

**PHILOSOPHICAL ASPECTS OF SOCIAL INDICATORS AND  
QUALITY OF LIFE RESEARCH**  
Some Tentative Conclusions

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*1. Introduction*

Comparing the various contributions to these two issues on SI/QOL research, many a reader will be seized by a feeling of confusion or even bewilderment — such is the distance between the different perspectives and approaches. The contributors disagree about *ends* and *means*; about the identification of the “true” problematique underlying the elusive notion of QOL as well as about the (theoretical) strategies<sup>1</sup> envisaged to tackle it. Occasionally, they may hold different opinions about purely factual matters<sup>2</sup>. But most of the time their conflicting views are more than disagreements in “belief”; they involve essentially normative or other valuational elements.

At the methodological level, one is struck by considerable divergences as to what is considered the “right” research strategy. Sometimes this is expressed explicitly, as when sociologists — who are the most inclined to empiricist and “inductivist” reasoning — complain about the “imperialism” of economists, imputing to them at least part of the deficiencies of present SI/QOL research practice (Durand, Gehrman); or vice versa (Fox’ theoreticist dismissal of “measurement without theory”).

At the level of *Weltanschauungen*, two entirely different worlds confront each other; as when Illich boasts about his anticipation of the future results of what he mockingly calls “language accounting” by means of the method which has gained his predilection : historical analysis.<sup>3</sup> To some, social accounting is a convenient instrument for

tackling some of the present world's most intricate problems; to others, the "colonization of everyday life" is the ultimate consequence of suffocating Weberian rationalisation.

*These disagreements rather accurately reflect the state of the debate over SI/QOL in general.* SI research is not comparable to central "theoretical paradigms" like functionalism vs. conflict theory in sociology; nor is it a special branch of social science, defined in terms of a specific subject matter; nor is it a purely methodical endeavor which offers mainly research instruments (cf. Glatzer, 1979). The dominating interest of the "historical" SI movement was (and is) *to provide descriptive, normative, evaluative, and explanatory knowledge about societal problems and developments to be used mainly for societal guidance*<sup>4</sup>. Few people will not endorse this purely formal characterisation. And the hard core of the movement as a more or less "established research direction" (Glatzer) can undoubtedly be identified by means of citation analyses and related bibliometrical/sociometrical techniques. On the other hand, concern with QOL has led to a fan of ramifications of the original endeavor into widely differing domains; and the movement has been influenced in turn by "outside"critique. As a result, when it comes to specifics, it is often difficult to tell which theoretical positions, methodical stances (etc.) *the* movement does or does not stand for.

With respect to the contributions gathered here, it seems equally futile to try to arrange them according to their distance from some presumed standard of relevance to our subject - human happiness, whatever this notion is held to mean. *At this stage of its development*, attempts by practitioners of well-established individual disciplines and specialisms to "appropriate" the capacity of the SI movement in a reductionist manner may seriously hamper the realization of its potentials. (The contrary move that consists in discarding SI/QOL research altogether is similarly counterproductive).

For these reasons I shall not attempt an impossible reconciliation of opposing viewpoints here. Nor shall I search for some minimal common denominator of dubious theoretical or heuristic value. Instead my aim in the present paper is to discuss some of the methodological and epistemological problems raised by the views and proposals as to the definition of QOL advocated in these volumes. In particular, I will concentrate on the implications of multidisciplinary SI/QOL research — broadly defined to include also critical

observations such as those of Rist and Illich in these pages — for certain “foundational” issues in contemporary economics (specifically, welfare economics). But first I have to outline my position concerning the current status of SI/QOL research within the field of social science in general.

