

A SYSTEMS DESIGN OF THE FUTURE*

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Summary

World social problems will be difficult to solve unless a truly social science is applied. But Social Sciences today still suffer from several and serious drawbacks. First of all, social criticism, though necessary, is insufficient, since to improve contemporary society, several minimal conditions should be met, going from the knowledge of the mechanisms of social stasis, to having enough people eager to rally around their elected leaders to work for the project. Secondly, it is necessary to surpass the stage of piecemeal reforms and to tackle reforms which are instead systemic, as well as regional, radical, participative and autogenous rather than imported. Thirdly, the question of Top-planning versus Down Planning, must be studied. especially where the solution does not lie in substituting one authoritarian scheme by another, but in involving people in the implementation of a social project of incremental and integral reconstruction. Fourthly it is important to distinguish between Integral and Sustainable development, since any desirable integral development must pursue the following major goals: a) Environmental, o energy saving in general; b) Biological, mainly through adequate nutrition, shelter and health care for all; c) Economic, through achieving full employment and control of business cycles; d) Political, meaning the enforcement of human rights and duties, as well as sexual, racial and social equality; and e) Cultural, reaching for all the population primary and secondary education, lifelong learning, creative leisure, and so on. Finally this article stresses the importance of the future of

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social studies, without forgetting the two main obstacles hampering the advancement of social sciences: on the one hand insufficient funding and, on the other, philosophical deficiencies, such as logical, ontological, epistemological and ethical.

1. Introduction

The future of a natural thing beyond our reach "comes" without our assistance: it unfolds lawfully from present circumstances. Not so the future of a made object, such as an institution. The future of such a thing does not "come" at all: we make it, if not always deliberately, let alone rationally. We shape the future of society by acting now and by preparing for later action. But we are not all equally effective in modifying the present conditions in such a way that they will evolve into what we want. Some of us are forced to wait for the future, others dream it, and very few design it, even though all of us labour at the construction site.

Nearly everyone has come to realize that all our societies - rich or poor, advanced or backward, democratic or authoritarian - are imperfect. Witness environmental degradation, overpopulation, poverty, poor health, unemployment, political unrest, corruption, anomie, and cultural pollution. Scholars in increasing numbers have warned that humankind is in the throes of a severe global crisis that threatens industrial civilization and even human survival.

However, social criticism, though necessary, is insufficient. Some of us believe that society can and must be reformed to forestall global catastrophe. And we add that any proposals for social reforms should be based on social studies, not just on electoral considerations. For example, social policy makers should know that social equality is a more reliable indicator of public health than are health-care expenditures. Hence, if genuinely interested in public health, they will promote increases in social expenditures aimed at reducing social inequality, rather than increasing only health-care expenditures. (In general, input alone is a poor predictor of output or system) performance simply because, by definition, $\text{Efficiency} = \text{Output}/\text{Input}$). See Axiological Systems Theory.

I submit that to improve any contemporary society with maximal efficiency and minimal pain seven conditions must be met: (a) adequate knowledge of the main mechanisms of social stasis and change; (b) adequate knowledge of the current state of society, including its resources and ills; (c) adequate knowledge of the needs and aspirations of the people; (d) an imaginative but feasible vision of a better society; (e) the sociotechnical expertise and moral sensitivity required to design a worthy project; (f) an enlightened and popular leadership capable of "selling" the project; and (g) enough people eager to rally around their elected leaders to work for the project and monitor its implementation.

It is well known that the time lag between scientific findings and their application to engineering and biotechnology is getting ever shorter. Obviously, this is not the case with the sociotechnologies: these seldom benefit from recent findings of social studies. Why? One cause is that most social policy makers and planners mistrust social science and lack a scientific background: more often than not they are professional politicians or

bureaucrats with, at best, a background in law or commerce. Another is that there is a wedge between social science and sociotechnology, namely, ideology. This is unavoidable and not deplorable in itself, because technology is neither value-free nor morally neutral. There would be no problem with a proscience and morally right ideology. The trouble is that most ideologies do not meet these conditions.

At any rate all the traditional ideologies are bankrupt. But, since we need some ideology to design social policies and plans, we should attempt to build a suitable new ideology. The latter should be based on both sound sociotechnology and sound morals, and it should be capable of helping us address social ills and work for a better social order: a fair, progressive, and sustainable one.

2. Macrosocial Issues and Their Inherent Values and Morals

Think of any of the threats to civilization or even human survival, such as overpopulation, rapid depletion of non-renewable resources; overindustrialization and consumerism in the rich countries, and underindustrialization and underconsumption in the poor ones; hunger and thirst; mass unemployment and underemployment; inadequate public education and health care; militarism and aggressive nationalism; race and sex discrimination; universal commodification and junk culture. Every one of these is a macrosocial issue and it poses a moral problem, for it affects us all, directly or indirectly, and it jeopardizes the future.

