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THEORIZING INDICATORS

On Indicators, Signs and Trends

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ABSTRACT. Policymakers and social theorists have increasingly come to rely on social indicators to guide their decisions and theories. Social indicators are also useful in bridging theory and empirical research as well as the traditional gap between policymaking and social theory. The concept of social indicators covers interpretation of cultural signs, simple statistical measures, and complex statistical indexes related to sets of domains. The article views the development of child well-being indicators as central not only in the social welfare field, but as an indicator of future societal conditions, given that children's lives are especially sensitive to social change. The paper addresses the development of indicators of children's well-being, arguing that the expansion of the field, the complexity of new domains and indicators, and the position of children as "being" and "becoming", they are citizens of the present as well as being socialized for the future, illustrates that the next crucial step for the field is to further elaborate theories and models.

KEY WORDS: children, indicators, social theory

1. THE WORLD OF INDICATORS

A glance at newspapers, political documents, or a search of the Internet shows that *social indicators* are the heart of the modern vocabulary, be it related to the quality of the health system, educational institutions, or welfare arrangements or connected to discourses of social exclusion or distributive justice. Indicators are a key concept in modern models of climate change as well as in all the social sciences. With regard to children and childhood, indicators are used to assess standard of living, welfare support, marginalization and well-being, and to measure distributive justice between age groups and between children of various ethnic and social groups. Indicators track trends along these dimensions, making them effective tools for evaluating policy implementation. National data banks and studies also facilitate identifying trends; e.g. *Child Trends* data bank, *Kids Count* and the *Trends in the Well-Being of America's Children and Youth* report in the U.S

(Department of Health and Human Services); *The State of the Child in Illinois: 2000* (Goerge et al., 2001; Chapin Hall Centre for Children); the *Child Data Bank* in Denmark and Norway (National Statistics); studies as the *Well-being of Children in UK*, (Save the Children, see e.g. Bradshaw and Mayhew 2005), as well as extensive statistical analyses of groups seeking government assistance (see e.g. Courtney, 2005). UNICEF provides global statistics and statistics by country (UNICEF: Monitoring and statistics), and national reporting in many countries involves statistics on children and their families.

Social indicators meet the need for planning and social reporting in the presence of complexity and change. In modern society, opportunities and progress are interconnected with uncertainty and risk (Beck, 1992). The governing of complex and changing societies not only requires statistical measurements but systems that combine myriad facts into policy guidelines that identify the state of the present and point to future consequences.

Children are at the center of the turbulence of modernity: they are socialized in an era of uncertainty and live closest to the epicenter of change. Children are confronted with new technology, globalization and cultural styles, and theirs is the age group that most easily adapts to change, so they are the first indicators of cultural change. However, identifying the well-being of children is more complex than identifying the well-being of other age groups.

Despite the numerous reports with “social indicators” in the title and the theoretical challenges necessarily facing the identification of trends in well-being, social cohesion, or distributive justice, the field of social indication is fragmented and lacking any unifying theory. The more ambitious the analysis and the more the elaborate the statistics, the stronger the need for a theoretical armature for models. Often, the term *indicators* simply refers to statistical measures, with little elaboration on the theoretical concepts or the relationship between indicators and measures. A short history of the term points to a more limited definition rooted in the development of systems of social accounting and analyses of social trends (See e.g. Brown and Moore, 2003). The well-being of children almost always relates to current trends: Are they better or worse off today compared to a period of time ago, or their conditions are related to normative standards.

2. SOCIAL ACCOUNTING

Indicators signifying the presence of social or individual faith are probably as old as human societies, but the idea of social accounting came with

centralized societies that accumulated wealth and information for governmental purposes. German social statistics are often mentioned as laying the foundation for modern *statswissenschaft*. In general, indicators have been related to the need for governance, from Bismarck to President Hoover, who established the Research Committee on Social Trends in 1930. In modern vocabulary, the term trends usually refers to tendencies over time, but it might also refer to variations between groups, as trends or tendencies in statistical patterns. When Bauer (1966) presented a comprehensive framework of indicators mimicking economic reports on national trends, trends were understood in this broad sense as national reporting. OECD's initiative to develop a set of indicators of well-being in the early '70s is illustrative of both the historical development of systems of social accounting and the challenges facing that development (Christian, 1974). While *Trends in the Well-Being of America's Children and Youth* might seem to be the longest systematic study of children's well-being, the Nordic countries, using population registers, can reconstruct long historical periods as longitudinal datasets.

The increasing availability of chronological data has facilitated the identification of trends over time, which helps with prediction and evaluation of policies. Indicators on crime, welfare, poverty, and family development and more complex matrices where material standards, social relations, and values intersect (as in social coherence and well-being) were established in the 1980s and 1990s (*Society at a Glance: OECD Social Indicators 2002*, foreword). Sets of standardized questions in surveys, designed to measure the level of individual happiness, depression, confidence, and so forth have accumulated over the years, as have standardized registers and data banks. Opinion polls on a variety of themes appear continually, and stable sets of indicators like consumer confidence have long been important in economic planning. Inventories of individual competence as well as national scores for innovation and human capital appear in popular magazines, and books such as Naisbit's *Megatrends* (1984) illustrate the forecasting of social trends.