## 2. *SI/QOL Research : Cross-Fertilization or Disciplinary Imperialism ?*

To witness certain features of contemporary political acrobatics, Storrs McCall is probably too optimistic when he writes that “it is impossible to be against QOL, any more than it is possible to be against motherhood, consensus, or international understanding” ! Anyhow, it is obvious that SI/QOL research can only hope to live up to its promise — the provision of reliable knowledge for societal guidance — when the smoke-screen masking vested interests and conflicting claims about societal concerns is blown away. It is a well-documented fact that proposals concerning SI/QOL are often *minimalistic* in that they are often the result of ideological compromises, evading “definitions that would reveal lack of consensus on the present nature of human societies and on the nature of the Good Society that is sought” (Wolfe, 1980). Their content is codetermined by ideological preconceptions and bureaucratic rituals. They may even be the outcome of attempts to reconcile fundamentally contradictory demands.

Especially in times of crisis, not all actors in the socio-political arena share an active or passive interest in promoting a truly rational debate over the modalities of the QOL of people throughout the world and ways to improve it. One of the merits of the critical contributions to these volumes is to have documented that such an interest is *not* universal; and that those who share it don’t necessarily share it in similar ways.

Granted that the SI/QOL debate is far from “neutral” — that to the contrary, we are dealing with ideologically and politically explosive material — we see no genuine reason for *not* trying to elucidate the terms of the debate and to separate pseudoproblems due to the accidents of intellectual history from genuine disagreements concerning values.

Let us leave aside the “external” aspects (political, ideological etc.) of the incompatibilities between the various perspectives on

SI/QOL here and concentrate on the “internal” factors responsible for the present confusion in the field<sup>5</sup>. In his contribution to the seminal work of the SI movement, Raymond A. Bauer’s *Social Indicators* (1966), Bertram Gross cautioned that the maturation of social accounting concepts (including theories, of course) would take many decades. Apart from (i) the inherent complexity of the task, he pointed to (ii) the *multi-disciplinary* character and origins of the movement as a major obstacle to fast and balanced scientific growth in the new domain.

(i) By now, it has become difficult to ignore that *the relative simplicity and formal elegance of the approaches of successive generations of welfare economists to satisfaction or happiness went at the expense of relevance*. Specifically, their “practical judgment”<sup>6</sup> that positive (resp. negative) changes in the “total” welfare (sic) of individuals and social groups would result from increasing (resp. decreasing) economic welfare — of which national product per capita was held to be the measurable counterpart — more often than not did not hold water. One standard objection (among many others) derives from Seebohm Rowntree’s pioneering work on the “poverty line”, which he defined in terms of the income needed to provide for the necessary calory and protein intake (Svoboda, 1974, p. 143 a.f.) Investigating standards of living in York around the turn of the century (!), Rowntree found that about ten per cent of the population fell below the poverty line. Moreover — and this is the point I want to make — another eighteen per cent, i.e. about the double, was found to suffer from malnutrition although their income was superior to the required minimum. This was so because they spent (or had to spend) their income in other ways : medical care, alcohol, gambling. The moral is of course that spending or other *output* measures are more directly relevant to QOL than input measures (which are usually easier to come by)<sup>7</sup>. Now output measurement is notoriously tricky. Among other things, it requires a drastic *redefinition of such fundamental economic categories as production and consumption* (cf. Illich’s critique of Becker).

Other difficulties arise when economists try to extend the welfare-economic apparatus to cope with income distribution and redistribution effects (e.g. Beckerman, 1980). Frequently used measures of distribution like the Gini index<sup>8</sup> do not have any clear theoretical foundation (Ijiri and Simon, 1977, p. 13). Therefore, models essentially based upon them (e.g. models of socio-economic development) have dubious explanatory value (cf. Callebaut, 1981a).

Current economic approaches to socio-economic development more often than not are of a pragmatist, "ad hoc" nature. This, in turn, makes them vulnerable to ideological biases (as the models are non-explanatory, they are often immune to testing and falsification).