How have we come to the brink while at the same time making sensational advances in mathematics, natural science, engineering, medicine, and other fields? We submit that we have been misled by the prevailing value systems and the concomitant moral codes. It is not that these or any other ideas rule the world, but that - to indulge in a Platonic idiom - they are embodied in some of our key institutions.

The dominant value systems and moral codes can be grouped into two large families: individualism (or egocentrism) and holism (or sociocentrism). Whereas individualism promotes individual interests at the expense of the public good, holism sacrifices the individual to a whole that is not necessarily noble, and that is often invoked to disguise private interests. Ironically, both individualism and holism can promote either indifference or destructive conflict. Moreover, neither individualism nor holism meets the Socratic ideal of the good individual in a good society.

Only the systemic approach suggests a value system whose supreme good is species survival and reasonable personal happiness in a just social order. The corresponding supreme moral norm at the individual level fits this goal by combining selfishness with altruism, and welfare with justice. This norm is "Enjoy life and help live".

3. Utopianism and Ideals without Illusions

A social utopia is a vision of a perfect society unaccompanied by a specification of the means to build it. Utopianism is usually motivated by flaws (real or imaginary) in current societies, which it criticizes in a more or less veiled fashion. However, utopian fantasy need not be barren: a utopia is a sort of thought experiment or simulation

prompting the examination of questions of the type, What would happen if such and such institutions were altered or even eliminated? This is why some social utopias, from Moron, have involved proposals that have fired social movements and reforms.

There is nothing wrong about imagining a better society even if one does not know how to build it. Others may suggest the appropriate means. A noble utopia is better than "realistic" (opportunistic and unscrupulous) politics. Still, dreamers do not accomplish much. Worse, they may seriously mislead those who adopt uncritically their diagnoses and prognoses, and even more so those who strive for the final society. These utopians ignore the fact that social conflict and value conflict are unavoidable features of any society - just as unavoidable as cooperation and partial value harmony. As Hutchison wrote, 'It is the main characteristic of Utopian thinking that, if only a particular Utopia is adopted, no hard choices between values and objectives are necessary, since the particular Utopia will provide all real desiderata, liberty, equality and fraternity, or freedom, social cohesion, stability economic and political ... and if there are any other desiderata they are not really worth desiring. In the communist Utopia all conflicts are, allegedly, abolished, and in the liberal Utopia they are all optimally mediated through the price mechanism".

Between the traditional utopian and the Realpolitiker stands the realist and progressive social reformer. He may be called a neo-utopian: a realist without illusions, who begins by identifying the issues, and uses social science and sociotechnology to uncover their roots and treat them: first study, then act. He proceeds by analogy with the scientific physician: identify the problem cluster -study it scientifically -diagnose - plan - treat - check - revise if necessary.

Regrettably, in many cases the very first step, namely correct social diagnosis, is yet to be taken. Consider, for instance, income inequality as measured by the Gini index. It has been conjectured that this variable depends on GDP (national wealth), school enrolment, political regime, percentage of the population under fifteen, position in the world-system, and so forth. But the precise form of such dependences is still under debate. In particular, the famous Kuznets hypothesis, that an inverted U-relation obtains between income inequality and GDP, has recently been refuted. In fact, Deininger and Squire in 1996 have found no systematic (functional) relationship between the two variables in about 90 per cent of the 108 countries investigated. However, in the United States there is such relation; but, since 1969, it is one of increasing inequality. Some of the mechanisms of this U-turn seem to be racism, educational heterogeneity, and urbanization. Morals: (a) before designing a social reform, collect and interrelate relevant and good-quality data; and (b) economic growth alone is no recipe for overall social progress

To conclude: no society is perfect, some imperfections are defects, and some of these can be repaired. Some imperfections, that is, deviations from either the ideal type or the norm, are welcome because the type or the norm themselves may be undesirable - for example, because they are mediocre. Without imperfections there would be neither biological nor social evolution. Hence, we should not wish for a perfect society fitting a preconceived blueprint, but rather an imperfect but progressive society fitting successive visions, each better informed and fairer than the preceding, and every one of

them viable. Such a neo-utopian program calls for as much social engineering as enthusiastic dedication and participation.

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Biographical Sketch

Dr Mario Bunge has been a professor of theoretical physics, and later on of philosophy, in his native Argentina and in the USA. He has held visiting positions at the Universities of Pennsylvania, Texas, Temple, Delaware, Freiburg, Aarhus, and Mexico, as well as at the ETH in Zürich. He is currently professor of philosophy and head of the Foundations and Philosophy of Science Unit at McGill University. He has been awarded Guggenheim, Alexander von Humboldt, and Ernesto Santamarina fellowships, as well as Killam grants. He has written sixteen books and edited seven volumes, one journal

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His best-known works are *Causality* and *Foundations of Physics, Method, Model and Matter*, and the first four volumes of the *Treatise*.

His contribution is the chapter *a systems design of the future*, from the book "*Social Science under Debate*", Ed. University of Toronto Press, 1998.

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