3 INDICATORS OF LIVABILITY OF SOCIETIES

3/1 APPROACHES TO ASSESMENT OF LIVABILITY OF SOCIETIES

Livability was defined as the *fit* between provisions and requirements of a society with the needs and capacities of its citizens. That 'fit' cannot be observed as such, the degree to which it exists must be derived from observations of other things. There are two ways to estimate livability. One way is to assess the presence of preconditions deemed likely to produce a fit. This involves assumptions about fit-likeliness of living conditions. The focus in this approach is on societal *input.* The other way is to observe how people flourish in a society, and attribute good functioning to good fit. The focus is than on societal *output.*

An analogy may illustrate the matter: the case of 'fertility' of the soil. If we want to know whether some piece of land is well suited for the growing of grain ('livable for grain'), the first way is analysing the input it provides. We then consider the structure of the soil, its percentage of moisture, the minerals it contains, etc. Because we know well what grain needs and to what conditions it can adapt, we can then reasonably well estimate the fit. That is: predict how well grain will grow.

The second way is just to try and consider the output. That is, asses the degree to which grain flourishes on this terrain afterwards. We then look at the results; the quantity and quality of the grain harvested.

Through the ages, fertility of land has been established by finding through experience (output). Only recently have we gathered enough knowledge on a limited number of plants to specify their necessary living conditions in advance (input).

The living conditions of grain can now be specified reasonably well. Needs and capacities of that species are rather clear-cut and have been discovered by controlled experimentation. The necessary living conditions for humans can less easily be specified. Not only is the human organism more complicated and many-sided than grain is, but also are humans much more adaptable. In fact, a major biological specialization of the human species is its un-specialism, combined with a great capacity for learning. Therefore, the possible variation in livable societies for humans is greater than the possible variation in fruitful soils for grain. Controlled experimentation is hardly possible with humans and human societies. Hence, it is also more difficult to discover basic human needs and capacities.

Let us keep these problems in mind and now consider current measures of livability of human societies.

3.2 ESTIMATING LIVABILITY BY INPUT: Assumed conditions for a good life

Current attempts to estimate the livability of human societies start from the assumption that some living conditions fit better with human needs and capacities than others. It is, for instance, supposed that economic conditions of material affluence fit better than poverty. Other conditions deemed likely to fit are 'political stability', 'social equality' and 'cultural civilization'. The more such conditions a society provides, the more livable it is presumed to be.

Investigators in this approach measure the success of societies (typically nations) in these respects by means of social statistics. For example, GNP measures 'economic affluence' per head or by average consumption, 'political stability' by the frequency of revolutionary activities and 'cultural civilization' by literacy or school enrolment. Such indicators are typically combined in an overall index. The sum-score on that index then denotes the general livability of the nation. An example of this approach is Estes' (1984) 'Index of Social Progress'. See scheme 3/2.

There are at least two problems with this approach: each of them quite serious.

The first problem is that the assumed fit is highly questionable in most cases. Consider the example of economic affluence: Does a rich society provide a better fit with individual needs and capacities than a not so rich society? Though people typically 'want' to improve their material standard of living, it is doubtful that they really 'need' so. It is also uncertain whether a rich society challenges human capacities more optimally than a not so rich one. In fact, the human species has developed in material conditions that would be judged as utterly poor by present day standards.

The second problem in this approach is the assumption that more of a condition denotes better livability. Consider the case of social stability. Some minimum stability is certainly required, too much change may frustrate needs for safety and overcharge adaptive capacities. However, a society without any change is not likely to fit either: it may frustrate the need for novelty and may leave adaptive capacities under-utilized.

In fact, this approach does not inform us about the livability of nations, but rather about the degree to which nations realize current ideals. The point of departure is not human needs and capacities, but the political agenda. As such, this approach is of little help in the search for optimal social organization. It typically tells us how far we have proceeded on the way we have chosen, but not whether that is the right way. In other words, this approach measures *success* in current social policy, but not the *sense* of it in terms of its contribution to livability.

