for political

¹⁹ For an analysis of policy goals at the European level see Berger-Schmitt/Noll (2000: 28ff.).

²⁰ One may also argue that more sophisticated research designs including the use of microdata analysis are requested when it comes to the evaluation of the impact and efficiency of political measures and programs.

action has been judged too optimistically. The believe of some advocates of social indicators research and social reporting that “‘what gets measured gets done’ ... makes a nice slogan, but is not entirely true” (Cobb/Rixford, 1998: 23). In her analysis of the use of knowledge in public policy, Judith Innes came to the following conclusion: “The failure was more due to an overly simplistic view of how and under what conditions knowledge influences policy, than to, as some observers suggested, a fundamental conflict between the worlds of knowledge and public action” (Innes 1990, p. 430). But obviously, an instrumental or technocratic model which proposes a direct demand on the part of politics for scientific information in order to solve policy problems does not provide us with an appropriate view of this link. As it seems, a model of enlightenment according to which social science is rather indirectly connected with politics, is much more realistic. In this sense it is only consequential that social indicators research and social reporting today is assigned a less ambitious and less direct function as a provider of information. According to Vogel (1990: 441) “social reporting belongs to the democratic infrastructure and has a special political function. To put it simply, social reporting places welfare issues on the political agenda. It supplies material to the public debate, influencing the media and, indirectly, the administration.” If we are going to distinguish three ways of affecting public policy - problem definition, policy choice and programme monitoring (MacRae, 1985) - the role of social reporting so far obviously focuses on that of ‘problem definition’, e.g. on the identification of new problems or challenging and changing existing definitions of problems.²¹

5. Recent Trends in Social Indicators and Quality of Life Research

During the past three decades the fields of social indicators and quality of life research have undergone various cycles of growing and declining attention and activity levels. Obviously, the interest in these fields and respective research and reporting activities have increased considerably during the nineties and at the turn of the century. According to Esping-Andersen (2000: 1), this was partially due to “dissatisfaction with the kind of indicator and monitoring approach that ensued under the aegis of the United Nations, the ... OECD and the World Bank, and in part by the widespread recognition that the terrain of social welfare has changed dramatically in recent decades.”

²¹ This perception of the role of social reporting is confirmed by Sten Johansson, a founder of the Scandinavian social indicators movement and level of living research: “Social reporting would serve the democratic process best if it answers, how it is and leaves the answers on ‘how it ought to be’ and ‘what should be done’ to come about through discussions among citizens“ (Johansson, 2001: 1).

Additional reasons for the renewed interest may be found in the new objectives of societal development like sustainability and social cohesion and the need for respective monitoring tools, the processes of globalisation and internationalisation and the popularity of benchmarking at different levels, new models of governance and a trend towards evidence-based policy making practices, to mention just a few.

Recent developments reflect and to some degree overcome critical views of 'traditional' social indicators research as they have been expressed for example by Esping-Andersen (2000) or Cobb/Rixford (1998) and Cobb (2000). Esping-Andersen has criticized the "Keynesian-inspired ideas of welfare monitoring that were developed in the 1960s and 1970s" (Esping-Andersen, 2000: 1) as being atheoretical and purely descriptive, overly static and unhistorical and based mainly on discrete aggregate measures designed to follow trends. This view of 'traditional' social indicators research may certainly be challenged and trend monitoring based on aggregated measures still seems to play an important role among other monitoring functions. On the other hand, more recent approaches frequently use micro-data bases, including longitudinal data as for example provided by household panel and life history studies, which to some extent is simply due to the improved availability and accessibility of this kind of data. Such a development also facilitates a progress from description to analysis as suggested by Cobb/Rixford (1998: 2): "in order to move from indicators to action, projects must examine the causes behind the symptoms, a process that could lead the indicators movement in a new direction."

A detailed and comprehensive presentation of recent developments in social indicators and quality of life research certainly would exceed the scope of this article. The following pages contain just a sketch of some trends the author considers to be the most significant.

5.1. Sophistication of Methods and Improved Databases

As far as methodological issues are concerned, the application of more sophisticated methods of data analysis and presentation is among the most obvious developments. Particularly the worldwide web has provided new techniques and opened new perspectives for the presentation and dissemination of information on living conditions and quality of life. In addition, the availability of appropriate databases has greatly improved compared to the early stages of social indicators and quality of life research. In many countries specific quality of life or social studies are conducted regularly now, serving a "need for regular, integrated surveys and simultaneous measurement of social indicators, as well as extended data on the quality of life" (Vogel, 1997: 112f). Many of these surveys are being regularly repeated, thus forming databases to be used for continuous monitoring and analysis across time. Particularly, the increasing availability of longitudinal data provided by house-

hold panel studies has opened new perspectives for the description and explanation of life quality and social change. Longitudinal information which goes beyond time series of aggregate data offers much better opportunities, not only for developing longitudinal indicators such as inflow-, outflow- and duration-indicators, but also for causal and dynamic analysis.