Modern society, with its awareness of human capital and education, puts a new emphasis on children as the resource of the future, low fertility strengthens children's position as a scarce future resource. OECD's (2006) development of indicators of educational success and marginalization (PISA; Programme for International Student Assessment) is perhaps the most well-known example of highly elaborated comparative research indicators related to children. While some systems of indicators focus on core indicators (e.g., UNICEF), others emphasize the development of new

and complex domains and extensive sets of indicators (Ben-Arieh et al., 2001).

3. WHAT IS AN INDICATOR?

Webster's dictionary defines indicators as something denoting something, a pointing or directing device. To indicate is to refer to or imply, to be a sign of. Like weather warning systems, childhood indicators such as social exclusion and dropout trends can point to what is coming economically and socially. Recently there has been new emphasis on positive indicators (Moore and Lipman, 2005) such as resilience or how certain factors develop a capacity to cope with risk factors (Brindis et al., 2001, <http://nahic.ucsf.edu/downloads/WTGResearchBrief.pdf>). In Bauer (1966), indicators are described as statistics and any other forms of evidence that help us assess where we stand and where are heading. Indicators can be related to factual material domains or evaluation of trends as much as to values and goals. Atkinson et al. (2002, p. 2) defines social indicators as "a parsimonious set of specific indices covering a broad range of social concerns." Bunge (1975), in an analysis of quality-of-life indicators, says, "An indicator is characterized as an observable variable assumed to point to, or estimate, some other (usually unobservable) variable." Indicators often refer to communities or societies. For example, Teitler et al. (2002) are measuring the well-being of New York residents "to take the 'social temperature' of the city." Noll defines social reporting not only as information on social structures and processes, but on "preconditions and consequences of social policy, regularly, in time, systematically, and autonomously" (Noll, H. *Social Indicators and Social Reporting: The International Experience*. <http://www.ccsd.ca/noll1.html>).

The concept of indicators covers a wider range of phenomena, from vague indices, signs, and symptoms to calculated probabilities and systematic measurements. Using cultural signs as indicators provides the possibility of interpreting myths, styles, and media messages as indicators of coming social trends. Statistical indicators are one level of measurements. At another level are sales of specific consumer goods, the choice of educational tracks, or parents' age at the birth of a first child cultural signs, which can be interpreted as indicators of deeper cultural trends.

Indicators are assigned meaning within contexts of time and space. Time series analyses present social processes as a sequence of social frames, as synchronic cuts in postulated causal chains. In the simplest version, trends consist of time series profiles of development, and extrapolation is the

corresponding simple version of forecasting. That social processes can be understood as causal processes implies that the synchronic analysis even at few points in time may reveal the factors and mechanisms producing the direction of the process. Indicators also take on meaning through theories and models related to a particular domain and by the models of everyday life. Formal models transform ideas of correlations and causal chains into precise models, providing tools for precise interpretation (Land, 2001) and predictions.

4. CHILDHOOD AND CHILDREN: A COMPLEX FIELD FOR INDICATORS

Although the individual child moves along the life cycle, demographic groups are constant as social groups. “Being” refers to children in the present; “becoming” refers to what they might become in the future (Qvortrup et al., 1994; Qvortrup, 2005; White, 2002). Becoming has always been a core theme in child psychology and socialization, a recognition that children are developing and growing and that this process should be supported by parents as well as the wider community. Well-being for children cannot be limited to their condition in the present. The present in which children live influences their development and their future, just as qualities of the school system or family background influence a student’s future success. The understanding and conceptualization of children’s quality of life has to encompass both the quality of life here and now and the dimensions of socialization and development. Being influences becoming; becoming influences the understanding of being. Analyses of quality of life or distributive justice referring to only the here and now do not address the totality of a child’s life.

Article 29 of the Convention on the Rights of the Child (CRC) says education shall be directed to “the development of the child’s personality, talents, and mental and physical abilities to their fullest potential.” The idea of the full development of mental abilities does not in itself provide indicators for measuring such capacities. Indicators have to be constructed through theories of psychological and life course development, which are conceptualized in variety of ways according to a variety of theories. Life course development is rooted in a complex interplay of historical contexts, life phase/age, and social conditions, as illustrated in Elder’s famous *Children of the Great Depression: Social Change in Life Experience* (1974).

The “under development” status of children does not legitimize poor conditions in the present (James et al., 1998; Qvortrup, 2005). According to the CRC, children have a right to decent living conditions, the right to be

seen and heard literally and statistically, the right to protection, to participate in their cultures and families, and rights as individuals. Article 13 of the CRC addresses “the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds,” and Article 5 provides for the adaptation of those rights and protections to the child’s age, “in a manner consistent with the evolving capacities of the child.” Even if one agrees with UNICEF that “Parents, who are intuitively aware of their child’s level of development, will do this naturally,” (UNICEF: Understanding the Convention on the Rights of the Child). there is a possible tension between culture and parents, on the one hand, and the child as a subject with individual rights, on the other. This tension is a field of interest for child research, and it also illustrates how children have gradually become salient entities in public statistics and documents as well as in politics.