Scheme 3/2
Some current indicators of quality of living conditions

Nations (Estes 1984)	(Narroll 1983)	*Large cities (*PCC1990)
Education - school enrolment - pupil teacher ratio - % illiterate - % expenditures	**Brotherhood** - social security - child beating death	**Public safety** - murders
Healthcare - physicians per 1000	**Progress** - national income - contributions to science	**Food cost** - % income spent on food
Women's rights - male/female education ratio - women's suffrage	**Peace** - foreign war death	**Living space** - persons per room
Economic welfare - growth rate - income per head - inflation - food production	**Order** - homicides - civil strife death	**Housing standard** - % with water/electricity
Population stability - birth rate -death rate - % increase	**Variety** - freedom of press	**Communications** - telephones per 1000
- % under 15		**Education** - % children at school
Geographic situation - % arable land - number natural disasters		**Quiet** - noise level
		Traffic flow - speed in rush hour
		Clean air - pollution

Political stability
- demonstrations - riots
- strikes - armed attacks
- violent deaths

Political participation
- years since independence
- years since constitution
- parliamentary system
- functioning parties
- influence military
- numbers of elections

Cultural homogeneity
- % same mother tongue or language
- % same religion
- ethnic fractalization

Need theory

An evident way to avoid these problems is to depart from a well-established theory about human needs and capacities and to specify the social conditions that are required to fit with these. This is called the *basic need approach.* Though better in principle, it has brought us little further.

A first problem on this track is that there is no well-established theory about human needs and capacities. There is much speculation on this matter, some of which is rather plausible, but little empirical proof. Methodologically, it is extremely difficult to demonstrate what people 'really' need and can.

The currently most used theory is Maslow's (1964) need-hierarchy. According to this theory, the most pressing need in human life is to overcome some basic deficiencies: first organic deficiencies such as hunger, and next socio-psychological needs like safety, belonging and esteem. Beyond these 'deficiency needs', 'growth needs' would prevail. That means that people need meaningful challenges that fit their capacities and involve ongoing development.

At the level of deficiency needs this theory allows some specification of necessary living conditions. The gratification of organic needs requires that there is a production system that provides 'food' and 'shelter'. Required minimum levels can be well specified in this case. Things become more difficult where the socio-psychological needs are concerned. There is much variation in the way societies provide 'safety', 'belongingness' and 'esteem' and it is difficult to define minima or compare performance. What is for instance the minimum required degree of belongingness? Are these needs better gratified in the traditional stem-family than in the modem nuclear family?

Things become even more complicated where 'growth needs' are concerned, which concern the use and development of capacities. These needs are too varied to allow the specification of satisfiers. At best, one can say that gratification of such needs requires a considerable degree of 'freedom' and 'variety' in society. Again, it is hardly possible to indicate minimum and maximum levels.

By lack of a theory from which we can deduct necessary living conditions, we must therefore resort to the other approach and assess inductively what societal conditions appear to be livable.

3/3 ESTIMATING LIVABILITY BY OUTPUT: Apparent good living as such

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The flourishing of plants or animals in a given ecological environment is usually measured on the basis of their functioning as apparent in growth, adequacy of behaviour and absence of disease. Successful procreation is also seen as a sign of good functioning. Can the flourishing of humans in a social environment be measured by the same criteria? To some extent yes, but the flourishing of humans involves more than biological functioning alone. Unlike plants and animals, humans can reflect on themselves and their situation. The fit between their needs and capacities with the provisions and requirements of society is therefore also reflected in their appraisals.

Below I will consider these two approaches in more detail. First, the indicator of good biological functioning (health) in section 3/3.1 and next appraisals of life (satisfaction) in section 3/3.2. The approaches are summarized in scheme 3/4. Next to the substantive qualities of these indicators we will also consider the availability of data. As the aim is to compare societies, cross-national data are needed.

3/3.1 Health

As in the case of plants and animals, the flourishing of humans can be judged by their bio-physiological functioning, in other words by their 'health'. We cannot say that somebody lives well if s/he is weak, impaired or ill and certainly not if s/he is dead. The concept of health covers biological functioning at large. Specific health concepts concern specific aspects of human functioning.

Physical health

The analogy with flourishing of plants applies best where mere bio-physiological

functioning is concerned, also called 'physical health'. Physical health of organisms can be defined in two ways: firstly, by absence of disease or impairment, secondly by signs of good functioning, such as energy or resilience. The former aspect of bio-physiological functioning is referred to as 'negative health' (illness), the latter as 'positive health'. The less negative and the more positive the physical health of humans is in a society, the more livable that society apparently is.

Negative health can be measured by the incidence and severity of impairments and disease. That sounds easier than it is. Medical statistics are often limited to incidence and do not inform us about severity. Moreover, medical statistics typically concern 'specific' health defects and mostly allow no view on the 'overall' health situation in a country. Some attempts have been made to characterize overall health in nations, but unfortunately, these are yet not sufficiently standardized to allow international comparison.

Positive health can be measured by performance tests and by subjective reports about feelings of health. The latter indicators typically concern overall health. In several western nations, periodical health surveys monitor health-feelings.