5.2. Community Indicators Movement and Quality of City Life

In recent years, social indicators and quality of life research has increasingly been applied at community and city levels, not considering that the topics of urban indicators and quality of life have also received growing attention in academic research.²² In particular, during the nineties numerous urban or community indicator initiatives emerged around the globe. Some observers referred to this development as the 'community indicators movement', which includes academic as well as policy oriented components. At the turn of the century only in the United States "over 200 communities ... developed sets of indicators that illuminate long-term trends of economic, environmental, and social well-being" (Redefining Progress website).²³ While some of these projects explicitly refer to quality of life as their frame of reference, others start from concepts like sustainability or 'healthy communities'. For example, a project of the U.S. National League of Cities on 'Cities in Transition' aims at the construction of an index of municipal livability and well-being for cities. The Winnipeg Quality of Life Indicators project establishes a measurement system for quality of life. Other examples are the project on Quality of Life in Big Cities of New Zealand, which began in 1999 with the objective to establish indicators of social well-being, including also economic and environmental indicators designed to monitor quality of life as a whole,²⁴ and at a larger scale the Urban Indicators Program by the United Nations' Centre for Human Settlements (Habitat). It is developing indicators to provide a comprehensive picture of cities and measure progress towards achieving urban objectives.²⁵ In many cases, urban indicators and quality of life projects are combined with specific data collection programmes such as quality of life or citizen surveys. A well known example is the New York City Social Indicators Survey (SIS), designed to monitor changes in the well-being of New Yorkers and identifying populations in need of additional programmes or services.²⁶ In Germany, there are now almost twenty larger cities conducting

²² See for example the proceedings of a recent conference on urban quality of life (Yuan/Yuen/Low, 1999)

²³ See <http://www.rprogress.org/projects/indicators/>. A compendium of such initiatives in the U.S., Canada and other regions of the world is available at: <http://iisd1.iisd.ca/measure/compindex.asp>.

²⁴ See <http://www.bigcities.govt.nz/index.htm>

²⁵ See <http://www.unhabitat.org/guo/gui/>

²⁶ See <http://www.columbia.edu/cu/ssw/projects/surcent/>.

citizen surveys on a regular basis, which are more or less focused on quality of life issues. The results of these diverse community indicators and quality of life projects are primarily used for social reporting activities at the community and municipal level, but are also reflected in academic debates, at conferences and in scientific publications.

5.3. *Quality of Life of Specific Population Groups*

Quality of life studies as well as social reporting activities have been addressing and focussing on specific population groups for quite a long time. Among those groups are for example women, immigrants, young or handicapped people. More recently, two target groups – children on the one hand and the elderly on the other – have attracted particular interest in terms of research and reporting activities.

The specific life situation of children has been largely ignored in the early stages of social indicators and quality of life research, but it is now at the centre of many research and reporting activities.²⁷ Since the information on living conditions and quality of life of children is sometimes difficult to obtain from general population surveys, particular child-surveys have been developed and conducted in some countries in recent years. From the many ‘child reports’ and indicator initiatives at various levels, only few may be mentioned here: The *Progress of Canada’s Children 2001* is a national report and the fifth in a series published by the Canadian Council on Social Development monitoring the well-being of children, youth, and families. The long-term goal of this report is to measure changes in children's well-being from year to year. The annual reports focus particular attention on varying topics such as the ‘school-aged children’ in the 2001 report for example. In the United States several child reporting initiatives have been launched during the last decade: *Trends in the Well-Being of America’s Children and Youth 2001* is the sixth edition of an annual report from the Department of Health and Human Services. The report is based on more than 80 indicators of well-being: “It is intended to provide the policy community, the media, and all interested citizens with an accessible overview of data describing the condition of children in the United States.”²⁸ Other respective U.S. reporting activities include *America’s Children: Key National Indicators of Well-Being*, an annual report from the Forum on Child and Family Statistics and the *Kids Count* initiative by the Annie E. Casey Foundation. It is “a state-by-state effort to track the status of children in the U.S. By providing policymakers and citizens with benchmarks of child well-being.”²⁹ The *State of the World’s*

²⁷ For comprehensive reviews of child indicator and reporting initiatives see in particular Ben-Arieh et al. (2001), Land (2000b) for the U.S., and Nauck (1997) for Germany.

²⁸ Quoted from the introduction of the 2001 edition. See <http://aspe.hhs.gov/hsp/01trends/intro.htm>

²⁹ See <http://www.aecf.org/kidscount/>

Children 2000 by UNICEF is a report on the well-being of children at the global level. There are also plenty of child reports on the regional and local level.