Finally, it remains to be seen whether economic theorizing of the type which now prevails will eventually prove capable of dealing with the issue of third-party (spillover) effects. Although it is true that economists are "increasingly competent to put price-tags on externalities" (Illich), it should be stressed that this can only be achieved at the cost of a drastic modification and of considerable complexification of standard concepts and theories. One of the most promising approaches to the problem is through *internalization* of production externalities (not to be confused with Illich's "internal counterproductivity"!.) Older generations of welfare economists held that it was possible, at least in principle, to determine a scheme of taxes and bounties that would equate marginal social and private products — and hence, would induce firms<sup>9</sup> generating externalities to move to the ideal output level. At present, advocates of the so-called *private bargaining approach* (Ronald Coase et al.) hold that in many cases, firms themselves have incentive to agree to produce optimal outputs, kinds and quantities of commodities, and to distribute the total profit among each other. In their framework, the issue of receiving truthful information from the participating firms in order to negotiate an efficient agreement concerning the coordination of their actions becomes paramount. Models are currently constructed which enable to deal with explicit mechanisms respecting the informational limitations of the "center", i.e. the coordinating agent (someone hired by the  $n$  firms in the case of voluntary coordination or a governmental body in the case of imposed coordination), yet providing the firms with appropriate incentives to communicate truthful information to the center (e.g. Groves, 1976). Apart from implementation problems (e.g., producers often do not possess the required information themselves), the trouble with both the traditional welfarist and private bargaining approach is of a methodological nature. The progressive tendency to cope with market failures in terms of an *organizational framework* not only entails a considerable departure from received micro-economic notions (cf. for instance the neo-institutionalism of Williamson, 1975); there are good reasons to believe that a number of essentially *non-economic features* of organizations must also be taken into account (Callebaut, 1981b).

To sum up : To face the inherent complexity of the QOL phenomenon, much more complex theoretical models are needed than the economic models which are available at present. Moreover, in addition to being able to cope with the issues I have mentioned (output assessment, distribution, and externalities), these models should be inspired by a much more realistic, i.e. probably also much more complex picture of man than traditional *homo oeconomicus*. Whether or not the "queen of the social sciences" will eventually be able to accommodate to the required changes<sup>10</sup> is, in the last analysis, of purely academic interest. What imports really is whether the high demands now placed on it can be met in due time by scientifically accurate means. If not, the strong anti-scientific attitude which already pervades part of those concerned — the "general public" as they are called in planners' jargon — may expand rapidly, paving the way for even more political charlatanism than we witness today.

(ii) How did the SI movement respond to the very challenge the economic profession is now gradually but reluctantly willing to perceive? After all, SI/QOL research was explicitly conceived as an alternative to the narrow-minded growth mania of the dismal science! The reader of these volumes will concede that "the breaking down of many language barriers" (Gross) among the various disciplines concerned is as necessary today as it was fifteen years ago. This is not to say that no progress has been made at all : There have been some major breakthroughs on the purely theoretical side, and valuable experience has been gained from a number of (mis)-applications. Yet as the scope of SI research has been widened to include the problematique of *non-western societies*, new confusions have arisen, adding to the old ones.

I have discussed these matters elsewhere (Callebaut, 1981a; Callebaut and Van Bendegem, 1980). Suffice it to point out here that advocates of SI/QOL research often are not really aware of, or do not seem to bother about the impossibility of generalizing western "development" patterns to the world situation. Within the existing political and economical world order, all nations cannot grow simultaneously, since the system functions precisely by virtue of having unequal core and peripheral regions (Immanuel Wallerstein). Roughly, two alternatives can be spelled out. The one is associated with various formulations of the dissociation (delinking) paradigm and holds that sustained growth of nations (which are now "underdeveloped" as a result of colonialism) is desirable and possible by means of a fundamental restructuring of the world system. The

other, which Illich and Rist defend in these pages with great ability, disposes of the growth imperative altogether. In many respects, these positions are irreconcilable. What concerns us here is that in propounding solutions for present-day world problems, both heavily rely on (alternative) visions of desirable life styles and of the "good society". To articulate these views, some type or other of indicators models, qualitative or quantitative, are needed<sup>11</sup>. Conversely, issues which were formerly studied from a narrow western perspective only can now be approached in a less biased way.

