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Torbert's "Institutional self-study"

There are many ways to study social institutions and groupings: historically and longitudinally, structurally, through external observation and analysis, through design, and so on. But can institutions be studied, understood, and changed *from within,* through a self-study efforts of their 'components', i.e., individual members?

Dean Torbert is reporting on an ongoing self-study process at the Boston College School of Management — from the midst of action. The readers are exposed to an unfinished experiment, to a process, not to a product of a process. This is also a publishing experiment and HSM considers itself a proper medium for capturing and transmitting the dynamics of institutional self-study.

Most social institutions (excluding concentration camps, model cities, and other 'wonders' of social engineering) are self-renewing entities which maintain their identity and distinction through and in spite of a continuous and relentless turnover of their constitutive members-components. How does Boston College maintain its characteristics, distinctiveness, and uniqueness in spite of complete replacements of people over the generations?

It is well known that social systems respond to external perturbations by adjusting their structure while maintaining their organization intact. Structural adaptation to environmental pressures allows the system or institution to maintain its identity, behavior, and systems of values. Adjusting a structure to protect its underlying organization — we can call this ability a *resilience.* But what happens when the changes and perturbations come from within, not from the outside? Its seems that the self-study and the resulting changes are capable of affecting the underlying organization, not just a surface-manifested structure. In this sense, institutional self-study represents potentially effective tool of organizational change.

Torbert has a good intuition about the above described resilience of social systems. In terms of leadership, he distinguished between the short-term, externally determined, responsive leadership affecting social structures only, and the long-term, internally determined, anticipative leadership affecting the underlying social organization. 'External' leadership, although important, is a passive concept, not as demanding and scarce as 'internal' leadership which calls for goal setting, not just for goal pursuit.

Torbert hopes for creating a 'community of inquiry' engaged in continuing, collaborative integration of empirical, sensual, theoretical, and spiritual kinds of knowledge into effective action (Recall the often quoted LRSQ, PISO, and TISC dimensions of leadership and management, for example Mueller, HSM 1 (1) 17–27). In Table 1, Torbert refers also to the concept of *emotional structure,* successfully used by Berg in his longitudinal organizational study (see Engwall's review of Berg's work in HSM 1 (4) 351–352).

Self-study should lead to self-understanding, to institutional maturity of self-reflection. This implies less fatalistic abandonment to external forces and more confident grasp of the powers of internal organization. It should stimulate the transition from passivity to activity, from responsiveness to anticipation, from structural adaptation to organizational change. One should feel good about being part of such an organizational environment — otherwise no study or self-study is worth the effort.

Torbert says that the primary critical public for the study is not the journal referees in one's scholarly field, but one's colleagues in the social system studied. This is of course true, especially when the two publics are in harmony with respect to their perception and evaluation — as it is the case in this case.

Dean Torbert represents not only a new breed of school administrators but also a new manager of human systems — humane, interdisciplinary, aware of complexity, capable of vision, not ashamed of intelligence. He is not your regular scheming dean, begging for money here and there, anxious to please every-

body, maintaining status quo, incapable of leader-ship — that beautifully inefficient breed of deans, products of mediocrity and breeders of mediocrity in return. Incompetence and acceptability go often hand in hand in mediocre organizations — no self-study projects there.

Why is Torbert interested in 'exporting' his self-study experience? Why to publish the details of self-inquiry, stress is generalizability to other institutions, and give advise to those who might consider similar projects? Can self-study experience be shared? Should it be shared? Only Torbert can answer such queries, through a self-study of his own motivations.

Huff's "Multilectic methods"

Multilectic view of inquiry implies studying a problem 'through multiple lenses', that is by adopting different methods and approaches in a parallel fashion. Multiple perspectives are expected to com-pensate for individual methodological weaknesses and achieve a more balanced understanding of a problem at hand. This is the main thesis of Professor Huff's article.

