

Reviews

C. HAMPDEN-TURNER

Maps of the Mind

Macmillan, New York, 1982, 224 pages.

Maps of the Mind is a collection of 60 essays on how the mind works. All were written by the 'humanist-psychologist' Charles Hampden-Turner. Described in the book are a host of concepts from the thinking of Aristotle, St. Augustine, Freud, Sartre, Blake, Koestler and many others. In addition to describing these theories the author tries to interrelate them so that major themes are seen from different perspectives. The inclusion of some important new concepts (i.e. Jacques Lacan's reinterpretation of Freud's model of the mind), as well as some obscure but nonetheless deserving theories (i.e. Francisco Varela's dualistic-astronomical model) make this endeavor worthy of note.

The author introduces the essays with a justification for having devised a book of this kind. He inveighs against the "fragmenting, reductive and compartmentalizing forces of the prevailing orthodoxies" within the social sciences, and sees his book as a plea for the "revision of social science, religion, and philosophy to stress connectedness, coherence, relationship, organicism, and wholeness". While convergence is sorely needed among the aforementioned disciplines, it seems to me that this book presents a paradox, for the seemingly arbitrary way with which he chooses the inclusions indicates the impossibility of the task he sets for himself. Many of the presentations and the illustrated maps which accompany them fall short of meeting the rigorous kind of historical treatment some of the subjects deserve. I wonder of the author hasn't overextended himself by trying to comprehend and interpret for the layperson so many complicated and intricate theories about the workings of the human mind.

Yet he delivers what the title promises: maps, patterns, pictures, and schemata which represent

the human mind. Although these theories are offered in the spirit of cohesion, they do not digest together easily and at times the layout seems like a banquet of disparate foods. The weakest concept is the nine-level progression from narrower to broader conceptions of mind. Certainly not arbitrary, the progression still is ineffective. There is no search for historic derivations of the current situation in understanding the workings of the human mind, nor is there any statement or statements which tie the old in with the new. I can only assume this approach indicates Hampden-Turner's own broad conception of the workings of the human mind as embracing a wide scope of philosophical, psychological, physiological, sociological, and metaphysical aspects. Yet he leaves it unclear as to why some maps belong at certain levels, and provides few transitions between levels. The reader is often unsure which level is being explored and why the various maps belong at that level. Yet as a metaphor, 'map of the mind' might prove useful to managers or others whose job it is to understand and focus human behavior.

The book could prove to be a fine acquisition for academic libraries or for anyone desiring broadly-conceived works in the social sciences, although at times this collection reminds me of essays in the style of *Psychology Today*. Its simplified style and dramatic illustrations perhaps make it more worthy as a coffee table book on ideas than a scholarly and cohesive piece of scientific research. Nevertheless, if one can wade through the sometimes glib language and overwhelming amount of material presented one discovers that at the very least a valiant attempt has been made to make a humanistic statement about the fate of man. In fact, I find the strongest reason for supporting the book finally lies in its tone, which is one of artful persuasion for humanism in all disciplines. It reminded me of an admonishment made by Albert Einstein over 50 years ago, in an address to the California Institute of Technology:

Concern for man himself and his fate must always form the chief interest of all technical endeavors, concern for the great

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unsolved problems of the organization of labor and the distribution of goods – in order that the creations of our mind shall be a blessing and not a curse to mankind. Never forget this in the midst of your diagrams and equations.

For managers of human systems who long for a human management of systems this book is illuminating. Additionally, for those who wish an introduction to these kinds of theories the book washes well as an index to further research. The illustrations which accompany the maps are colorful and dramatic. Readers of *HSM* will find *Maps of the Mind* interesting from at least one perspective, if not several, and the metaphor is useful as a method to guide human behavior.