Thus investigations into the deeper causes of discontent at the life styles characteristic of present-day "advanced" societies (social limits to growth<sup>12</sup>, built-in frustration of consumption etc.) may gain from studies of alternative non-western production and consumption modes. SI/QOL research may also greatly benefit from focusing on the *informal sector* of economies, consisting of all non-scheduled, non-professional and non-market activities. Traditionally, the informal sector has been treated in a stepmotherly fashion. It is now realized more and more that it is — and should be — an integrated part of any viable economy, a necessary counterpart to the institutional sector; and that solutions for many of our "civilization" illnesses might be found if we are willing to look for a better balanced "dual economy" (Huber). When liberated from their present technocratic confinement, the potentially powerful tools of social accounting could help to define strategies toward this balance.

### 3. A Plea for Utopianism

Assessing the current limitations and possibilities of SI/QOL research, an authors collective (Encel et al., 1975) writes that Its potentials are multifold : it can increase the visibility of social problems and locate emergent problems, thus pointing out required social and technological innovations; it can extend accepted notions of welfare, so that the responsibility of planners for the quality of life of the planned-for becomes more evident; it can provide a basis for the systemic comparison of the consequences of alternative futures for those holding alternative value perspectives and for the elaboration of both purely theoretical social science and our techniques of policy assessment and experimentation. Whether these potentials will be realized remains to be seen.

"*The systematic comparison of the consequences of alternative futures...*" : Contradistinguished from the pejorative use of the term utopian<sup>13</sup>, there is a positive meaning of (concrete) *utopia* associated with such widely differing names as the German philosopher Ernst Bloch and the Italian mathematician Bruno de Finetti. The latter has once envisaged an "utopian" science of economics, the conceptual and theoretical apparatus of which would not be biased by the contingency of economic institutions like money as it is used at present. Only such a science would be truly scientific. According to de Finetti, the Utopia is a scenario of a desirable world, not technologically impossible, although perhaps impossible under the present organization of society (politics, law, customs, existing distributions of wealth and power). The utopian approach deals with the problem of finding possible forms of organization to implement such a world. Its formulations must be "neutral" in that "the use of words implicitly suggesting limitations to the range of 'possible' choices must be avoided" (1974, p. 336).

de Finetti's "utopianism" was directed against the many subtle or not so subtle forms of *reification and unjustified generalization* with respect to the range of applicability of theories economists are prone to when they fail to specify the institutional premises and preconceptions of their theories. It is well known that references to aspects of universal "human nature" are often afflicted with such unwarranted inferences. Sometimes this kind of carelessness has been explicitly defended or even promoted a methodological prescription. Thus Wassily Leontief, the father of modern input-output modeling, addressed the Marxist critique according to which neoclassical economists fail to specify the institutional background of their theories in these terms :

Fortunately enough in the process of their actual work the bourgeois economists implicitly and maybe even unconsciously framed their theories in complete accordance with the fundamental, relevant facts of the institutional background of capitalist society. Thus the subjective methodological shortcomings did not impair the objective validity of their theoretical deductions (1938, p. 96).

It seems that Leontief's epistemological pragmatism is still shared by many of today's economists, although usually they are not that explicit. One may strongly doubt whether such optimism was warranted at any time. Anyhow, it certainly becomes scientifically counterproductive — and mystifying — as soon as it is transplanted



to the analysis of non-western societies.