Life-expectancy
The flourishing of humans in a society can also be measured by their longevity; the better the livability of a society, the longer the life-expectancy of its members must be. This indicator is certainly quite appropriate where success in providing the biological minimum is concerned. However, it is not sure that this indicator also reflects variations in the extent to which societies are successful in meeting the social and psychological needs of their members. A society may succeed in keeping its citizens alive for a long time without offering a good life: e.g. by investing heavily in medical technology or by imposing a taboo on suicide and euthanasia. Another complication is that longevity may also depend on race and the ecological environment. The validity of this indicator is thus limited.

The quality of data on longevity is quite good. Most present-day nations have reliable mortality statistics. These statistics show considerable differences between present day nation states. Life-expectancy is currently lowest in Upper Volta (about 30) and highest in Japan (77.2). Mortality statistics also show progress and decline in livability, for instance a drop-in life-expectancy in the former second world (communist) countries since the 1970's and a rise in first world nations (WHO, 1986).

Healthy life-expectancy
The physical health of people in a society can also be measured by the average number of years they live free from chronic illnesses. This combined measure

corrects one of the above-mentioned limitations of mere life-expectancy. Healthy life-expectancy has been measured in different ways: see Katz et al (1983) and Sullivan (1986). As yet, there is hardly any comparable nation data on this matter.

Mental health

Instead of focusing on 'bio-physiological' functioning, one can also consider the adequacy of 'socio-psychological' functioning. This is what commonly is referred to as 'mental health'. The reasoning is that the better a society fits with human needs and possibilities, the less it drives its members mad.

There is nothing wrong with this idea, but there are great problems in its operationalization. It is not easy to establish who is mentally 'ill' or not. Cross-cultural comparison is hampered by differences in manifestations of psychological disturbance, as well as in definition and registration. This limits the use of this indicator to countries that are culturally very similar.

Comparable national data on this matter are scarce and limited in fact to the western world. The data that are available concern 'negative' mental health: that is incidence of psychological disturbances. Like in the case of physical health, these do not reflect 'overall' mental health, but the incidence of specific syndromes such as depression, anxiety and stress. A good review of data and their limitations can be found in Murphy (1984).

As in the case of physical health, the best indicators of overall mental health in a given country come from survey studies. Most health surveys inquire about psychological complaints and compute sum scores based on these. Again, there is as yet too little uniformity in the data for meaningful comparison between countries.

3/3.2 Satisfaction

Unlike plants and animals, humans can reflect on themselves and their situation. Therefore, livability of human societies can also be measured by the degree to which its inhabitants deem life worthwhile.

In this context, it is worth distinguishing between judgments about 'society' and judgments about one's 'life' in that society. A society that is judged positively by its citizens is not necessarily a very livable one. The judgement can concern aspects that are very prominent in public discourse but have little relevance for the actual enjoyment of life. Also, basically dissatisfied people can still be positive about their society, because they are unaware of its shortcomings and attribute their misery to other matters. The degree to which people flourish in a society can thus best measured by how they evaluate their own life, in other words by their *personal satisfaction.*

If we focus on personal satisfaction, there is still another distinction that must be considered. Personal satisfaction judgments can concern 'aspects-of-life', or ones 'life-as- a-whole'. Satisfaction with specific aspects of life such as 'work', 'marriage' or 'governments' says little about the general livability of a society. Most citizens may be satisfied with their work, but still be unhappy because their society offers little more. Also, they can be satisfied with most aspects of life, but nevertheless judge their life-as-a-whole negatively; for instance, because they miss something essential in it, i.e. 'freedom'. Still another complication is that aspects of life are not equally important in all societies at all times. 'Work' for instance is less central in most third world countries than in the homelands of the Protestant Ethic. For these reasons, we will focus on *'overall' personal satisfaction.*

The degree of overall personal satisfaction of members of a society can be assessed in different ways: by the degree of 'alienation', by the incidence of 'suicide' and by the level of 'happiness'.

Alienation

In the sociological literature, the concept of alienation is commonly mentioned in this context. Alienation is seen as something that results from a lack of fit between ways of life provided by a society and human potentials. That condition is believed to manifest in individual feelings of powerlessness and meaninglessness. There are many variations in this theme, some of which come close to conceptions of mental health.

The incidence of subjective alienation in a society can be measured by means of self-reports. Several questionnaires have been developed for that purpose and used in large-scale surveys. The most currently used is the Seeman Alienation Scale (Seeman, 1975). A major limitation of all these measures is that they do not involve a general judgement of life, but rather describe satisfaction in a cluster of life-aspects.

Therefore, it is better not to use them for assessing overall livability in nations.

Despite much theorizing about alienation and society, there are hardly any comparative data. Even if we might want to judge livability of nations by the alienation of its citizens, we simply cannot.