The rapidly growing research and reporting activities concerning living conditions and quality of life of the elderly might be stimulated by the current trends of demographic change towards aging societies. Due to declining birth rates and increasing life expectancy the share of the elderly within the populations of many societies have been growing considerably in recent decades and will continue in the years to come. Placing particular emphasis on the elderly reflects the fact that more and more people spend longer time in this period of the life cycle. Thus, the quality of additional years of life of this growing population moves to the centre of interest. A recent example of respective reporting for the U.S. is the report *Older Americans 2000: Key Indicators of Well-Being*, published by the Federal Interagency Forum on Aging Related Statistics. It is considered the first edition of a future series. In Germany the 4th report on the elderly (Altenbericht) has been published in 2002, which has been prepared by an expert commission on behalf of the Federal Ministry for the Family, Senior Citizens, Women and Youth. Also, Statistics Sweden recently has published a comprehensive special report on the living conditions of the elderly (Vogel et al., 2000). In close relation to this kind of reporting and research initiatives on living conditions and quality of life of the elderly also particular 'old-aged-surveys' have been conducted in several countries, such as Sweden and Germany in recent years. It is most likely that the concern with the living conditions and quality of life of the elderly will further grow in the years to come.

5.4. Sustainability and Social Cohesion Indicators

With the increasing popularity of the concepts of sustainable development and social cohesion, numerous projects have been launched in order to allow measurement of these concepts and focusing on the development of sustainability and social cohesion indicators.³⁰ Also the conceptual debates and diverse efforts of developing indicators to measure social exclusion and inclusion are closely related to these activities (Atkinson et al., 2002). Since there are considerable overlaps between the measurement efforts related to these two concepts and quality of life and social indicators research, many of these initiatives referred to and profited from the available knowledge and experience in the latter fields. On the other hand, the initiatives of developing measurement tools and indicators concerning sustainability and social cohesion have also challenged conventional views, created new ideas and thus

³⁰ For a list of selected sources of sustainable development indicators see <http://iisd1.iisd.ca/ic/info/ss9504.htm>; a rather comprehensive report on Social Cohesion in Canada: Possible Indicators by the Canadian Council on Social Development is available at <http://www.ccsd.ca/pubs/2001/si/sra-543.pdf>; see also Berger-Schmitt (2000)

have given a new impetus to quality of life and social indicators research. The popularity of these concepts and the felt need to develop appropriate measurement tools moreover seems to have attracted new interest on the side of the policy makers in the construction and use of social indicators in general. As for the future, there are some indications of an increasing integration of quality of life, sustainability and social cohesion not only at the conceptual level, but also as far as measurement and indicator construction is concerned.

5.5. Composite Welfare Indices

The demand for and debate on summary indices, synthesizing a multitude of welfare dimensions and indicators into one single or at least a restricted number of composite measures, builds on a long-lasting tradition. However, the interest in constructing composite indices has grown considerably yet again. Moreover, some observers expect this issue to rank high on the future research agenda: “With the tremendous increase in the richness of social data available ... today as compared to two or three decades ago, a new generation of researchers has returned to the task of summary index construction. The field of social indicators probably will see several decades of such index construction and competition among various indices - with a corresponding need for careful assessments which indices have substantive validity ... in the assessment of the quality of life and its changes over time and social space” (Land, 2000a). A variety of approaches of how to aggregate information and how to combine several indicators into one or more indices has already been proposed in recent years (e.g. Diener, 1995; Estes, 1997; Osberg/Sharpe, 1998; Miringoff/Miringoff, 1999). The best known and popular measure of this kind is the Human Development Index published regularly by the United Nations’ Human Development Report Office (UNDP, 2001). On the other hand, it is still controversial whether composite indices, as they are available so far, offer appropriate tools for monitoring the quality of life and for which particular purposes – within scientific research as well as in the policy making processes – these kind of measures might be used. Too many methodological as well as substantial problems related to the construction and use of composite indices still seem to be solved insufficiently by now, such as identifying components, aggregation algorithm, or weighting. Thus, we may expect continuing debates and efforts in this field for years to come.

5.6. Comparative Monitoring and Analysis

In social indicators and quality of life research as in other fields of social research, the comparative perspective has gained in importance. This is mainly due to the ongoing processes of globalisation as well as the increasing economic and political integration taking place in Europe and in other regions of the world. More and better comparative information on living conditions and

the quality of life is needed to establish ‘international best practice performance benchmarks’ which can play an important role in monitoring and guiding social performance at the national and supranational levels. Accordingly, in recent years the data base for comparative monitoring and reporting activities has been improved considerably, for example by establishing international surveys such as the International Social Survey Program, the European Community Household Panel Study,³¹ the Euromodule³² or the European Social Survey.³³ To a considerable extent these surveys meet the request for coordinated international surveys in the field of social indicators and quality of life research (Vogel, 1997: 113), although some of them are not specially designed for this particular purpose. Recent activities of data harmonisation such as those initiated by Eurostat have also contributed largely to improve the information base for comparative monitoring, reporting and analyses in the fields of social indicators and quality of life research.