5. WELL-BEING

Standard of living most often is expressed by an index of resources, well-being as it relates to children – refers to the positions and experiences of individuals or groups in sets of domains. A number of reports on well-being refer to objective and subjective measurements on domains such as health, economic security, education, behavior, and social environment, according to *America’s Children 2005*. The number of domains and indicators varies: the Duke University well-being index consists of 7 domains and about 28 key indicators; there are 25 U.S. key indicators in child statistics (Key National Indicators of Well-being 2005). A study of the field over a period of time concludes with five dominating domains: physical, psychological, cognitive, social, and economic (Pollard and Lee, 2003). Domains are often constructed in correspondence with general administrative or institutional patterns (as education, housing, income, type of household etc.), as illustrated by U.S. key indicators and by the European System of Social Indicators (http://www.gesis.org/en/social_monitoring/social_indicators/Data/EUSI/index.htm; see also Noll, 2002). Well-being is determined by scores on each domain and scoreboard profiles on sets of domains. The sets of indicators are being expanded as the analyses become more elaborate, as illustrated by new studies of well-being of children in the U.K. (Bradshaw et al., 2005) and studies combining indicators on domains such as socio-metric status, body mass index, lifestyle, and motor fitness (Mjaavatn, 2005). Some works present development of a broad set of indicators over a long period of time, identifying how periods of growth and recessions

affected children's well-being (see e.g., Land, 2006). Hernandez (1993) historical oriented work on America's children and families illustrates how existing data can be utilized to develop extensive analysis that covers long historical periods.

The definition of domains influences scores and interpretation of data. Domains can be based on the administrative organization, on institutional differentiation in society, on certain theories, or on political perspectives or values. The domain of civic life skills presented in the project *Measuring and Monitoring Children's Well-Being* (Ben-Arieh et al., 2001) illustrates new domains of children's rights. Measurements of well-being incorporate objective living conditions (such as health or standard of living) and subjective experiences (such as perceptions and evaluations of life and living conditions, satisfaction and happiness). Indicators may be extracted from both the individual and the system, as when macro indicators on social cohesion illustrate the social environment of children. On the system level, social cohesion is indicated by level of distributive justice, level of disparities, polarization, and exclusion (see Council of Europe Revised Strategy for Social Cohesion).

That subjective experiences are relative to local norms and experiences can result in a paradox, such as the inner-city child identifying the low density of traffic as a good thing in his local community on the basis of the terrible situation for children in the neighboring street. The "progress paradox" (Easterbrook, 2004) suggests that a better life is accompanied by new visions of the good life, visions that may increase the gap between factual possibilities and desire. Subjective measurements provide necessary information, but their relativity and contextual sensibility illustrate the need for more objective models of a well-being and the ensuing development of objective indicators.

Child-centric measurements are now sometimes viewed as the voice of the child, their chance to express their own subjective opinions. But phenomenologically inclined interviews presenting the children's perspectives are as rooted in cultural contexts as surveys and other types of indicators, scientific truth does not emerge from the voice of the subject. But the child has to be the reference point and the unit of analysis also related to objective indicators. For children, the indicators of well-being vary not only by context but also by life phase, making theorization, conceptualization, and measurement extremely complex. Personal skills are different at age 5 than at 15, and qualities and measurements of skills must be appropriate for each socio-cognitive level. Although some psychological theories will highlight certain phases as critical or sensitive, life course studies root critical phases in

historical contexts as well as in psychological development alone (Elder, 1974). The construction of social domains must be based on the historical period and the social context. The context must be related to various stages of competence and phases of the life course.

What constitutes the good life is based on assumptions about the relationship between conditions in childhood and well-being in the future. Psychodynamic theories are in general not strongly supported by empirical findings; the style of mothering does not seem to leave footprints that can be identified statistically, so long as measures are within the range of normality (Kagan, 1998, see also Harris, 1998). On the other hand, life course analysis does show that certain economic conditions as well as individual qualities act as predictors of future outcomes (Clausen, 1993). The increasing inequality that can be registered in many countries illustrates the importance of cultural and economic capital, the Economist of June 17, 2006 inform the readers that only 3% of the students at the best colleges in USA come from the poorest quarter of the American population.

Generalizing from one context to a different time and place is risky, and different theories emphasize different mechanisms of social development and socialization. Some tendencies do seem stable, even if there are challenges in translation between historical contexts. Correlations from large samples are tools for predicting an individual's future and for assessing the "becoming" aspect of well-being – done so increasingly through a system of indicators (Moore and Lipman, 2005).