At a more elementary level, Huff argues that so called 'competing' paradigms are complementary, capable of reinforcing each other and producing a more complete insight. For example, reductionism and holism are complementary, LRSQ (logical, rational, sequential, quantitative) and PISQ (percep-tive, intuitive, simultaneous, qualitative) approaches are complementary, and so on. Relying exclusively on one or the other perspective is unscientific, incom-plete, and ultimately self-defeating.

The issue os scientific precision versus social rele-vancy and usefulness of findings is best captured by the *incompatibility principle,* suggested by Lotfi Zadeh: *As the complexity of a system increases, human ability to make precise and yet significant statements about its behavior diminishes until a thres-hold is reached beyond which precision and signifi-cance (or relevance) become almost mutually exclu-sive characteristics.* Huff similarly implies that scienti-fic precision is limiting, if not misleading. Zadeh insists that to deal with human systems realistically we need approaches which do not make a fetish of precision, rigor, and mathematical formalism, and which employ *instead* a methodological framework which is tolerant of imprecision and partial truths. (This program was later defeated by the intolerant

mathematization and six-decimal-points precision of so called *fuzzy sets* theory.) Huff, on the other hand, seems to imply that alternative approaches should not be used 'instead' but rather as a complement of scien-tific rigor.

Professor Huff's listing of the *limitations of scientific inquiry* is remarkable in that all these limita-tions boil down to the 'unscientific' attempt of science to be precise. Imagine the usefulness of replacing the concept of *red* color by a light wave-length measured in Ångströms with six decimal places. Or, imagine how identifying, cataloging, and indexing of every protein made in the human body (circa 50 000), or of the human genome (a single human chromosome contains about 500 million DNA bases), would have on our understanding of life, aging and cancer. Imagine! One does not describe the city by producing a telephone book, no matter how precise.

Huff's analysis of Kuhn, Popper, Feyerabend, and Toulmin is informative and refreshing in its critique of their incomplete viewpoints. The point is not to evolve and use such capability amounts to an abroga-understand how multiple perspectives complement and reinforce each other and how the multilectic view should be strengthened rather than erased through 'unification'. Unity through diversity means con-scious and purposeful emphasis on complementarity of a variety of views, not a promotion of a single, all-encompassing 'unitary' view.

Huff rejects the notion that an individual can encompass only a single topic or discipline, assume a single role, or adhere to a single view of reality. Each individual scientist is capable of a multilectic view, of a inter- or transdisciplinary understanding. Not to evolve and use such capability amounts to an abroga-tion of scientific purpose. To know more and more (in terms of precision and detail) about less and less (in terms of relevance and significance) is not a pro-position worthy of intellectual pursuit.

The world of management is increasingly characterized by incommensurate aspects: multiple and conflicting objectives and goals of individuals and groups. Multilectic approach argues against collapsing such multiple perspectives into a single aggregate of unifying utility function. *Multilectic management* implies recognition, affirmation, and creative balanc-ing of multiple criteria, purposes, and perspectives. Managers and management theorists can certainly benefit from adopting a more philosophical view of their activities, roles, and purposes. Huff's article is a

good beginning on the path toward self-understanding without losing a sense of the situation. As Ortega y Gasset put it: "I am I and my circumstance" — a wisdom regained.

Bowonder's "Appropriate technology"

The 'appropriateness' of any technology refers not to the tool itself but to its adaptability to user's environment and priorities of values. As such, *appropriate technology* is neither primitive nor backwarded. Yet, educational and research institutions in developing countries often regard such technology as not worthy of their attention.

Dr. Bowonder of the Administrative Staff College of India represents one of such skeptical and pessimistic views. He equates appropriate technology with smallness ('small is beautiful') and argues that such smallness is neither sustainable, nor self-organizing, nor desirable. The question arises, Why could not appropriate technology be large-scale if such largeness is appropriate?