5.7. Increased Use of Indicators in Policy Making

There is some evidence, that social and other types of indicators are increasingly being used as instruments for policy making. This tendency is most obvious at the level of European institutions, where the use of indicators and quality of life research as part of the policy making process. In particular, as a follow-up to the Lisbon European Council, which adopted the strategic goal that Europe should become the “most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion,”³⁴ several indicator initiatives have been launched. Indicators to be developed and politically agreed upon are thought to be used for monitoring progress on achieving the key Lisbon objectives, including employment, sustainability and social cohesion and inclusion. For monitoring the latter objectives social indicators are particularly relevant, as has been underlined by Frank Vandenbroucke, the Belgian Minister of Social Affairs and Pensions: “the objective is ... to combine a dynamic economy with social inclusion and protection.... In achieving this, social indicators have a key role to play. A set of commonly agreed and defined social indicators is essential to allow the Union to monitor progress towards social inclusion” (Vandenbroucke, 2001). The European Unions’ Social Protection Committee and its subgroup on social indicators was in charge to

³¹The European Community Household Panel Study (ECHP) is going to be replaced by Statistics of Income and Living Conditions (SILC) in 2003.

³²See Delhey et al. (2001).

³³The European Social Survey (ESS) has been developed under the auspices of the European Science Foundation (ESF). The first survey covering 20 countries is scheduled for fall 2002.

³⁴Presidency Conclusions, Lisbon European Council, March, 23-24, 2000. See <http://ue.eu.int/en/Info/eurocouncil/index.htm>.

propose a respective set of indicators to be officially used at the European as well as national levels.³⁵ In order to support and enhance this complex and ambitious exercise of agreeing on a common set of indicators, the Belgian Government has launched a report on *Indicators for Social Inclusion in the European Union* (Atkinson et al., 2002) as part of the Belgian EU-Presidency. This report reviews previous work on social indicators, it assesses the strengths and weaknesses of various indicators as measures of social inclusion and makes recommendations for indicators to be selected and used at different levels. As it seems by now, the potentials as well as limitations of using indicators for such purposes are not much reflected yet. Thus, there obviously is a need to address these questions more thoroughly and to establish regular links and dialogues between policy making institutions and academic social indicators and quality of life research.

The European Commission recently has also established a programme for research in order “to improve understanding of the quality of life of individuals and of society as a whole, including a sense of ‘well-being’ and of their variations across Europe; to clarify how these are affected by key socio-economic trends and to improve the basis for societal and economic policies which promote quality of life and well-being” (European Commission, 2001: 12-13). By promoting quality of life research, the European Commission does not only demonstrate the importance it attributes to quality of life as a goal of societal development, but it starts also from the concern that the “political and public debate in relation to the future development of the EU suffers from a lack of comparative data in relation to the social well being and the quality of life of European citizens” (European Commission, 2001: 16). Until now it is unclear whether and how the lack of respective information identified will be filled.

6. Conclusions

The birth of social indicators and quality of life research was closely related to the formation of new goals of societal development, not least reflecting structural and value changes as part of the transition from industrial to post-industrial societies. Although social indicators and quality of life research underwent various cycles of growing and declining attention and popularity, they are now established fields of empirical social research in almost all parts of the globe. From the beginning these research branches used to be multidisciplinary, attracting the interests not only of sociologists and statisticians, but also of psychologists, economists, political scientists, and not least practitioners from various fields, in particular the policy making realm.

³⁵ The report of this committee was accepted by the Employment and Social Affairs Council in December 2001 and endorsed by the Laeken European Council soon after.

During the last three decades social indicators research has succeeded to considerably improve the measurement of peoples' quality of life as well as the monitoring of general social conditions and change. Quality of life research has moreover largely enhanced our knowledge of the components and determinants of human well-being by developing theoretical models and advancing empirical analysis on levels, changes and causes of well-being for various populations. Whereas the use of objective and subjective indicators – a major issue of the early stages of quality of life measurement – is now almost common ground, new debates on utility versus agency related concepts – such as Sen's 'capabilities approach' - have emerged more recently. Today, social reporting as the major application of social indicators and quality of life research is well established within the information systems of numerous national societies as well as international and supranational organisations, providing empirically based knowledge on living conditions and well-being of the whole population or specific subgroups within a society. Monitoring and reporting tools as they have been developed in this tradition provide societies – the general public as well as decisions makers – with the kind of information and knowledge needed for continuous self-reflection. While social indicators and social reports have successfully been used as descriptive monitoring tools, their application and use for purposes like setting goals and priorities, or the choice and evaluation of political programmes still seems to be problematic and questionable. Yet, there is a growing demand for respective tools in the fields of policy making, where social indicators are increasingly considered to be useful tools for various purposes, as for example benchmarking. Additional reasons for the growing popularity of social indicators and quality of life research recently observed on the part of policy makers – as for example the European Union - may be found in new policy objectives for societal development like sustainability and social cohesion and the need for respective monitoring tools, the processes of globalisation and internationalisation, new models of governance and a trend towards evidence-based policy making practices.