Various authors (Durand and Van Trier in particular) point out that as it seeks to define objective happiness requirements which are allegedly universal, current SI/QOL research is subject to a similar institutional bias. Van Trier goes even further: he endorses the epistemological view that concepts and models which are used for the observation and classification of societal phenomena are always peculiar to specific societal contexts. To the extent that "universal scales" (such as Maslow's hierarchy of needs whose application to SI/QOL is envisaged by McCall) are in fact biased, SI/QOL research ought to abstain from using them, unless modifications would result in more adequate, "neutral" devices. However, whether or not a concept, model or theory will stand up to the test of "neutrality" cannot be decided completely a priori; it should be made the subject of empirical investigation within a setting as free from "theory-ladenness" as possible. Where possible, competing approaches ought to be taken into account<sup>14</sup>. The only alternative — a full-blown relativism which would leave no room for cross-cultural comparisons in time/place — seems as undesirable as the disease it is supposed to remedy. (And, for that matter, it is denied by everyday perceptions our theories should be able to "correct": one needs only to think of the "demonstration effect" of western life-styles, or the fascination of a growing number of so-called drop-outs with more "primitive" life patterns, etc.)

The question, then, is how a setting favorable to non-biased SI/QOL "commensuration" might be secured. As far as I can see, little effort has been spent on the investigation of this issue, despite its primordial importance. One possible strategy would consist in grasping the nettle by critically investigating the epistemological premises of the social accounting systems proposed to measure and compare the QOL of people belonging to different social groups and cultures. To the extent that these models and theories remain tributary to measurement principles derived from or inspired by utility theory (which is the case more often than not), praxiological and, more specifically, *proto-scientific* considerations which have been elaborated in the last decade could be of great help here. I am referring to the endeavor of constructivist philosophers working in the vein of Paul Lorenzen's approach to the theory of science (see especially Kambartel, 1979). The Erlanger program can be viewed as a re-statement, by means of modern conceptual and logical tools, of Kant's critical program; as Paul Sagal put it, it is "philosophizing

after the *linguistic turn*" (Sagal, 1977) Constructivists hold that every science is at least in part a priori. Sciences which also essentially involve an empirical (a posteriori) part, like physics or the social sciences, are viewed as exhibiting a multi-tiered structure. Upper tier principles as such are not subject to empirical test; they can only be justified a priori. Only the "derivative" level, consisting of empirical hypotheses (laws) which are deducible from the axioms with the help of auxiliary assumptions (as well as the level of empirical generalizations not directly derivable from the axiomatic core) are exposed to direct testing<sup>15</sup>. Just as the theory of measurement is presupposed in all physics as a preliminary to testing physical hypotheses, there are terms and principles definitive of the subject matter of social science that must come before one can go about testing hypotheses of social science. The methodical introduction and justification of these first principles (arguments for which were called "transcendental" by Kant) has to take into account a preliminary understanding of the *explananda*. Thus it might be asked whether received economic notions like cost or utility (or more generally, concepts such as action, ends/means, price etc.) may be so secured as to guarantee that they will "do the job" we expect(ed) them to do. The malaise in contemporary economics which Drownowski and others have pointed to has been approached also at this level (methodical reconstruction of the *task* of economics, resp. social science in general). As yet the question whether certain modifications of "first principles" will suffice or whether more drastic changes ("eine methodisch-praktische Revolution der Denkungsart" — Kambartel) are in order remains open. But the debate has already yielded a number of useful clarifications<sup>16</sup>.

To get a flavor of some issues that might be the subject of a systematic reflection on the prerequisites of "utopian" SI/QOL accounting systems, I propose to consider how mainstream welfare economics runs into trouble when it tries to account for human happiness.

#### 4. Conclusion : Prerequisites of a Viable Theory of QOL

Abramovitz (1979) is an informed discussion of the malaise affecting contemporary welfare economics from the point of view of a mainstream economist venturing into the domains of sociology and psychology. Abramovitz' concern is with the growing disenchantment (in the west) with the fruits and the working of the economy. More specifically, he tries to offer an explanation of the

results of a number of Gallup-type happiness surveys in different countries and at different times as brought together by R. A. Easterlin. The surveys are all of the subjective type. As Abramovitz himself acknowledges (p. 8n), most of his views are also held by other welfare economists.

Abramovitz' discussion focuses mainly on the relations between income and people's perceptions of their own states of satisfaction.