6. THE POWER OF INDICATORS

When the media publicizes the number of children living in poverty in a particular country, media consumers conjure up their personal images of the impoverished child. Mass media seldom informs the recipients that "poor" is a chosen statistical definition and that other indicators might produce different results. The number of children who are poor in a one-year period is higher than the number of children in poverty in a three-year period, for example, or that the number of children identified as poor by one indicator is higher than the number identified by two indicators. In some countries, the correlation between two indicators is strong (e.g., low income correlates strongly with poor housing). In other countries, such as Denmark and Norway, this is not the case. If poverty is defined as household income below 60% of the European median income, the poor children in Europe will live in conditions like that of former eastern bloc. If poverty is based on national income, not a European-wide index, all

countries will have a number of poor children and the numbers will in fact reflect the distribution of wealth more than living conditions of the poor.

Even the more stable indicators of risk vary with national and regional contexts and with historical period. A single mother in Sweden does not have the same economic consequences as a single mother in the United States. Social change assigns indicators new meaning. Some decades ago, Scandinavian rates of out-of-wedlock births were often interpreted as an indication of coming crises in the family, with possibly serious consequences for children, as for the birth rate. The statistical measurements and the models of family life, however, overlooked the new cultural phenomenon of cohabitation: the change was primarily a new contract between parents, not an increase in single parenthood. (Later studies in Scandinavia reveal that cohabitation today is a complex and ambiguous phenomenon with a different meaning for different life phases and social groups, covering a variety of phenomena from marriage-like cohabitation to more elusive relations. Identifying what is going on related to the establishment of families among young Scandinavians requires a set of indicators that are yet not systematically developed. The category "cohabitants" is more heterogeneous than marriage.) Today the Scandinavian birth rate is among the highest in Europe, while more than 50% of children are born out of wedlock. The birth rate also illustrates that the correlation among indicators at different levels may change; the divorce rate in Southern Europe is still lower than in Scandinavia, families are still more traditional, but contradictory to some decades ago, this correlates with low fertility.

In the social sciences, variations on the surface may indicate the influence of deeper structures. When the low income of the parents is understood as an indicator of the children's current standard of living and a sign of possible future problems, complex theories and correlations in life course matrices are in play. Working women were once believed to weaken the family and risk the healthy development of children, but now a well-educated working mother is considered a positive role model in many countries. The model or theory applied is the source of the meaning assigned the indicators. The complex relationship between indicators and the phenomenon indicated is especially profound in areas such as quality of life and well-being. A good life is a meaningful metaphor for most people, but it is not an entity that exists in a given format. The good life and happiness exist as narratives, visions, and images and as economic and psychological models. The construction of indicators of the good life is interwoven with

the theory of the good life. Phenomena such as poverty, well-being, happiness, or marginalization are not created by indicators, but they are defined by them.

7. INDICATORS AS SIGNS

When World Watch titles its tables Vital Signs, the word sign intentionally suggests that the tables are indicators of deeper processes. In Saussurean semiology, signs are relatively stable sets of distinctions, while in the semiotic framework of Peirce et al., (1991), signs are a part of chains of interpretations, both of which demonstrate the varied character of the sign as an indicator. Peirce's perspective suits the problem of signs as indicators: there are series of possible interpretations that can be understood as an indicator on the next level. Cultural signs as indicators are granted meaning through a theory that breaks the heterogeneity of the sign down into specific dimensions.

Indicators as signs can be understood as a natural part of the phenomena they indicate (as the spots in measles are part of the disease and indicate the disease) or as meaning assigned through cultural conventions. Although natural signs are stable over time, the meaning or value of cultural signs is temporary and even volatile, as illustrated in fashion and lifestyles. Signs are assigned meaning as early indicators (Emery and Trist, 1965) by being related to groups or phenomena that are especially sensitive to social change. The theoretical challenge of early indications is not only the identification of the meaning of signs, but also the identification of sensitive areas and phenomena. As related to children, early indicators often focus negative development ("early warning"), but they are increasingly capturing positive development, approaching well-being in a way that encapsulates both a socio-ecological perspective on contexts and the life course. (The Child Indicator, Vol 2 Issue 3., Moore et al., 2006).

In some areas such as modern media and cultural styles, indicators are continuously changing. Domains such as marginalization and social exclusion produce more stable indicators. Institutions and professions transform signs into diagnosis and quantifiable systems of classification, which may also predict future development. Questions such as "How early can we tell?" (White, 1990) reveal the need for the development of early indicators. In some domains, this might mean a search for tools for the development of systems of early diagnosis both on individual and societal levels, in others, interpretations of lifestyles and cultural signs.

