Comments on 'A logic for strategic management' and Authors' reply to Echols' comments

The paper by Mitroff and Mason contains some interesting concepts, particularly with regard to a logic of policy making and some interesting expansion of the stakeholder concept. Unfortunately, the empirical evidence offered and the logical flow of the paper itself are not equally enlightening.

The assertation stated in the last sentence of the abstract that "The outcome is a new approach to policy and planning" is not supported by the content of the paper. The paper does categorize a number of policy issues, but the logic of the paper does not prove the case for a single approach.

The heart of this flaw in the paper is the issue of the benefits derivable from a logic of policy making. Issue 5 states the assertion: The policy conclusions are derived with less than complete deductive certainty, usually with far less certainty than the manager needs as a basis for taking action.

Deductive certainty may be necessary for increased economic efficiency or reduced personal risk for the manager but it is not a necessary condition for taking action. Managers act with high levels of uncertainty in response to environmental and organization time pressure. Indeed, in the absence of a purely deductive decision logic, one could argue that the essence of a good manager is the ability to make a high quality decision in spite of the large degree of uncertainty inherent in a given decision.

The point is that while there may be a good reason to attempt to establish a logic for policy resolution, that reason surely is not dissolving a decision stalemate.

The application of the retroduction concept seems to be directed almost exclusively to logical concerns rather than empirical concerns. If we substitute the concept of environmental conditions such as patents, financial resources, human resources, etc, then a retroduction is a process of working backward from a clearly preferred policy (in terms of stakeholders) to a necessary set of conditions required to implement such a preferred policy. This approach for the paper is a practical contrast to the authors' almost exclusive focus on the logical consistency of the policy decison elements.

Finally, the practical examples of the drug case, the manufacturing example and the PIMS data are all interesting but the sections dealing with these topics are far from persuasive.

A personal note. Both of the authors are personal friends an my opinions are intended as a dialogue between colleagues rather than a statement of editorial review.

Michael E. ECHOLS

Our friend and colleague Michael E. Echols, has raised some points with regard to our paper which bear responding to. We thought that we have repeatedly made it clear throughout all our writings that logic of theory is not opposed to practical action. Indeed, we see a symbiotic relation between the two. The purpose of the present paper was to demonstrate that the outlines of a theory are now at hand for treating deep conflicts within the structure of managerial reason and action. Since such conflicts are an integral feature of the real-world, we can no longer avoid acting on them for want of available theory. Indeed, we hope that the availability of a new kind of theoretical machinery makes possible a new kind of practical action. The purpose of the present paper was to lead the development of a new basis for taking action, not to supplant action.

When Echols finds our illustrative examples less than completely satisfying, we are tempted to agree with him. They were only meant to be illustrative, not definitive. There may be no 'definitive' cases for any method. In order for something to be definitive, in the language of our paper, would mean that the Rebuttal would either be non-existent or have a very low plausibility. Since this is rarely, if ever, the case, no example or argument — including this one! — will ever be completely satisfying. In effect, Echols has been using our very approach to show just how elusive a target the structure of policy-making is!

Ian I. MITROFF, Richard O. MASON 188 Feedback

Dialectical methodology

The first two issues of *HSM* have raised the question of dialectical logic and methodology. Refer for example to Negoita's concept of 'pullback' in *HSM* 1 (1980), pp. 71–76, and his review of Sutherland's book in this issue. Also, Mueller in *HSM* 1 (1980), pp. 17–27, evokes the notion of threeness, reconciling the conflict between LRSQ (logical, rational, sequential and quantitative) and PISQ (perceptual, intuitive, simultaneous and qualitative), through a higher synthetic concept of TISC (teleological-ideological, instinctive, spiritual and charismatic).

Dialectical logic (Hegelian) assumes that A and non-A do not exclude each other as the predicates of X. Both A and non-A are considered to be different modes of description, conflicting evaluations, dualities — the opposites. Although they do not exclude each other, their apparent conflict is to be reconciled at a higher level of synthesis.

The 'clash of opposites' and its higher level resolution are at the base of many political and scientific ideologies. Resolution of competitive predicates, interests, paradigms, views, objectives, collisions, etc., is to occur at a higher level of synthesis. As stated by Negoita, "The existence of conflict at one level generates a synthesis at the higher level."

Implicit in these notions is the assumption that both opposites or polarities belong to the same level and something 'new' or 'third' (a synthesis) must be evoked to resolve the conflict.

So far, so good. However, the problem is not whether A and non-A exclude each other (Aristotelian logic) or whether A and non-A are in opposition to be resolved at a higher level of synthesis (Hegelian logic); the problem is that in reality of natural systems there is no non-A negating the A. As Negoita observed, conflict is a category of human mind, not an objective element of reality. Conflicting evaluations do *not* reflect the nature of things but that of the perceiving mind. There are no opposites or conflicts in natural systems; there are only conflicts in values we wish to put on the components of reality.

For example, predator/prey system does not function as a clash of conflicting opposites; the conflict arises in the value system of a perceiving observer. In fact, predator/prey components are complementary, they mutually specify and define each other. There is

no predator without prey and no prey without predator. Their mutual complementarity of interaction generates a whole, say ecosystem. Thus, in reality, free of the interference of external value judgment, there is only ecosystem/species pair, the components of which are neither in opposition nor operating at the same level. This dialectical pair crosses the levels of our description.

Francisco Varela, in his *Principles of Biological Autonomy* [1], attempts to advance the idea of dialectics by forming new dialectical pairs: *it/process leading to it*. He suggests that for every Hegelian pair (A/non-A) there is "it/process leading to it" where the apparent opposites are components of the right-hand side of the /.

The implications are deep. Consider feudalists/serfs pair and replace it by feudal system/participants in the process. Feudalists and serfs mutually define each other. Disintegration of the system dissolves both components. Consider capitalists/working class pair. Both components specify each other; negation of one dissolves the other. They are not in conflict with respect to 'it' (capitalistic system) except in the value system of a perceiving person. Negation of capitalists dissolves not only the capitalistic system but the working class as well. Consider employer/employees as a process of interaction leading to a particular economic pattern, and so forth.

It seems that to *destroy* 'it' one has to destroy the 'process leading to it'. This can be achieved by negating at least one of the complementary components of the process — the other is negated by definition. In order to *change* 'it' one has to change the 'process leading to it' while preserving, in whatever form or disguise, the formatory components of the process. In order to *create* a new 'it' one has to create a new 'process leading to it'. One has to establish a new set of complementary components capable of 'it'-forming interaction.

Milan ZELENY

Reference

[1] F.J. Varela, Principles of Biological Autonomy (Elsevier/ North-Holland, New York, 1979) 99-102.