Recent trends in social indicators and quality of life research include the use of more sophisticated methodologies and improved data sources, which may facilitate a shift toward efforts to identify the 'causes behind the symptoms' measured by indicators. The growing emphasis given to the local as well as supranational level as compared to the national level, international comparisons and a special focus on children and senior citizens in social reporting activities are other recent developments in this field. Current approaches of quality of life measurement moreover increasingly account for societal characteristics as compared to individual conditions as an important component of the overall quality of life, which have been largely neglected in previous approaches of empirical measurement and analysis. Also new impetus has been given to the construction of summary indices, synthesizing a multitude of welfare dimensions and indicators into one or few composite measures of overall well-being. However, the usefulness of these kind of

measures is still controversial and additional research is certainly needed to provide better solutions for related methodological as well as substantial problems.

REFERENCES

- Allardt, Erik (1993) 'Having, Loving, Being: An Alternative to the Swedish Model of Welfare Research.' In: M. Nussbaum and A. Sen. Eds. *The Quality of Life*. Oxford: Clarendon Press, pp. 88-94.
- Argyle, Michael (1996) 'Subjective Well-Being.' In: A. Offer. Ed. *In Pursuit of the Quality of Life*. Oxford: Oxford University Press, pp. 18-45.
- Atkinson, Tony, Bea Cantillion, Eric Marlier, Brian Nolan (2002) *Social Indicators. The EU and Social Inclusion*. Oxford: Oxford University Press.
- Australian Bureau of Statistics (2001) *Measuring Wellbeing. Frameworks for Australian Social Statistics*. Belconnen.
- Bauer, Raymond A. Ed. (1966) *Social Indicators*. Cambridge, Mass./London: The M.I.T. Press.
- Ben-Arieh, Asher, et al. (2001) *Measuring and Monitoring Children's Well-Being. Social Indicators Research Series, Vol. 7*, Dordrecht: Kluwer Academic Publishers.
- Berger-Schmitt, Regina, Beate Jankowitsch (1999) *Systems of Social Indicators and Social Reporting: The State of the Art*. EuReporting Working Paper No 1. Mannheim: Centre for Survey Research and Methodology (ZUMA), Social Indicators Department.
- Berger-Schmitt, Regina (2000) *Social Cohesion as an Aspect of the Quality of Societies: Concept and Measurement*. EuReporting Working Paper No 14, Subproject "European System of Social Indicators". Mannheim: Centre for Survey Research and Methodology (ZUMA), Social Indicators Department.
- Berger-Schmitt, Regina, Heinz-Herbert NOLL (2000) *Conceptual Framework and Structure of a European System of Social Indicators*. EuReporting Working Paper No 9, Subproject "European System of Social Indicators". Mannheim: Centre for Survey Research and Methodology (ZUMA), Social Indicators Department.
- Bertrand, Robert J. (1986/87) 'Les indicateurs sociaux.' *The Tocqueville Review*, 8: 211-233.
- Booth, Tim (1992) 'Social Indicators and the Mondale Initiative.' *Knowledge: Creation, Diffusion, Utilization*, 13: 371-398.
- Brown, Brett and Thomas Corbett (1997) *Social Indicators and Public Policy in the Age of Devolution*. Institute for Research on Poverty, Special Report No. 71. University of Wisconsin-Madison.
- Campbell, Angus (1972) 'Aspiration, Satisfaction and Fulfillment.' In: A. Campbell, P. Converse. Eds. *The Human Meaning of Social Change*. New York: Russell Sage Foundation, pp. 441-446.
- Campbell, Angus, Phil Converse, Willard Rodgers (1976) *The Quality of American Life*. New York: Russell Sage Foundation.
- Canadian Policy Research Network (2002) *Quality of Life in Canada. A Citizens' Report Card*. Ottawa: CPRN.
- Cobb, Clifford W. (2000) *Measurement Tools and the Quality of Life. Redefining Progress*. San Francisco: www.rprogress.org/pubs/pdf/measure_qol.pdf
- Cobb, Clifford W. and Craig Rixford (1998) *Competing Paradigms in the Development of Social and Economic Indicators*. Paper presented at the CSLS Conference on the State of Living Standards and the Quality of Life in Canada. Ottawa, October 30-31.