Holli G. LEVITSKY
Mental Health Research Institute
University of Michigan
Ann Arbor, MI 48109, USA

A rejoinder to Levitsky's review of *Maps of the Mind*

Whereas I agree with the gist of Levitsky's review, I would like to add my own remarks. After reading this book, I am much more enthusiastic about Hampden-Turner's achievement than the above reviewer. For many reasons, I find this volume very rewarding. It is comprehensive and integrative. The author has tried to reconcile the innumerable views which exist about the brain and the mind – no simple feat – in sixty 'maps' each of which refers to a different point of view. Contrary to Levitsky's assessment, I think that Hampden-Turner has done an excellent job of trying to cross-reference his different chapters. As a matter of fact, if the readers wants to take the trouble, he/she would be able to go from one chapter to another and coordinate the study of the sixty maps. Of course, it depends on one's level of expertise. If you are a professor of Psychology who specializes in the topic, you will probably find this text very superficial. On the other hand, if you are interested in the subject of brain/mind without being an expert, this book 'delivers' a great deal. It covers an immense amount of territory, from Aristotle to Freud, without omitting Descartes, Marcuse, Bateson and a thousand other authors

who directly or indirectly have focused on the workings of the brain or have contributed to human knowledge. The author cross-references the many 'maps' and thus relates different currents of thoughts.

I found the book very exciting, and if one is willing to take the time, a great deal can be learnt from it. Naturally, it all depends whether you read it at the 'right time' in your personal development. I will illustrate the book's structure by referring to a subject that the author follows in many 'maps'. It is the idea of duality. How have philosophers, psychologists, thinkers in general, reconciled the contradiction of opposites? Hampden-Turner suggests that the juxtaposition of opposites at the *object level* precipitates conflict between both hemispheres of the brain (Map 23), where *object level* is at the lower level of the hierarchy of logical types, and *metalevel* is at the higher level. The Theory of Types was introduced by Whitehead and Russell to show the relationship among classes and members of a class (Map 40). This conflict or duality is of course found in all human endeavors, starting in Chinese philosophy with the opposition of Yin and Yang (Map 3). It can be found in the subject-object split of Cartesian dualism (Map 6), Laing's polarity of subjective whole and objective part (Map 14), the mind-splitters who see the left hemisphere as verbal, analytical, sequential, rational, time-oriented, and discontinuous, while the right hemisphere is seen as verbal, holistic, synthetic, visuo-spatial, intuitive, timeless and diffuse (Map 23). As a matter of fact, the subject of duality is taken up in no less than twenty-four of the sixty maps described in the book. We can cite other dualism such as the Bono's vertical vs. lateral thinking, Korzybsky's territory vs. map, Freud's conscious vs. unconscious, Varela's tree vs. net, Lévi-Strauss' positive vs. mythic, Pribram's and Bohm's opposition of the realities of time/space vs. frequency in the holographic paradigm, and so on. The conflict of opposites leads to schizophrenia or schismogenesis (psychic break) as described by Bateson (Map 40 and 48). If conflict leads to the structure of evil, the resolution of these contradictions leads to the structure of growth.

The contradictions between complementary characteristics of opposites cannot be resolved when they are considered at the same level of logical typing or at the same level of logic, i.e.

when both are considered at the object level. Potential contradictions between one side of the duality and another, are only resolved by ensuring that “one in each pair is ‘message’ and the other is ‘context’”, i.e. where opposites are always at different levels of logical typing. Value A or value B must contain and constrain its corresponding opposite. A must be seen within the context of B, or B within the context of A. Another way of expressing this resolution, is that value A must be ‘manifest’ while B is ‘latent’, or value B must be ‘manifest’ while A is ‘latent’. One of the two values must be placed at the object level while the other is at the metalevel, where the latter contains or works as the context for the other. In this way, one can resolve all contradictions including the one between the Sphinx, representing all that is physical, and the Rainbow, all that is mental (see D. Loye’s *The Sphinx and the Rainbow*, Boulder and London, Shambhala, 1983). In Map 59, Hampden-Turner refers to Martin Luther King Jr.’s crusade and explains how King was able to implement this reconciliation of complementary values by balancing each one with its complement. While his detractors and enemies were fighting him by embracing one value or its negation (complements of the same value at the object level), King was able to place the dialogue at a higher level, where the morality issue avoids the contradictions of the lower levels by fusing extremes in a synergistic movement.

I would qualify this book as important because of its content and its structure. It certainly is more important than the previous reviewer wants to admit. I believe that many of our readers will agree with me. I am not making this recommendation lightly, and would like to hear about others who agree with my assessment. This book will become essential reading for all those interested in the study of brain/mind.