8. STATISTICAL INDICATORS

Social statistics range from the simplest form of statistical measurements to complex sets of measurements like scoreboards and statistical indexes. The relationship between indicators and trends or phenomena is on an ordinal level and, to some extent, on a nominal level. The nominal level implies that processes are moving in a specific direction. The ordinal level implies that there is more or less of some thing. Quantitative measurements are conveyed in codes that are precise and shared, but the phenomena indicated are (in principle) not identical to what is measured. Crime, for example, is a phenomenon that is not wholly represented by the crime rate, doubling one's income does not mean becoming twice as rich. Subjective measurements will naturally never reach a cardinal level: an increase in happiness from 2 to 3 on a 10-point scale is not identical to an increase from 9 to 10. The methodological vocabularies of the social sciences are filled with inventories assessing behavioral profiles, experiences, and attitudes, and a number of them address children. But indicators will always operate on an ordinal level, even if the measurements are on a higher level.

In the case of simple indicators, the measurement is presumed to indicate the phenomenon, while constructed indicators build on models of the social phenomena and the relationship between the indicator and the phenomenon. Multimeasurement indicators involve a variety of measurements, but they all concentrate on the same area or perspective, such as a set of indicators on poverty. Multidimensional indicators cover a variety of dimensions, such as those that measure children's well-being. Multimeasurement and multidimensional indicators are often an elaboration on simple statistics, from fractions to complex coefficients. A good example is infant mortality rates, which can be derived from a single measurement or more complex measures. Simple statistics report that a certain percentage of children die as infants, but not what kind of social phenomenon these deaths represent. Indicators specifying mortality rates by different groups produce a more complex model, indicating distributions of health care and welfare support, as well as the standard of living of different groups. In Scandinavia, changes in the infant mortality of single mothers relative to two-parent families capture the development of the welfare state; over time, the rates converged. A simple fraction indicates the evolution of the welfare system and its effect on distributive justice for children.

The comparison of rates is not identical to the comparison of the phenomena the rates are meant to indicate. Comparing divorce rates over national and cultural borders may entail comparing different phenomena. A

financially autonomous woman leaving her husband is a phenomenon that is different from a man leaving his wife for his secretary and keeping financial responsibility for his former wife. A divorce in Iran is not the same social phenomenon as a divorce in Sweden. Undertheorizing of social phenomena involves the risk of misinterpretations regarding both the phenomena in question and missing deeper social trends.

9. QUALITATIVE AND QUANTITATIVE MEASURES

Indicators informing about rates of change are necessarily quantitative, interpretation of cultural signs can primarily act as indications of the existence of a phenomenon. All social indicators will have a sign aspect requiring interpretation and a statistical aspect related to measurement. Comparative analyses are confronted with these qualitative aspects of statistical profiles continuously: What do phenomena signify in different contexts? Where are the “pools of silence,” that is, areas or phenomenon that are not visible- or not made visible?

Public statistics reveal ideological aspects when statistical patterns are analyzed as signs. Which domains, which indicators, are chosen for analysis? The development of domains such as “children as citizens” illustrates the development of children’s rights – the development of this domain is itself an indicator of changes in the understanding of children’s social position.

Cultural indicators will, in general, be based on both qualitative and quantitative measures. The qualitative (or semiotic) aspect refers to what the phenomena signify. The quantitative aspects refer to the frequency of the phenomena. (Frequency may also influence the sign-value.) Even though the qualitative aspect has often been less salient, it is important in principle. The question of interpretation is an also a question of validity.

10. SOCIAL TRENDS

Social trends refer to social processes, to patterns or structures that can be tracked over a period of time. Trends refer to both phenomenon on the surface, and to the forces that support the development of the surface. Although trends at the surface are easily observable, trends at the deeper level may manifest themselves through several phenomena on the surface.

Trends are generally documented as time series. Simple trends refer to the frequency of certain phenomenon, while deeper trends are constituted through series of indicators, such as when statistical indicators and cultural

signs are understood as supporting a trend of individualization. Trends are not just tendencies; they are forces. They are deeper dynamics causing the phenomena emerging at the surface. Social forecasts must be based on knowledge of the dynamics of these forces, not on extrapolation of tendencies on the surface.

Predictive indicators can be divided into identification of trends and strength of trends. Although strength is related to statistical measures, identification of trends relates both to statistical measures and cultural signs. Signs identify new tendencies through being interpreted as early indicators, as when commercial bureaus try to follow young trends. National surveys often seek to identify trends through time series on certain domains. Multidimensional measures may be developed to identify emerging tendencies through a model of emerging issues. The phenomenon of risk as understood by sociologists is a good illustration. Risk of poverty, for example, was established by interpreting certain signs in sensitive areas, as well as through theorizing about structural patterns. Indicators of risk in childhood refer to sets of factors that have a documented influence on their development or well-being (Bradshaw, 2002; Moore et al., 2006, Kids Count Special Report, Kids Count. Children at Risk).

Well-being is generally understood as a dependent variable, but it may be interpreted as the independent variable, influencing the capacity to cope with and overcome obstacles. Happiness is generally interpreted as a consequence of other factors in life but may also be understood as a factor of resilience (Headey et al., 1991). Social trends may also change rapidly. The focal point of research on social trends must therefore necessarily be thresholds, mechanisms, and interplay between factors, not extrapolation. In some domains, changes are rapid, while changes seem to be slow in domains dominated by strong institutions. Institutional apparatuses, vocabularies, and power structures limit social and cultural elasticity.