- Delhey, Jan, Petra Böhnke, Roland Habich and Wolfgang Zapf (2001) *The Euromodule. A New Instrument for Comparative Welfare Research*. WZB Discussion Paper FSIII 01-401, Berlin: Science Centre.
- Diener, Ed (1984) 'Subjective Well-being.' *Psychological Bulletin*, 95: 542-575.
- Diener, Ed (1995) 'A Value-Based Index for Measuring National Quality of Life.' *Social Indicators Research*, 36: 107-127.
- Diener, Ed, E. Suh, R.E.Lucas and H. Smith. (1999) 'Subjective Well-being: Three Decades of Progress.' *Psychological Bulletin*, 125: 276-302.
- Department of Health, Education, and Welfare. Ed. (1969) *Toward a Social Report*. Washington: US Government Printing Office.
- Drewnowski, Jan (1970) *Studies in the Measurement of Levels of Living and Welfare*. Report No 70.3. Geneva: United Nations Research Institute for Social Development.
- Eckersley, Richard (1998) 'Perspectives of Progress: Economic Growth, Quality of Life and Ecological Sustainability.' In: R. Eckersley. Ed. *Measuring Progress. Is Life Getting Better?* Collingwood: CSIRO Publishing, pp. 3-34.
- Erikson, Robert (1974) 'Welfare as a Planning Goal.' *acta sociologica*, Vol. 17, No. 3: 273-288.
- Erikson, Robert (1993) 'Descriptions of Inequality: The Swedish Approach to Welfare Research.' In: M. Nussbaum and A. Sen. Eds. *The Quality of Life*. Oxford: Clarendon Press, pp. 67-87.
- Erikson, Robert; Hannu Uusitalo (1987) *The Scandinavian Approach to Welfare Research*. Swedish Institute for Social Research. Reprint Series No. 181. Stockholm: Almqvist & Wiksell.
- Esping-Andersen, Gøsta (2000) *Social Indicators and Welfare Monitoring: Social Policy and Development Programme*. Paper No 2. Geneva: United Nations Research Institute for Social Development.
- Estes, Richard (1997) 'Social Development Trends in Europe, 1970-1994: Development Prospects for the New Europe.' *Social Indicators Research*, 42: 1-19.
- Eurostat, European Commission (2000) *The Social Situation in the European Union 2000*. Luxembourg: Office for Official Publications of the European Communities.
- European Commission (2001) *Guide for Proposers (Part 2). Call Specific. Improving the Socio-economic Knowledge Base (1998-2002)*. Brussels.
- Glatzer, Wolfgang (1992) 'Lebensqualität aus sozioökonomischer Sicht.' In: Seifert, G. Ed. *Lebensqualität unserer Zeit – Modebegriff oder neues Denken?* Göttingen, pp. 47-60.
- Habich, Roland, Heinz-Herbert NOLL, in collaboration with Wolfgang Zapf (1994) *Soziale Indikatoren und Sozialberichterstattung. Internationale Erfahrungen und gegenwärtiger Forschungsstand*. Bern: Bundesamt für Statistik.
- Habich, Roland, Wolfgang ZAPF (1994) 'Gesellschaftliche Dauerbeobachtung – Wohlfarts-surveys: Instrument der Sozial-berichterstattung.' In: R. Hauser, N. Ott and G. Wagner (Hrsg.). *Mikroanalytische Grundlagen der Gesellschaftspolitik. Band 2 Erhebungsverfahren, Analysemethoden und Mikrosimulation*. Deutsche Forschungsgemeinschaft: Akademie Verlag, S. 13-37.
- Hagerty, Michael R. et al. (2001) 'Quality of Life for National Policy: Review and Agenda for Research.' *Social Indicators Research*, 55 (1), pp. 1-96.
- Hardi, Peter, Stephan Barg, Tony Hodge (1997) *Measuring Sustainable Development: Review of Current Practice (occasional Paper No 17)*. Winnipeg: International Institute for Sustainable Development (IISD).
- Heady, Bruce, Alex Weary (1992) *Understanding Happiness: A Theory of Subjective Well-Being*. Melbourne: Longman Cheshire.
- Henderson, Hazel, Jon Lickerman and Patrice Flynn. Eds. (2000) *Calvert-Henderson Quality of Life Indicators. A New Tool for Assessing National Trends*. Bethesda: Calvert Group.