I believe it to be great injustice to state that this book is written in the style of *Psychology Today*. Its substance is overwhelmingly better than that of a popular magazine. As a matter of fact, it is a deceptively difficult book to read, if one really intends to extract its entire message. Neither would I agree with the first reviewer that it “might prove useful” to managers. Ordinary managers would not know what to do with it. It has a deep message that may exceed most of us, unless we are dedicated to understand how to bring back coherence

to split value judgments in the synergistic congruence of a larger cybernetic system.

John P. van GIGCH
HSM Book Review Editor
California State University
Sacramento, CA 95819, USA

I.I. MITROFF

Stakeholders of the Organizational Mind

Jossey Bass, San Francisco, 1983, 178 pages.

According to the author, the primary concern of this book is the creation of a new way of studying and understanding the deeper features of human systems, i.e. the motives of human behavior that lie deeper than those the current main body of organization theory treats or is able to account for.

The organization is buffeted by a growing disparate array of forces which are called *stakeholders* in contrast to the more limited term *shareholders*. *Stakeholders* are interest groups, parties, actors, claimants, and institutions that exert a hold on the corporation. They affect or are affected by the corporation’s actions, behavior and policies. Different stakeholders do not generally share the same definitions of an organization’s ‘problems’, and hence do not agree on the same ‘solutions’. There are two kinds of stakeholders, those who are *external* to the individual and those are *internal*, i.e. those who constitute the innermost core of the individual’s psyche. There is a constant interplay between these two classes of stakeholders.

In this book, Mitroff proceeds to explain how he and his colleagues evolved a special methodology to deal with highly ill-structured, complex, messy, real-world problems and to treat stakeholders and their associated properties at varying levels of social reality. After showing how to identify those stakeholders *external* to the skin of the autonomous individual personality, Mitroff begins his treatment of “stakeholders within the skin”, or in the psyche, of the individual. The ideas of Jung and Berne are used to present personality typologies and, by extension, it is shown that organizations can also have different personalities and styles. The personalities of individuals affect the

design and structure of organizations, including what they recognize as valid information on which to base their decisions. Then, the author introduces the concept of *archetypes* which are called “stakeholders of the mind”. They are represented as the “most extreme, pure symbols that the mind is capable of producing and of experiencing of itself and everything else that constitutes the world”. The influence of archetypes is to be found everywhere. They are part of the working, living culture of civilizations, institutions and the psyches of individuals.

After reading this description of the book one may well wonder whether this work has practical significance for managers and management.

Knowing Mitroff and his pioneering work in all realms of social science and organization theory, it is not surprising to find ‘the practical side’ of his treatise. For example, in chapter four, he delves into the various cognitive styles of real-world managers and shows how they can be classified depending on how they ‘take-in’ data (the input-data dimension), and how they typically make decisions based on this data (the decision-making dimension). Borrowing from Jung, Mitroff recognizes that the data-input process can either be performed through *sensation* or through *intuition* and that decisions can be reached on *thinking* and *feeling*. As a consequence, the Jungian dimensions lead to the ideal types of personalities, depending on the combination of the four dimensions just stated.

That differences in cognitive styles exist is far from being new. Explorations of this kind have been carried out by many researchers, including Mitroff and his associates, for a long time. In this book, these investigations are integrated into a larger framework and extended. He recalls from previous work that the classification of personality styles provides a link between individual and societal behavior and how the Jungian framework can be used to shed light on organizational and institutional differences. Indeed, managers use the methods that are in accord with their views of social reality. They see (recognize) the stakeholders that fit their views, and, in turn, their views fit or reflect the kinds of stakeholders they recognize as legitimate. If this is so, Mitroff argues, then it is vitally important to understand the linkages between personality differences of individuals and the views of social systems (realities) that different

individuals construct. It is also important to recognize that no one style or attitude is capable of recognizing or dealing with all of the significant features of ‘reality’.

Mitroff goes into depth to explain how archetypes influence corporate affairs and everyday life. Archetypes and social system stakeholders overlap. This demonstrates that “the human mind and human social systems exist on several different planes of reality at the same time. We have to deal with the conscious or the unconscious, the psychological or the sociological, not separately but holistically”.