The "Easterlin paradox" is described as follows :

- On the one hand, a strong, consistent, positive association between income and reported happiness is found to exist when people at a given place and time are surveyed. Much more people in upper income groups feel happy than is the case in lower income groups.
- On the other hand, cross-time and cross-place comparisons yield small differences in reported happiness. The proportion of the population considering themselves very happy, for instance, is found to be about the same in countries with high, medium and low income.

Four complementary and mutually supporting explanations are offered for these apparently contradictory results. They may be roughly summarized as follows :

(i) *Satisfaction from income depends not so much on its absolute level as it is positionally conditioned*: it depends on the relative position of persons/households vis-à-vis others in the same community at the same time.

(ii) *Satisfaction depends on the novelty and stimulation of experiencing a higher than usual income level* (habituation effect).

(iii) *Rising prices of (a) space and (b) time*. (a) Attempts to buy spaciousness, ease, seclusion, etc. are frustrated because the competition of more people for the same limited place has raised the price of it. (b) "Maids cannot have maids"; more precisely, assuming unchanged productivity of services (which, of course, is unrealistic), there is an absolute fixed maximum amount of service which average men/women can command, no matter how rich they become; the average man/women can never command the service of more than one other average man/woman (Harrod). In addition, there is the rising price of time available for non-market production or leisure activities.

(iv) *Work satisfaction*. "Consumption is only part of life". Technological progress seems to reduce the interest and variety of work and often cuts off workers from meaningful contact with their fellows.

It is fairly obvious that to cope with these four features, any QOL theory must be able to deal with, a.o.,<sup>17</sup>

1. *Interpersonal/intergroup and intertemporal comparisons* (cf. Drewnowski). The traditional refusal of economics to consider interpersonal (etc.) comparisons of utility was based on an unacceptable restrictive empiricism which can now be overcome (Harsanyi).

2. *Rational behavior defined in terms of the satisfaction of aspirational levels*. Instead of optimizing, individuals essentially look for satisfactory alternatives, i.e. alternatives that satisfy a number of criteria of acceptability. These criteria are themselves subject to alteration in the light of past failure/success (Simon's theory of bounded rationality) and, very important in our context, the "demonstration effect" of the behavior of other agents (individuals, groups, cultures...)

3. *Human action in general, in all types of environments*. Satisfaction derives not merely from consumption as traditionally defined, nor from combining purchased services and goods with the consumer's time and effort to produce final utilities (Becker). An "utopian" QOL theory ought to be equally applicable to all types of dual economies, including those micro- and macro-economies in which "vernacular" activities (Illich) prevail. Whether or not social accounting based on the computation of money equivalents for different fashions of time-spending (Fox) can be used as an unbiased instrument here may, in the last analysis, essentially depend on the possibility of acquiring accurate knowledge concerning the actual or hypothetical modalities of access to the formal labor market. Considering the current state of world (un)employment, it seems doubtful whether such a "monetary" approach will be usually feasible. In the same context, it should also be stressed that the human condition is in part a function of the ecology reflecting the impact of past collective action (role of ecological psychology).

4. *"Positional" aspects*. Differential access to the labor market is but one — essential — aspect of the "position" problem discussed in recent literature on social growth limits. In the final analysis, "positional" problems come down to the problems Marxists have usually discussed under the heading "class society", problems related to racial and sexual inequalities, etc. It seems that an approach to QOL starting from the differential action opportunities of various groups of social actors in general would be less mystifying than the present focus on the rather abstract relation between income and QOL.

## NOTES

<sup>1</sup>With the exception of Gehrman's paper, all contributions, whether "positive" or "critical", are *theoretical* in that they scarcely address implementation problems: technical applicability, political feasibility, etc. Although this limitation may be convenient for the purposes at hand, it is clear that a complete study of SI/QOL must also take into account the interaction between the design of SI systems and their actual uses (descriptive, normative, evaluative...) in public policy. SI/QOL research is never merely instrumental; design and policy both affect each other. The implications of a dialectical view on the indicators-policy relationship are discussed at length in de Neufville (1975).