- Inglehart, Ronald (1977) *The Silent Revolution: Changing Values and Political Styles among Western Publics*. Princeton: Princeton University Press.
- Innes, Judith E. (1989) *Knowledge and Public Policy. The Search for Meaningful Indicators*. New Brunswick/London: Transaction Publishers.
- Innes, Judith E. (1990) 'Disappointments and Legacies of Social Indicators.' *Journal of Public Policy*, 9: 429-432.
- Institut de la Statistique Quebec (2001) *Portrait social du Québec. Données analyses*. Quebec.
- Johansson, Sten (2001) *Conceptualizing and Measuring Quality of Life for National Policy*. FIEF Working Paper Series, No. 171. Stockholm: www.Fief.se/library/wp/wp171.pdf
- Land, Kenneth (1983) 'Social Indicators.' *Annual Review of Sociology*, 9, pp. 1-26.
- Land, Kenneth (2000a) 'Social Indicators.' In: E. F. Borgatta. Ed. *Encyclopedia of Sociology*. Revised edition. New York: Macmillan, pp. 2682-2690.
- Land, Kenneth (2000b) 'Child Trends' Criteria for a Better System of Child and Family Indicators.' *Sinet* 61/62.
- Lane, Robert E. (1996) 'Quality of Life and Quality of Persons: A New Role for Government.' In: A. Offer. Ed. *In Pursuit of the Quality of Life*. New York: Oxford University Press, pp. 256-293.
- MacRae, Duncan (1985) *Policy Indicators: Links Between Social Science and Public Debate*. Chapel Hill: The University of North Carolina Press.
- McEwin, Marion (1995) 'Social Indicators and Social Statistics in Australia.' *Statistical Journal of the United Nations. Economic Commission for Europe*, pp. 309-318.
- McMURRER, Daniel P., Isabel V. SAWHILL (1998) *Getting Ahead. Economic and Social Mobility in America*. Washington, D.C.: The Urban Institute Press.
- Ministry of Social Policy (2001) *The Social Report. Indicators of Social Well-Being in New Zealand*. Wellington.
- Miringoff, Marc and Marque-Luisa Miringoff (1999) *The Social Health of the Nation. How America is Really Doing*. New York/Oxford: Oxford University Press.
- Miringoff, Marque-Luisa, Marc Miringoff and Sandra Opdycke (2001/2002) 'A Social Report on America's Well-Being.' *INDICATORS*, Vol. 1, No. 1, pp. 50-89.
- Mishan, Edward J. (1967) *The Costs of Economic Growth*. London: Staples Press.
- Moldan, Bedrich, S. Billharz, S. and R. Matravers. Eds. (1997) *Sustainability Indicators: A Report on the Project on Indicators of Sustainable Development*. SCOPE report 58. Chichester: Wiley.
- Nauck, Bernhard (1997) 'Sozialberichterstattung zu den Lebensverhältnissen von Kindern.' In: H.-H. Noll. Ed. *Sozialberichterstattung in Deutschland*. Weinheim/München: Juventa Verlag, pp. 167-194.
- Niceforo, Alfredo (1916-1917) 'È Possibile un Sistema di Indici Quantitative.' *Rivista Antropologia*, XXI: 129-201.
- Niceforo, Alfredo (1919) *La Misura della Vita*. Mailand/Turin/Rom: Fratelli Bocca Editori.
- Niceforo, Alfredo (1921) *Les Indices numériques de la civilisation et du progrès*. Paris: Flammarion.
- Noll, Heinz-Herbert (2000a) *Konzepte der Wohlfahrtsentwicklung: Lebensqualität und 'neue' Wohlfahrtskonzepte*. WZB-Discussionpapers P00-505. Berlin: Science Centre.
- Noll, Heinz-Herbert (2000b) *Subjektive Indikatoren. Expertise für die Kommission zur Verbesserung der informationellen Infrastruktur zwischen Wissenschaft und Statistik*. Mannheim.
- Noll, Heinz-Herbert (2002a) 'Globale Wohlfahrtsmaße als Instrumente der Wohlfahrtsmessung und Sozialberichterstattung: Funktionen, Ansätze und Probleme.' In: W. Glatzer, R. Habich and K. U. Mayer. Eds. *Sozialer Wandel und*

