SOME NORMATIVE IMPLICATIONS OF A
SYSTEMS VIEW OF POLICYMAKING

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1. Usually the systems approach in its general theory version is used (a) better to explain behavior and/or (b) to provide a unifying and general theoretic framework for analyzing in common terms a greater number of heterogenous phenomena. A different, more normative, systems approach has developed in "systems analysis" and "systems engineering," with the aim of improving the operations of a given system or designing a new system in an efficient way. At present, this normative approach is in the main of limited use in respect to complex non-deterministic systems. My purpose in this presentation is to combine the normative orientation with a simple general systems approach in order to explore some

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approaches to the improvement of public policymaking. My purposes in doing so are: (a) to illustrate the possibilities of using a simple general systems approach for improving complex systems; (b) to stimulate work on one of the most important contemporary needs, namely, the improvement of public policymaking; and (c) to try and lay more foundations for a new interdiscipline of policy science, based in part on a fusion between organization and management sciences and concepts of general systems theory. ¹

2. Using a very simple version of systems theory, we regard public policymaking (and, mutatis mutandis, other types of policymaking) as an aggregative process in which a large number of different units interact in a variety of part-stabilized but open-ended modes. In other words, public policy is made by a system, the public policymaking system. Even in this simple form, this systems perspective leads to two improvement-relevant conclusions: a. As public policy is a product of complex interactions between a large number of components, similar changes in the output (or similar "equifinal states") can be achieved through many alternative variations in the components. This means, for our purposes, that different combinations of a variety of improvements may be equally useful in achieving equivalent changes in the quality of policymaking. This is a very helpful conclusion, because it permits us to pick out of a large repertoire of potentially effective improvements those which are more feasible under

¹The theoretic foundations of such a policy science are presented in part in my book Public Policymaking Reexamined (San Francisco: Chandler Pub., 1968)
changing political and social conditions. This view also emphasizes the open-ended (or, to be more exact, "open-sided") nature of any search for improvement-suggestions: there is, in principle, unlimited scope for adventurous thinking and invention. Therefore, any concrete list of such proposals should be regarded as illustrative and not definitive.

b. A less optimistic implication of the systems view of public policymaking is, that improvements must reach a critical mass in order to influence the aggregative workings of the system. Improvements which do not reach the relevant impact thresholds will, at best, be neutralized by countervailing adjustments of other components (e.g., a new planning method may be reacted to in a way making it an empty ritual), or, at worst, may in fact reduce the quality of aggregative policies (e.g., through possible boomerang effect, reducing belief in capacity of human intelligence, with possible retreat to some types of mysticism, leader-ideology, etc.; or by making and implementing wrong decisions more "efficiently," and thus abolishing a basic social protective mechanism - inefficiency as reducing the dangers of foolish decisions and permitting slow and tacit learning).

3. At present, many efforts are under way in the United States (and other countries) to improve public policymaking, though in a disjointed way. These efforts take a number of forms, including for instance: a. Establishment of new types of organizations devoted to improving policymaking (such as RAND, the Urban Institute, and, in another way, the Center for the Study of Democratic Institutions); b. Development of new methods which try to help better policymaking (such as systems analysis, planning-programming-
budgeting-systems (PPBS), and sensitivity training); 
c. Establishment of new schools and departments at universities devoted to "policy studies" (such as the program in policy sciences at Buffalo, the program in social policy planning at Berkeley, the programs in analysis at MIT, and the large number of new schools for public affairs); These new programs are also in part a response to student demand, with an apparent move by top students from physics to social-problem-relevant studies); and d. Various efforts to increase the utilization of behavioral sciences in government.

4. These and other efforts are symptomatic of increasing awareness of the need and constitute an important beginning on the way to better public policymaking. But, if stabilized in their present form, they are of limited usefulness and perhaps even dangerous, because they neglect to view policymaking as a complex system, ignore many critical improvement needs, and fail - in many respects - to reach the minimum critical mass. In particular: they apply in the main to low-level and technical decisions; they depend on quantification; they require unavailable highly-qualified persons; they fail to deal with many critical decision situations (e.g., the one-person-focussed decision situation); they, in effect, fail to face the needs for creativity, tacit knowledge and adventurous thinking, and may indeed repress them through subjection to inappropriate criteria; they tend to ignore if not to disdain the "political;" and they have no comprehensive theoretic basis nor the necessary underpinning of academic research and training (other than in the rather narrow areas of operations research, systems engineering, and parts of economic theory).
5. What is needed, therefore, is a broad systems approach to the improvement of policymaking, with the help of which a large variety of improvement suggestions can provide a sufficiently large sub-set of feasible alternative improvements to reach the critical mass and to achieve a substantial impact on aggregative policymaking. The probable effects of any proposal must be "guestimated" (guessed-estimated) in terms of system-effects and, in most instances, a synergetic set of improvements is required. This applies to the illustrative improvement-suggestions to be presented soon, which are mutually reinforcing and should be implemented in sets including at least some measure of a number of them.

6. Improvement of public policymaking must, as explained, proceed in respect to all main dimensions of the public policymaking system. In particular, improvements are required in respect to: a. process-patterns; b. structure; c. personnel; d. knowledge; and, on a broader level, e. "policy culture." In all these dimensions, improvements should strengthen rational-analytic capacities as well as extra-rational capacities (such as creativity, tolerance of ambiguity, propensity to innovate, and levels of aspiration). To concretize and illustrate, let me present concisely ten proposals dispersed over these (and some additional) systems dimensions:

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2 For elaboration of some of these proposals, see my following articles:

(1) **Explicit strategy decisions.** Special structures and process-patterns should be established to engage in basic strategy decisions, as distinguished from more-or-less ad hoc policymaking. Such strategy decisions include formulation of longer-range policy goals, establishment of main postures, determination of attitudes toward risk and similar "master-policy" decisions.