Mitroff spans the whole spectrum of contexts in which human stakeholders and archetypes play a role. Thus, he shows where to find archetypes in the computer games that we play, in the movies, in fairy tales, in policy making as well as in scientific research. Mitroff extends the work which he and Mason initiated on the dialectic interplay of premises and assumptions in policy formation (R. Mason and I.I. Mitroff, *Challenging Strategic Planning Assumptions*, Wiley, New York, 1981). In the present work, *Evidence* plays the role of the minor premise, the *Warrant* (the ‘if-then’ part of the argument) plays the role of major premise. The *Backing* is the set of deeper background reasons whose role is to validate or justify belief in the Warrant. Cause-effect, analogy, belief and logical necessity are four kinds of backing. Evidence, Warrant and Backing lead to *Claim* or policy making. We have also the *Rebuttal*, which is the set of any and all challenges to any and all parts of the argument. The Rebuttal provides the dialectic element in the policy formulation. Evidence, Warrant, Backing and Rebuttal play the role of pure, depersonalized abstract stakeholders in the scientific context, whereas in a nonscientific one, these functions are carried by human stakeholders.

In the final chapters of his treatise, Mitroff turns to archetypal conceptions of science and compares the linear hierarchical archetype with circular archetype of the ordering of sciences. The former places logic on top as the ‘queen’ of the sciences with mathematical and physical sciences at the top half of the array. In this scheme the social sciences end up at the bottom half. Instead, in the wheel archetype, no science takes precedence over any other science. The circular archetype is founded on the radical notion that *all of the sciences presuppose one another in the sense*

that the concepts of all the sciences have a bearing on one another. The circular archetype acknowledges the tremendous role that the social sciences have and are playing in all other sciences.

Mitroff concludes with implications of his theory of the mind to understand organizations. His theory is far reaching and visionary. It implies radical new views of how organizations as well as individuals, groups and even whole societies behave. Given its abstraction it will not easily be grasped by everyone. However, unless we take its meaning seriously, we will not be in a position to cope with the ever increasing complexity that surrounds us.

John P. van GIGCH
California State University
Sacramento, CA 95819, USA

Mark DAVIDSON

Uncommon Sense

Houghton Mifflin, Boston, 1984, \$8.95 pbk, 247 pages.

(Order tel. 1-800-225-3362)

Mark Davidson has written a long overdue biography of Ludwig von Bertalanffy: "the least known intellectual titan of the twentieth century", as he calls him in the very first sentence. Davidson continues: "... he spent his life in semi-obscurity, and he survives today mostly in footnotes".

The above statements are of course true of many thinkers associated with the general theory of systems. Systems theorists do have a knack for conveniently forgetting, ignoring or even degrading major contributors to their field. Bertalanffy is on his way to become a member of the systems' 'Hall of Obscurity': joining Bogdanov, Weiss, Smuts, Trentowski, Gerard, Jantsch, Koestler, and countless small armies of others. New candidates are being ceaselessly and untiringly induced all the time: General Systems Theory still pays very little attention to the innovation and erudition of such original thinkers as Prigogine, Eigen, Maturana, Varela, von Foerster, Morin, and Boulding – all being living witnesses to GST-institutionalized neglect, all potential objects for the future Davidsons of resurrection.

Instead, the systems proponents lavish their adoration on technicians, mechanists, and formalists of an inconsequential, non-humanistic bent. Bertalanffy himself was the father of a *humanistic* general systems theory, in the tradition of Bogdanov (of whose work, unfortunately, he was not aware), and this humanism is mostly missing from modern GST. Human beings and their societies are not computer wiring diagrams or electrical circuits full of Wheatstone bridges. Similarly, a non-systemic, non-cybernetic, and shoddy work of the Meadian type is rewarded and infused into GST proceedings with uncommon zeal and persistence.

Davidson to the rescue: Bertalanffy deserves this resurrection, as is also stressed in the forewords by R. Buckminster Fuller and Kenneth E. Boulding. Davidson explains: "... there is a world of difference between the technical systems approaches and the all-encompassing GST mode of thinking that Bertalanffy had in mind". Bertalanffian GST applies the principles of integrated thinking to all areas of *human* experience – it is a way of *teaching* or a way of seeing, rather than a theory. Bertalanffy always disassociated himself from the ranks of systems hucksters and 'general systems consultants' who pollute the world by their self-promoting efforts to sell their samizdat booklets describing "fairly easy ways to deal with the world around us with all its complexities". They impose themselves on policy makers and even governments, pushing and pulling, representing the world as this or that feedback system. It is a sad commentary on GST that it takes a science writer and journalist, rather than a scientist, to see that clearly.