<sup>2</sup>It seems only natural that such disagreements may occur in the embryonic phase of transdisciplinary exchanges. They are usually resolved by appealing to additional relevant evidence. To take but one example: Prima facie, McCall and Drewnowski seem to disagree about the possibility of aggregating a "social utility" index on the basis of individual utility functions. On closer inspection, however, it turns out that they only differ in their interpretation of basically the same "fact". What McCall seems to have in mind — a *psychologically* defined index of social utility, long conceived in principle but not existing in an operational form to date looks essentially like the very function Drewnowski describes, with numerical values derived from empirical observation, interpersonal comparability *and* preference characteristics. What remains after this point has been cleared are divergent views concerning the very definition of QOL: McCall proposes an "objectivist" notion of QOL, fundamentally distinct from social utility; while Drewnowski's QLF is a "merger" of subjective collective preferences and objective QOL indices.

<sup>3</sup>The reader will have noticed that there are striking similarities between Fox' theory of social accounts and one of the economic theories Illich is at odds with, Gary Becker's theory of time allocation (see Fox, 1974). Note also that a rudimentary "economics of language" has in fact been proposed by a former collaborator of Becker (Marschak, 1965). Moreover, Becker himself has linked his economic approach to another target of Illich's critique, socio-biology (Becker, 1976).

<sup>4</sup>To advocates of "active politics" along the lines of Etzioni (1968), societal monitoring not only has to foster the provision of relevant

information : They also want to monitor its distribution and implementation, and if necessary, mobilize against its nonuse. For a succinct discussion of the concept of *societal guidance capacity* and related notions, see Callebaut (1978, p. 181 a.f.)

<sup>5</sup>I am aware of the problematic character of the distinction between internal and external aspects of scientific change, even as a purely analytic tool. Yet for lack of a better alternative I must continue to use it.

<sup>6</sup>According to the standard doctrine of welfare economics, an increase in economic welfare does not necessarily imply an increase in total welfare; e.g., the spill-over effects of changes in technology may offset the benefits. Yet in general, the rationale of the welfare economists' endeavor was the unwarranted belief that having more goods ought to do us some good (Pigou). See Abramovitz (1979).

<sup>7</sup>Recent attempts to supplement current income measures with a measure of "earnings capacity", which is held to be independent on relative "tastes" for income and leisure and to depend to a lesser extent on the transitory nature of actual income levels (Garfinkel & Haveman, 1977), are subject to the same limitation.

<sup>8</sup>Note that a Gini distribution which remains relatively stable over time does not necessarily indicate that the distribution of poverty/affluence has remained relatively unchanged. Many policies only shift poverty between rural and urban areas, or between groups within a region; as a result, overall inequality may be scarcely affected. From a non-economic, say, a sociological perspective, then, the Gini measure is also inadequate.

<sup>9</sup>The same holds for households.

<sup>10</sup>Lesourne (1977) gives a good survey of recent attempts to broaden the model of the individual underlying economic analysis.

<sup>11</sup>SI models do not always require comparability or even measurement within or between all QOL dimensions (Callebaut, 1978, pp. 176–177).

<sup>12</sup>Callebaut (1981a, p. 104 a.f.)

<sup>13</sup>Cf. the introduction to this issue or Durand's "utopie de facilité" — "utopie rationaliste".

<sup>14</sup>The application of the Lakatosian methodology of research programs to problems of cross-cultural competition between world views is discussed in Elkana (1971).

<sup>15</sup>There are some striking similarities between this view of scientific

theories and the damped empiricism of the older Carnap and especially of the post-positivists.

<sup>16</sup>A number of references may be found in Kambartel (1979) as well as in the more recent volumes of the *Zeitschrift für allgemeine Wissenschaftstheorie*.

<sup>17</sup>I disregard standard criticism, e.g. concerning the inadequacy of exclusively subjective QOL indices here.

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