In terms of scientific and engineering demands, appropriate technology is actually advanced high technology: calculating the heat transfer of a cooking stove is as challenging as calculating that of reentering rocket — only more useful to developing countries. Simple-minded aping of Western technologies by developing countries is in itself inappropriate.

Dr. Bowonder based his analysis on general systems theory and cybernetics, not on social ecology and the physical circumstances of a village, and habits and preferences of villagers. Yet he arrives at sensible conclusions: neither exclusively small nor exclusively large industries are desirable; it is the symbiotic interdependence of heterogeneous components which assures the self-organization of a system. The very meaning of 'appropriate' would seem to suggest weeding out of 'inappropriate' industrial patterns.

Although appropriate technology must promote self-reliance, Bowonder evokes some sort of central planning for appropriate systems, based on regulation, control, and information transfer. He is worried that otherwise each appropriate subsystem would be working towards its own goals and not towards the goal of the whole system. This would result in suboptimal pattern of growth. But can a centrally controlled and regulated technology, advancing goals of the system as a whole, promote the self-reliance and independence of components? Can it be labeled appropriate?

Bowonder states and accepts an assortment of systems-cybernetic principles without exploring their appropriateness in this context. For example, "The higher the level of a system, the more correct or adaptive its decisions are," is actually stated twice. This leads directly to embracing hierarchical designs and to stating that only hierarchical systems will be adaptive. Another premise insists that "Only variety can absorb variety." That is, a high-variety system can only be controlled by a system capable of matching (requisite) variety of responses. Yet a gunman who can only shoot or not shoot (two options) can effectively control a high-variety crowd of high-variety human beings.

In spite of some inappropriate applications of general systems theory, Bowonder brings to the readers of HSM important message. He demonstrates that appropriate technology is resisted and viewed with suspicion by scientists and researchers in developing countries. He cautions that existing governmental institutions show an intense interest in their own survival. Appropriate technology is human-oriented, requiring extensive participation of individuals and groups in the decision-making process. Participation complicates smooth and linear transfer of command in bureaucratic hierarchies and threatens conventional definitions of power. Appropriate technology requires sharing of information while power rests on its control and preemption. All this calls for a fundamental change in existing institutions, linkages of power, and information flows. This is unlikely to happen, Bowonder concludes.

Kamenetzky's "Economics of the satisfaction of needs"

Mario Kamenetzky's experience with science and technology in developing countries, under the auspices of the World Bank, has been translated into a more general discourse on the economics of human needs. He differentiates between *needs* and *desires* or *wants,* as stable and universal, or changeable and relative human motives, respectively.

Maslow's dogma implies that human needs can be hierarchically ordered according to their decreasing urgency for satisfaction, and then pursued in a *sequential* order. It is now widely accepted that there is no hierarchy of human needs: humans pursue their needs *concurrently* and seek their balanced, *simultaneous* satisfaction. In addition to the need for

security, the need for belonging and self-fulfillment make people seek common shelters and organized groupings. In addition to physiological needs, the need for self-esteem and recognition motivates hunters to become more efficient and skillful in securing food for a group. The need for self-fulfill-ment made hungry, insecure, and unloved 'primitives' paint supremely beautiful images in the cave of Alta-mira. Such complex systems of parallel, concurrent motivations are only poorly represented by the image of a well-greased shifting of gears from lower to higher needs.

Kamenetzky, in concert with these observations, suggests that, "in order to achieve stability in social and economic growth, *all needs* should be satisfied simultaneously, not only the so-called basic needs." This multidimensional or multicriterion approach to the enhancement of the quality of life through the satisfaction of all human needs, is the cornerstone of Kamenetzky's new economics.