(2) **Explicit learning feedback.** Special structures and process-patterns should be established to engage in the systematic study of past policies, the drawing of future-oriented conclusions from those experiences, and the injection of these conclusions into contemporary policymaking.

(3) **Better consideration of the future.** Special structures and process-patterns should be established to encourage better consideration of the future in contemporary policymaking. This includes, for instance, dispersal of various kinds of "future study" organizations, units, and staff throughout the social guidance cluster, and utilization of alternative images of the future and scenarios as standard parts in all policy considerations.

(4) **Policy analysis should become an integral part of policymaking.** This involves (a) development of policy analysis as a method for better dealing with complex, largely non-quantifyable issues; and (b) establishment of

policy analysis units (of different scope, size, and complexity) throughout the social guidance cluster, so as to change somewhat the patterns of policy discussions and policy formulation.

(5) Creativity and invention in respect to policy issues should be encouraged. This involves, for instance, no-strings-attached support to individuals and organizations engaging in adventurous thinking, avoidance of their becoming committed to present policies and establishments, and opening up channels of access for unconventional ideas to high-level policymakers. Mutatis mutandis, creativity and invention should also be encouraged within policymaking organizations by institutionally protecting non-conventional thinkers from organizational conformity pressures.

(6) Improvement of one-person-centered high-level decisionmaking. Even though of very high and sometimes critical importance, one-person-centered high-level decision-making is very neglected both by research and by improvement attempts. This in part is due to difficulties of access, on one hand, and dependence of such decisionmaking on the personal characteristics and tastes of the individual occupying the central position, and the consequent difficulties in improving such situations, on the other hand. Nevertheless, one-person-centered high-level decisionmaking can be improved, because some needs of better decisionmaking - as already explained - can be satisfied by a variety of means, some of which may often fit the desires of any particular decision-maker. Thus, information inputs, access of unconventional opinions, feedback from past decisions, etc. can be provided by different channels, staff structures, mechanical devices,
communication media, etc. - which provide sufficient
elasticity to fit arrangements to the needs, tastes,
preferences, and idiosyncracies of most, if not all, top
decisionmakers.

(7) Training and development of policy analysts and
other policy professionals. Nearly all the improvement
Suggestions require persons with high moral, intellectual,
and academic qualifications to serve as the professional
staff for policy analysis, policy research, future studies,
etc. Training of such professionals at universities and
their continuous development (e.g., through rotation between
more detached and more applied research) is essential.
Furthermore, better policymaking requires better utilization
of social sciences, of law, of life sciences, and other
disciplines. Preparation of graduate students in these
areas for playing a role in policymaking - both in staff
positions and as independent free-thinking citizens -
requires significant changes in many of the contemporary
graduate studies curricula.

(8) Development of politicians. The idea of improving
politicians is regarded as quite taboo in Western Democratic
societies, but this is not justified. Politicians can be
improved within the basic democratic tenents of free
elections and must be improved to increase the probabilities
of good policymaking. Leaving aside more diffuse proposals
on how to encourage entrance into politics of more persons
whom we regard as "desirable" and how to vary the rules of
the game to permit better judgment by the voter, let me
concretize my idea with one discrete proposal: Elected
politicians (e.g., members of a state legislature) should
be granted a sabbatical to be spent in a self-developing activity, such as traveling abroad and studying. Parallel suitable programs should be established at universities and special centers for active politicians to spend their sabbaticals at them in a useful and attractive way.

(9) Development of policy science as a distinct area of research and study. Implied in most other improvement suggestions, and indeed fundamental for every effort to understand and improve the public policymaking system, is the need for more knowledge on and for policymaking. Taking also into account the needs of preparing and developing policy professionals, and in view of the organizational characteristics of most universities - recognition of policy science as a distinct area of research and study seems essential.

(10) Radical changes in the school teaching of "good citizenship" subjects. In the longer run, better preparation of the citizen for his roles in influencing policies and policy-making are of critical importance for the adjustment of democracy to an age of more knowledge and better multidirectional communications. A first step in the needed direction is radical change in the teaching of all "good citizenship" subjects in the elementary and high schools in the direction of developing individual judgment capacities, learning information search and evaluation habits, and increasing tolerance for ambiguities, as well as readiness to innovate. Intensive use of new teaching methods, such as gaming and projects, and full exposition to contradicting points of view may be helpful in the desired directions. But what is really needed is a far-going reform of the
teaching of all subjects (and of all teacher preparation), but this leads me beyond the scope of this presentation.

9. These ten suggestions, as already mentioned, are only some illustrations of needed and, I think, feasible mutually reinforcing improvements in the public policymaking system. There remains one further question which I would like to mention, namely, what can we expect in the way of better policymaking even if these and similar improvement suggestions are fully implemented. Here - our view of policymaking as the function of a complex and non-deterministic system should help us to avoid any form of hubris and to warn of misplaced overconfidence in the human capacity to shape (or misshape) his own future. My own feeling is that some avoidance of "minimin" in policymaking would be a great achievement and overall improvement of public policymaking by - in a qualitative sense - "ten percent" would be a tremendous achievement which constitutes a radical change in the evolution of social auto-guidance. To achieve such a break-through requires, inter alia, intense efforts to utilize the insights provided by general systems theory for analyzing, understanding, and redesigning the public policymaking system.

I propose "minimin" as a new term, by which I refer to the worst of all bad alternatives - in part-contrast to the theory of games concepts of maximax, maximin, minimax.