Children's relationship to the future is more profound than the fact that children are tomorrow's adults. The idea of pre-figurative socialization, children seen as scouts into the future (Mead, 1972), is widely accepted in popular culture. Their lifestyles anticipate the coming trends and locate children at the center of the dynamics of change. In Mannheim's theory on generations and life course (Mannheim, 1956), *weltanschauung* is developed in the formative period of youth. Mannheim's theory and cohort analysis share the assumption that cohorts or generations carry ideas and values with them through the life course (Frønes, 2001). Uncertainty related to future trends makes understanding the well-being of children difficult. The affluence at the present may produce the poverty of tomorrow, as illustrated by

possible coming crisis of global warming caused by the affluence and pollution of the present. Actions in the present have different consequences for different generations.

11. COHESION, EXCLUSION, AND INTEGRATION

The European Committee for Social Cohesion (CDCS) defines cohesion as “the capacity of a society to ensure the welfare of all its members, minimizing disparities and avoiding polarization. A cohesive society is a mutually supportive community of free individuals pursuing these common goals by democratic means” (http://www.coe.int/T/E/social_cohesion/social_policies/03.Strategy_for_Social_Cohesion/).

Indicators of such capacities are implicitly or explicitly rooted in a theory of cohesion, implying that divergent social systems may have divergent mechanisms of cohesion. Models based on general indicators may overlook local strategies for cohesion (Duhaime et al., 2004). Concepts such as individualization, fragmentation, and atomization indicate a deterioration of social cohesion on the system level, while the concept of social exclusion generally means the exclusion of certain groups or individuals. Exclusion may be a consequence of qualities of the groups or individuals excluded, or of social structures that create positions with a high risk of exclusion. The interplay between those factors is well documented. Groups such as “zero youth” who are outside both the educational institutions and the labor market (Williamson, 1997) or the situation of certain minority groups illustrate the dynamic interaction of structural positions, group characteristics, and individual competencies. Inner-city youth gangs are one example of a subculture emerging at the intersection of structural properties and cultural dynamics. The concept of subcultural capital (Thornton, 1996) illustrates that integration of one level may entail disintegration on another, as when strong ties to subcultures or minority groups weaken ties to the wider society. The position of children mirrors this dynamic of levels: integration in the family is at one level positive; at another level the family may be in an excluded position. Exclusion must necessarily be related to being and becoming, to the present, and to the possible consequences for the future. Integration in the peer group may be an indicator of future social capital and integration in the community, but it may also be a route to future social exclusion, depending on the structural position of the local peers. Young people’s integration into basic institutions such as schools and the labor market is often a key indicator of social integration. The possible varied influence of peers and community and the importance of

links to social institutions illustrate the multidimensional quality of social capital (Paxton, 1999), and the importance of studies on children's well-being and social capital being related to characteristic of their local community. The understanding of the multidimensionality of social capital illustrates the importance of social cohesion in local neighborhoods (Melton, 2001), and an elaboration of the concept of social capital related to children.

Institutional integration is often measured as a dependent variable, varying with economic and social resources, but it may also be understood as an independent variable, an indication of a certain type of poverty. The poor mother who places higher priority on consumer goods for her children may prevent them from looking poor, but this priority may make them even poorer in participation in activities and institutions important for social integration. Cash transfers and tax reductions to families aim to support the children via their parents, while integration in preschool more directly supports the children. Models of integration and exclusion determine which of these facilitates social integration. Mechanisms that contribute to integration for one group may contribute to exclusion of another.

12. THEORIZING INDICATORS: CHALLENGES AND STRATEGIES

Indicators provide a position between empirical observations and general conceptualization, bridging conceptualization and measurement. Through their deductive capacities indicators can produce domains that have their foundation in social theory, values and policies, in their empirical modality they are anchoring interpretation of empirical observation in specific models.

Indicators refer to statistical measurements and cultural signs, both as divergent types of indicators and as different aspects of the same measurements. The dimension of interpretation interact with the dimension of measuring, multidimensional interpretation requires multidimensional measures. The acknowledgment of the complexity of the phenomena intensifies the elaboration of measurements and tends toward complex multidimensional indicators. The need for stable, comparative indicators delimits the use of qualitative methods, while qualitative analyses can pursue more deeply into questions raised by indicators, and also confront the validity of quantitative indicators.

The more complex the indicators, the stronger their power: when changing and complex phenomenon are captured as a set of indicators, the

theoretical model defining phenomenon like well-being, cohesion, social capital or development has to be explicitly communicated. Despite their obvious character as constructions, even complex indicators may melt into the phenomenon; poverty or well-being is understood as what is being measured. Indicators are powerful instruments; indicators are part of the development of policies, not only neutral signs of their consequences.