I call this phenomenon a 'general systems approach to wife battering', an actual title observed at the recent Frankfurt book fair. Anything and everything can be 'approached' from a GST viewpoint. It is also extremely useless to do so. The elegance, the dignity, the noblesse is missing: everything must be practical, applied, useful and relevant, pushed through countless overpriced seminars and 'learning experiences' where they teach you in a week or so to save the world.

General Systems Theory is a complex, multi-faceted way of seeing the world – it is not a quick methodological fix, it cannot be applied. It can only be learned, assimilated, and appreciated. It takes a lifetime, and often more than that, to

acquire some understanding of its grandiose, overwhelming intentionalities. It is more a question of a holistic versus a reductionistic view of the world, yet modern GST is no heir to holism; most of its 'methodologies' are uncomfortably (or comfortably) reductionistic. As an allegory, Margaret Mead's famous recommendation for solving the World Hunger ("Each American should eat one hamburger less every week") comes to mind. Is that the pinnacle of a life-long devotion to cybernetics and general systems? Is that what we are teaching our students?

The systems science student, Bertalanffy observed in 1968, often "receives a technical training which makes systems theory (originally intended to overcome the specialization) into another of the hundreds of academic specialties". The word *system* is a fashionable verbal label (a fuzzy label in modern terms), which is increasingly being applied by our students, after some six months of training, to the most complex problems that mankind has ever known. Actual systems *thinking* is rare (or even non-existent). It demands what Bertalanffy called "a change in basic categories of thought".

One cannot change 'basic categories of thought' in six months. Many of us can never change them. Systems thinking goes much deeper, it is culturally conditioned, it comes from a specific *real* life experience, it cannot be acquired in a week of training, no matter how high the price tag or how exotic the location.

Von Bertalanffy was a *natural* systems thinker; he was *not trained* to be a systems thinker. Many others were 'natural': von Neumann, Weiss, Schumpeter, Morgenstern, Drucker, Machlup, Bogdanov, Rapoport, Trentowski, Jantsch, Prigogine, Koestler, Gerard, Leduc, Smuts, von Foerster, Menger, von Hayek, etc. – all results of a specific culture, specific education and values, and specific experience.

Davidson sensitively identifies the concepts and ideas that are in line with Bertalanffy's own way of thinking: holism, order through fluctuations, non-equilibrium thermodynamics, autopoiesis, etc., thus

affirming that Bertalanffy's 'foundations' are bound to survive and evolve.

The weakest part of the whole book is nevertheless the history, the past evolution of GST thought. No mention of Bogdanov's monumental 'Tekhnologiya', Trentowski's 'Kybernetyka', or Leduc's 'Synthetic biology'. Even Paul Weiss wrote about 'general systems' long before Bertalanffy. Instead, 'GST Roots' are connected with such names as Lotka, Woodger, Whitehead, Rosen, Needham, Haldane, and even such reductionists as Dobzhansky, Dubos, Commoner, and Russell.

Davidson refers to the 'fruit salad' of all current systems practices, approaches, and methodologies as *systems movement*: this includes also the writings of Bateson, operations-research systems versions of Churchman-Ackoff, and even 'fuzzy systems' of Zadeh: Bertalanffy would have had nothing to do with it, although he was paternally ambivalent to this 'Frankenstein monster'. This gentle ambivalence led to Bertalanffy being often associated with the 'zoo' of systems pseudo-scientists (as for example charged by critic David Berlinski), becoming thus their 'zoo master' by association, although Bertalanffy's GST had nothing to do with these *other* 'systems approaches'. Berlinski's otherwise informed and well written criticism suffered from the misunderstanding of Bertalanffy's soft, professorial attitude towards systems technocracy. Ludwig von Bertalanffy should have shouted from the highest peaks in the loudest of voices: "I disassociate myself from systems zealots who hasten the process of mechanization, automation, and the devaluation of man". He was too nice a man for that, well educated, and cultured.

Mark Davidson has written a remarkably human and sensitive biography of a remarkably human and sensitive man of uncommon sense. Let us be thankful to both.

Milan ZELÉNY
 Fordham University
 New York, NY 10023, USA