In addition to productive activities (generating, storing, and distributing goods, services, and know-ledge), Kamenetzky introduces a category of *libidinal activities,* that is wealth-consuming and gratuitous activities directed toward the immediate and direct satisfaction of the needs of the individual engaged in such activities. For example, fishing could be produc-tive, when the catch is sold in the market, or 'libidi-nal', when a fish caught is used to satisfy the hunger of the fisherman, or when it is performed for pleasure only. Economists are interested in my activities only if I do it for money or for the market. If I do it for myself (self-service) or if I do it free (voluntarism), economists lose interest. Yet, self-service, self-help, voluntary, and out-of-market activities are becoming more important than traditional 'productive' activi-ties in a large number of both developed and develop-ing countries. More and more the economists are con-cerned with smaller and smaller portion of human activities. Instead of broadening their interests, economists respond by further narrowing them down: not only for-the-market economic activities, but only those that can also be quantified and measured by money. This rapidly shrinking realm of economics will become less and less understood as it is cleaved and separated from an ever growing whole of human activities.

The reader should not be put off by Kamenetzky's unfortunate usage of the word 'libidinal' which does not capture the essence of these trends and could mis-lead into thinking that something entirely gratuitous,

egoistic, and unessential is going on. Yet, 'libidinal' activities are becoming a necessity, they are economi-cally motivated, and represent a serious alternative to the traditional mass production for markets and money.

Although Kamenetzky's ideas "do not necessarily reflect the policies of the institution [the World Bank] with which he is affiliated," one cannot escape the feeling that this might be the cause for failures of such institutions: they do not reflect.

Schroeder's "Assumptions in policy preferences"

It is now almost conventional wisdom that criteria, goals, and objectives of individuals and groups are multiple and conflicting; it is becoming apparent that also importance, desirability, and representativeness of criteria are perceived differently by different participants in the policy-making process. Professor Schroeder explores the role of preformed assump-tions in the divergency of policy preferences.

It is widely accepted that individual's values, worldview and subjective assumptions are major determinants in the formulation and choice of objec-tives, their differential weighting, and the intensity of their pursuit. That is, there are no objective, conflict-free goals which could be comfortably measured, quantified and reproduced. Different people form different models of the world around them, derive different assumptions about reality, and, therefore, use different criteria (or different priorities) in judg-ing the world or making choices. Consequently, human preferences are subjective and context-dependent.

Schroeder compares a group of *corporate execu-tives* with a group of *social scientists* in terms of how they judge the impact of different policy measures on ten selected socio-economic goals. The respondents were also asked to provide a relative ranking of these goals.

It appears that the two groups strongly disagreed on the impact of the following policy measures:

(1) 20 percent increase in governmental regulation of business,

(2) reduction of concentration in primary industries,

(3) non-management representation on boards of directors of major corporations, and

(4) removal of persuasion from advertising.

Social scientists view these measures as positive while

executives perceive them as negative in their impact on socio-economic goals.

Schroeder developed a total measure of the effect of a single policy item on all ten socio-economic goals and presented the most interesting results in four tables. The highest level of disagreement is on the issue of governmental regulation.

Identifying the proper level and scope of governmental regulation of business is one of the 'hot' issues of human systems management. Obviously those who are to be regulated view its proper level differently from those who are to be the regulators. One of the issues neglected by Schroeder is the *power struggle* involved between the two groups. More regulation implies more power to social scientists and less power to businessmen. The divergency of views is to be expected; Schroeder's data show again and again that predictions, forecasts and analyses of economists, econometricians and analysts are reflective of their subjective value systems and any claim for objectivity of their results can be dismissed as unscientific. The very choice of criteria, mathematical functions, statistical tests, computational algorithms, and interpretation of results, is subjective, culture and paradigm-dependent, and biased towards hidden personal goals. As professor Huff argues in this issue of HSM, the answer is not in the endless seesaw of paradigmal domination, nor in the conflict-free supraunification of views, but in the understanding and enhancement of diverse views as complementary and mutually reinforcing tools for achieving completeness and comprehensibility.

In publishing Professor Schroeder's paper, HSM editors hope again to raise the issue of *tolerance of diverse views*. Tolerance is the first and necessary step towards understanding. And understanding is a necessary condition for humane action.