Social indicators are assigned values and meaning through models of the phenomena they denote. As topic as well-being, civic skills, ethics, and justice increasingly are transformed into operational indicators, the complex relation between indicators, phenomenon, and models will increasingly have to be addressed, requiring an elaboration of models. Indicator research represents a particular methodological challenge related to measures. Comparability, related to social context and to life course and psychological development as well as societal development, means confronting challenges both of validity and reliability.

What is particular to children is not that they are a demographic group in which the membership continuously is changing, but the perspective of “becoming” and socialization, and the relationship between “being” and “becoming,” between the present and the future. The future occurs on a macro level and on the individual level of development and life course. The present shapes the future, and images of the future influence the present. The understanding of well-being of children has to be elaborated both in relation to “being” (as citizens), to “becoming” (development and socialization), and to the dynamics of “being” and “becoming.” Some domains, such as citizenship and rights, are dominated by the present. Others, such as education and development, are dominated by how the present influences the future. Models of well-being that place too much emphasis on the one aspect or the other will easily contribute to policies that miss out on this special aspect of the social position of children. As more complex phenomenon is approached through indicators, the methodological and theoretical challenges will become more potent, so will the ethical and political challenges. Possible conflicts related to cultural versus individual rights are but one of the dilemmas that will confront the future development of indicators.

Indicators mediate between conceptualization and measurement, confronting conceptualizations with empirical facts and assigning meaning to empirical measures. Understanding emerges from the tension between the elaboration of models and the operationalization of measures. This interactive process of construction helps indicators to contribute both to the accumulation of knowledge and the development of policies.

REFERENCES

- Atkinson, T. et al.: 2002, *Social Indicators. The EU and Social Inclusion* (Oxford, New York).
- Bauer, R.A. (ed.): 1966, *Social Indicators* (MIT Press, Cambridge, Mass).
- Beck, U.: 1992, *Risk Society: Towards a New Modernity* (Sage, London).
- Ben-Arieh, A. et al: 2001, 'Measuring and monitoring children's well-being', *Social Indicators Research Series Vol. 7*.
- Bradshaw, J.: 2002, 'Child poverty and child outcomes', *Children & Society* 16, pp. 131–140.
- Bradshaw, J. and E. Mayhew (eds.): 2005, *The Well-being of Children in the UK* (2nd ed.) (Save the Children, London).
- Brindis, C. et al: 2001, *Bridging the Gap: Next Steps in Developing and Using Indicators to Improve Adolescent Health* (University of California, San Francisco, San Francisco, CA).
- Brown, B.V. and K.M. Moore: 2003, 'Child and Youth Well-being: The Social Indicators Field', in Lerner et al. (eds.) *Handbook of Applied Developmental Science* (Thousand Oaks, Calif Sage).
- Bunge, M. 1975, 'What is a quality of life indicator?', *Social Indicators Research Series* 2(1), pp. 65–79.
- Clausen, J.: 1993, *American Lives: Looking Back at the Children of the Great Depression* (Free Press, New York).
- Christian, D.E.: 1974, 'International social indicators: The OECD experience', *Social Indicators Research Series* 1(2), pp. 169–186.
- Council of Europe Revised Strategy for Social Cohesion. http://www.coe.int/T/E/social_cohesion/social_policies/03.Strategy_for_Social_Cohesion/2_Revised_Strategy/.
- Courtney, M.E.: 2005, *Youth Who Run Away from Substitute Care*. Chapin Hall Center for Children, Report.
- Duhaime, G. et al.: 2004, *Social cohesion and living conditions in the Canadian Arctic: From theory to measurement*, *Social Indicator Research Series* 66(3), pp. 295–318.
- Easterbrook, G.: 2004, *The Progress Paradox: How Life Gets Better While People Feel Worse* (Random House, New York).
- Elder, G.H. Jr.: 1974, *Children of the Great Depression: Social Change in Life Experience* (University of Chicago Press, Chicago).
- Emery, F. and E. Trist: 1965, 'The causal texture of organizational environments', *Human Relations* 18, pp. 21–32.
- European Strategy for Social Cohesion. http://www.coe.int/T/E/social_cohesion/social_policies/03.Strategy_for_Social_Cohesion/.
- European System of Social Indicators. (http://www.gesis.org/en/social_monitoring/social_indicators/Data/EUSI/index.htm).
- Frønes, I.: 2001, 'Revolution without rebels: Gender, generation, and social change. An essay on gender, socialization, and change', in *Transitions of Youth Citizenship in Europe: Culture, Subculture, and Identity* (Council of Europe Publishing, Strasbourg), pp. 217–234.
- Goerge, R.M. et al.: 2001, *The State of The Child in Illinois: 2000*. Chapin Hall Centre for Children.
- Harris J.R.: 1998, *The nurture assumption: why children turn out the way they* (Bloomsbury, London).
- Headey, B., R. Veenhoven and A. Wearing: 1991, 'Top-down versus bottom-up theories of subjective well-being', *Political Science Dept., University of Melbourne*, 3052 Parkville, Victoria, Australia 24(1), pp. 81–100.
- Hernandez, D.: 1993, *America's children : resources from family, government, and the economy* (Russell Sage Foundation, New York).
- James, A., C. Jenks and A. Prout: 1998, *Theorizing Childhood* (Polity Press, Cambridge).
- Kagan, J.: 1998, *Three Seductive Ideas* (Harvard University Press, Cambridge, Mass).