Suicide

Personal dissatisfaction can also be measured by behavioural manifestations of despair. Various behaviours have been considered in that perspective: mostly deviant behaviours such as use of drugs, aggression and excessive risk-taking, but also non-offensive behaviours such as religious retreat. The problem with all these phenomena is that they are at best partly linked to livability of society, and probably not equally much in all societies at all times.

Still, there is little doubt that suicide mostly signifies great personal despair. Hence, suicide rates are often used as an indicator of livability of societies. This tradition dates to Durkheim (1897), who observed more suicide in religiously heterogeneous communities than in religiously homogenous ones. In this line, the continuous rise of suicide in western societies in the 20th century has been interpreted as showing that modernization of society has reduced its livability.

There is probably some truth in the idea that low livability gives itself away in high suicide rates. Yet it is also clear that the incidence of suicide depends on many other things as well. In societies such as traditional Japan, suicide is a moral obligation in some situations. In present day western society, suicide rates rise because it is no longer taboo and because medical technology postpones natural death. As in the case of other despair behaviours, such effects are not equally great at all times in all societies.

Still, suicide is currently used as an indicator of livability of nations. This is probably because it is well documented. In most countries, this cause of death is registered systematically since long. Though the accuracy of registration varies somewhat between countries and through time, the data seem well comparable. A review of suicide rates in countries is available in WHO (1987). These data show sizable differences. Around 1980 mortality by suicide was greatest in Hungary (± 460 per million) and lowest in the Philippines (± 9 per million).

Happiness

Personal overall satisfaction can better be measured directly by asking people how they feel about their life. This is currently done in survey research on 'happiness' or 'life- satisfaction'. In the 1950's questions on such matters figured in the margin of studies on adjustment and health. Since the 1970's, happiness serves as a core variable in representative 'Quality-of-Life' surveys in many developed nations. In that latter context, happiness is often used as an indicator of livability. The happier the

inhabitants are on average, the more livable the nation or region is presumed to be.

A basic assumption in these studies is that a good fit between societal provisions/demands and individual needs/capacities results in a high appreciation of life by individuals. Bad fit is seen to give rise to deprivation and frustration, and thereby to a negative evaluation of life-as-a-whole. This view is quite plausible, but not established beyond doubt. Cultural relativists object that enjoyment of life in a society is a matter of prevailing outlook-on-life, rather than real quality-of-life. Likewise, sceptical psychologists argue that happiness is a cognitive matter that depends on aspirations and expectations and is essentially unrelated to real quality of life. In chapter 5, I will consider these objections in more detail.

The happiness of members of a society can be measured by surveys. Survey data on happiness are available for most present-day nations and on some major cities around the world. There are also surveys on ethnic groups within nations, such as on African- Americans or Hispanic-Americans in the USA, or on typical sub-cultures such as the Kibbutzim in Israel. The data are less abundant than in the case of life-expectancy and suicide, the number of societies covered is smaller and the time-series are shorter. Still, the number of observations on happiness grows every year and their number is now sufficiently great for a fruitful analysis.

As with life-expectancy and suicide-rates, there are consistent differences in average happiness between countries. Happiness differentiates even better than the other indicators. This is consistent with the above-mentioned observation that the former two indicators estimate livability rather incompletely. However, there is doubt about the validity of survey-assessed happiness. Methodologists have questioned whether answers to simple survey questions adequately measure how people really feel about their life. Moreover, there is hesitation about the comparability of happiness between nations.

3/4 SUMMARY

The livability of human societies can be estimated in two ways: The first way is to assess the presence of living conditions deemed likely to provide a fit with citizens needs and capacities. Clues for presence of such conditions are referred to as 'input' indicators. The second way is to assess the degree to which citizens flourish in a society, assuming that good flourishing results from a good fit. Manifestations of good flourishing are health and satisfaction. They are referred to as 'output' indicators of livability. These approaches are summarized in scheme 3/4 below.

The focus of this book is on output indicators, in particular on satisfaction. Unlike health, satisfaction has hardly been compared cross-nationally as yet. This book presents data on satisfaction with life-as-a-whole, also called 'happiness'.

Scheme 3/4
Indicators of livability: summary scheme

<table>
<tr><td>Unobserved concept</td><td colspan="2">LIVABILITY
fit between provisions requirements of a society and needs capacities of citizens</td></tr>
<tr><td>Observable manifestations</td><td>INPUT indicators:
Presence in a society of living conditions deemed likely to fit with citizens' needs/capacities,
- material affluence
- social security
- political freedom
- cultural variety
- etc....
-</td><td>OUTPUT indicators:
Flourishing of citizens in a society as apparent in:
-Health
- physical health
- longevity
- mental health
-Satisfaction
- suicide
- alienation
- happiness</td></tr>
</table>

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