- gesellschaftliche Dauerbeobachtung. Festschrift für Wolfgang Zapf. Leverkusen: Leske+Budrich, pp. 317-336.
- Noll, Heinz-Herbert (2002b) 'Towards a European System of Social Indicators: Theoretical Framework and System Architecture.' In: M. Hagerty, J. Vogel and V. Moeller. Eds. *Assessing Quality of Life and Living Conditions to Guide National Policy*. Social Indicators Research Series, Vol. 11. Dordrecht: Kluwer Academic Publishers.
- Noll, Heinz-Herbert and Wolfgang ZAPF (1994) 'Social Indicators Research: Societal Monitoring and Social Reporting.' In: I. Borg and P.Ph. Mohler. Eds. *Trends and Perspectives in Empirical Social Research*. Berlin/New York: de Gruyter, pp 1-16.
- OECD (1982) *The OECD List of Social Indicators*. OECD Social Indicator Development Programme. Paris: OECD.
- OECD (1998) *Sustainable Development Indicators* (OECD Expert Workshop, 8-9 October 1998). Paris.
- OECD (2001a) *Society at a Glance*. OECD Social Indicators. Paris: OECD.
- OECD (2001b) *The Well-being of Nations. The Role of Human and Social Capital*. Paris: OECD.
- OECD (2001c) *Environmental Indicators: Towards Sustainable Development 2001*. Paris: OECD.
- Offer, Avner. Ed. (1996) *In Pursuit of the Quality of Life*. Oxford: Oxford University Press.
- Osberg, Lars; Andrew Sharpe (1998) *An Index of Economic Well-Being for Canada*. Working Paper R-99-3E. Hull: Applied Research Branch, Strategic Policy Human Resources Development.
- Rothenbacher, Franz (1993) 'National and International Approaches in Social Reporting.' *Social Indicators Research*, 29 (1), pp. 1-62.
- Sen, Amartya (1993) 'Capability and Well-Being.' In: M.C. Nussbaum and A. Sen. Eds. *The Quality of Life*. Oxford: Clarendon Press, pp. 30-53.
- Sheldon, Eleanor Bernert and Wilbert E. MOORE (1968) *Indicators of Social Change. Concepts and Measurement*. New York: Russell Sage Foundation.
- Smelser, Neil J. and Dean R. GERSTEIN. Eds. (1986) *Behavioral and Social Science Fifty Years of Discovery*. In commemoration of the Fiftieth Anniversary of the "Ogburn Report," *Recent Social Trends in the United States*. Washington, D.C.: National Academy Press.
- Tåhlin, Michael (1990) 'Politics, Dynamics and Individualism – The Swedish Approach to Level of Living Research.' *Social Indicators Research*, 22 (2), pp. 155-180.
- Thomas, William I. with Dorothy S. Thomas (1928) *The Child in America: Behavior Problems and Programs*. New York: Alfred A. Knopf.
- UN Commission on Sustainable Development (CSD) (1996) *Indicators of Sustainable Development: Framework and Methodologies*. New York: CSD.
- United Nations (1975) *Towards a System of Social and Demographic Statistics*. Studies in Methods, Series F, 18. New York: United Nations Publications.
- United Nations (1994) *Information on Social Development Publications and Indicators in the United Nations System*. Working Paper No. 7. New York: United Nations Publications.
- United Nations Development Programme (2001) *Human Development Report 2001*. New York/Oxford: Oxford University Press.
- Uusitalo, Hannu (1994) 'Social Statistics and Social Reporting in the Nordic Countries.' In: P. Flora, F. Kraus, H.-H. Noll and F. Rothenbacher. Eds. *Social Statistics and Social Reporting in and for Europe*. Bonn: Informationszentrum Sozialwissenschaften, pp. 99-120.
- Veenhoven, Ruut (1996) 'Development in Satisfaction Research.' *Social Indicators Research*, 37, pp. 1-46.

- Veenhoven, Ruut (2000) Why Social Policy Needs Subjective Indicators. Paper presented at the 3rd Conference of the International Society for Quality of Life Studies (ISQOLS), Girona.
- Vandenbroucke, Frank (2001) Indicators for Social Inclusion: Where We Are Now and What We Want to Achieve. Discussion paper for the informal council 'Employment and Social Policy of 6/7 July 2001,' published at <http://www.vandenbroucke.fgov.be>.
- Vogel, Joachim (1990) 'Social Indicators: A Swedish Perspective.' *Journal of Public Policy*, 9, pp. 439-444.
- Vogel, Joachim (1997) 'The Future Direction of Social Indicator Research.' *Social Indicators Research*, 42, pp. 103-116.
- Vogel, Joachim, Lars Häll, Lars, Sven-Erik Johansson and Cecilia Skjöld (2000) *Åldres Levnadsföhältnanden 1980-1998. Living conditions Report 93.* Stockholm: Statistics Sweden.
- World Bank (1997) *Expanding the Measure of Wealth: Indicators of Environmentally Sustainable Development.* Environmentally Sustainable Development Studies and Monograph Series, No 17. Washington, D.C.
- World Commission on Environment and Development (1987) *Our Common Future.* Oxford: Oxford University Press.
- Yuan, Lim L., Belinda Yuen and Christine Low. Eds. (1999) *Urban Quality of Life: Critical Issues and Options.* Singapore: Singapore University Press.
- Zapf, Wolfgang (1977a) 'Einleitung in das SPES-Indikatorensystem.' In: W. Zapf. Ed. *Lebensbedingungen in der Bundesrepublik. Sozialer Wandel und Wohlfahrtsentwicklung.* Frankfurt a.M./New York: Campus, pp. 11-27.
- Zapf, Wolfgang (1977b) 'Soziale Indikatoren – eine Zwischenbilanz.' In: H.-J. Krupp and W. Zapf. Eds. *Sozialpolitik und Sozialberichterstattung.* Frankfurt a.M./New York: Campus, pp. 231-246.
- Zapf, Wolfgang (1984) 'Individuelle Wohlfahrt: Lebensbedingungen und wahrgenommene Lebensqualität.' In: W. Glatzer and W. Zapf. Eds. *Lebensqualität in der Bundesrepublik.* Frankfurt a.M./New York: Campus, pp. 13-26.
- Zapf, Wolfgang (1993) 'Wohlfahrtsentwicklung und Modernisierung.' In: W. Glatzer. Ed. *Einstellungen und Lebensbedingungen in Europa. Soziale Indikatoren XVII.* Frankfurt a.M./New York: Campus, pp. 163-176.

This article was published in: Genov, Nicolai, Ed. (2004): *Advances in Sociological Knowledge Over Half a Century.* Wiesbaden: VS Verlag für Sozialwissenschaften