- Kids Count Special Report: Trends in Child Poverty, 1976 through 2001 http://www.aecf.org/kidscount/child_poverty_intro2.htm.
- Kids Count. Children at Risk: State Trends 1990–2000. <http://www.aecf.org/kidscount/c2ss/>.
- Land, K.: 2001, 'Models and indicators', *Social Forces* 80(2), pp. 381–410.
- Land, K.: 2006, The Foundation for Child Development Child and Youth Well-Being Index (CWI), 1975–2004, with Projections for 2205. Duke University North Carolina. http://66.249.93.104/search?q=cache:6Y-ERiPjazEJ:www.fcdus.org/PDFs/03-21_06FINAL2006CWI-Report.pdf±child±and±youth±well±being&hl=en&ct=clnk&cd=6&client=safari.
- Mannheim, K.: 1956, *Essays on the Sociology of Culture* (Routledge, London).
- Mead, Margaret: 1972, *Culture and Commitment: A Study of the Generation Gap* (Panther, London).
- Melton, G.: 2001, *Toward a Child-Centered, Neighborhood-Based Child Protection System: A Report of the Consortium on Children, Families, and the Law*.
- Mjaavatn, P.E.: 2005, *Medicine & Science in Sports & Exercise* 2005. vol 37(5) supplement, p. 427.
- Moore K., S. Vandivere and R. Zakia: 2006, 'A sociodemographic risk index', *Social Indicator Research Series* 75(1), pp. 45–81.
- Moore, K. and L. Lipman (eds.): 2005, *What Do Children Need to Flourish? Conceptualizing and Measuring Indicators of Positive Development*. Search Institute Series (Springer, New York).
- Naisbitt, J.: 1984, *Megatrends* (Warner Books, New York).
- Noll, H.: 2002, 'Towards a European system of social indicators: Theoretical framework and system architecture', *Social Indicators Research Series* 58(1–3), pp. 47–87.
- Noll, H.: *Social Indicators and Social Reporting: The International Experience*. <http://www.ccsd.ca/noll1.html>.
- OECD: 2002, *Society at a Glance: OECD Social Indicators*.
- OECD: 2006, *Where Immigrant Students Succeed*. http://www.oecd.org/document/17/0,2340,en_2649_201185_36701777_1_1_1_1,00.html.
- Paxton, P.: 1999, 'Is social capital declining in the United States? A multiple indicator assessment', *American Journal of Sociology* 105(1), pp. 88–127.
- Peirce, C.S., H. Hoopes and James (eds.): 1991, *Peirce on Signs: Writings on Semiotic* (University of North Carolina Press, Chapel Hill, N.C).
- Qvortrup, J., M. Bardy, G. Sgritta and H. Wintersberger (eds.): 1994, *Childhood Matters: Social Theory, Practice, and Policies* (Avebury, Aldershot).
- Qvortrup, J.: 2005, *Varieties of Childhood in Studies in Modern Childhood: Society, Agency, Culture* (Macmillan, Palgrave).
- Pollard, E. and P.D. Lee: 2003, *Child Well-being: "A Systematic Review of the Literature"* Social Indicator research volume 61 number 1, pp. 59–78.
- Teitler, J. et al.: 2002, *Growing Prosperity, Lingering Inequality: New York City Social Indicators 2002* (The Social Indicators Survey Center) <http://www.siscenter.org/reports.htm>.
- Thornton, S.: 1996, *Club Cultures: Music, Media and Subcultural Capital* (Wesleyan University Press, Middletown, Conn).
- UNICEF: *Understanding the Convention on the Rights of the Child*. http://www.unicef.org/crc/index_30172.html.
- UNICEF: *Monitoring and statistics* <http://www.unicef.org/statistics/index.html>.
- United Nations Statistics Division: *Demographic and Social Statistics*. <http://unstats.un.org/unsd/demographic/products/socind/>.
- Key, U.S.: 2005, *America's Children: Key National Indicators of Well-Being 2005*. <http://www.childstats.gov/americaschildren/>.

- White, J.L., T.E. Moffitt, F. Earls, L. Robins and P.A. Silva: 1990, 'How early can we tell? Predictors of childhood conduct disorder and adolescent delinquency', *Criminology* 28, p. 507.
- White, S.C.: 2002, 'Being, becoming and relationship: Conceptual challenges of a child rights approach in development', *Journal of International Development* 14(8), pp. 1095–1104.
- Williamson, H.: 1997, *Contexts and Consequences: Young Men, Transition, and Social Exclusion* (Ashgate, Aldershot).

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