

## Reviews

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### Editorial comment

We are happy to accept the first contribution from Professor E.G. Herrscher who was a Fulbright Scholar-in-Residence at California State University, Sacramento (CSUS) during the Spring Semester 1986. The author is now an Adjunct Professor at CSUS and, therefore, we hope that the contributions to this column will continue.

As an Editor, I would like to commend the publishing house of Jossey Bass, San Francisco, CA, for the persistent high quality of books which they have produced recently and which have appeared at a furious pace.

J.P. van GIGCH

D. YATES, Jr.

#### **The Politics of Management**

Jossey Bass, San Francisco, CA/London, 1986, 269 pages.

M. NASH

#### **Making People Productive**

Jossey Bass, San Francisco, CA/London, 1985, 266 pages.

E.G. FLAMHOLTZ

#### **Human Resource Accounting**

Jossey Bass, San Francisco, CA/London, 1985, 389 pages.

S. SRIVASTVA and ASSOCIATES

#### **Executive Power**

Jossey Bass, San Francisco, CA/London, 1986, 360 pages.

R.H. KILMANN, M.J. SAXTON, R. SERPA and ASSOCIATES

#### **Gaining Control of the Corporate Culture**

Jossey Bass, San Francisco, CA/London, 1985, 451 pages.

You can talk about it. You can tell people how to do it. You can tell people how to measure it. Or you can think about it and build some sort of model that explains it.

These approaches could be applied to almost everything. In using them to comment on these five books, this reviewer will relate them to the human element of management: from individual and group performance improvement, to top corporate politics and the exercise of power.

Yates' *The Politics of Management* clearly corresponds to the 'story-teller' type: the author 'talks' about corporate politics providing insight through relevant anecdotes. Once this restriction is accepted, I can say that this is an excellent work, with a plethora of information that makes it indispensable reading for anyone interested in the sociology rather than in the purely financial or operational aspects of business.

Some readers may miss a greater 'thinker-analyst' approach: the greatest 'thinker-analyst' of old times in political aspects, Nicoló Machiavello, is nowhere mentioned. Nor is his lucid adaptor to business, Anthony Jay [1], whose work, in spite of age, is still a 'modern' classic.

Others in turn may miss a greater 'model builder' approach. General Systems Theory has provided useful tools to help analyze the 'politics of management' in terms of power, competition and coalition, strategy and tactic, control and metacontrol, and many more. That is not the way Yates' book is structured.

The 'mini stories' (rather than in-depth cases) are very well selected and used to point to the political skills required by managers, as well as to highlight the pitfalls they may encounter in that endeavor.

In some instances, the conciseness of the story prevents a more profound analysis. For example, Harold Geneen's style at ITT was much more complex than an 'open competition between managers': rather, its driving force was mainly structured on strong roles of line and staff, linked by the 'devil's advocate tactic' that Yates mentions in connection with the Kennedy style, and that Mason and Mitroff [2] explain more adequately in relation to Geneen.

In summary, as soon as we recognize the short-case-style not as a weakness but as the feature that distinguishes this approach from others, Yates' book makes a useful – and certainly very entertaining – reading.

Nash's *Making People Productive* is, with the same clarity, a 'how to do' book. This is not to say that it is a 'recipe' kind of work: proposals are thought through, well supported by the management, social and behavioral literature and references from authors, such as D.C. McClelland and V.H. Vroom. Still, they are proposals, possible solutions to problems, not analysis of the perspectives and underlying causes, the 'why' and 'what for' of the issues.

The issues can be summarized in one word: productivity. At a time when this concept has revived dramatically, pulled out from textbooks and theoretical analysis to the front pages of newspapers and to the very practical area of competition-concerned corporate board meetings, a hands-on approach on 'how to get the most out of the people' is certainly welcome.

However, when reviewing this book I cannot avoid a certain feeling of obsolescence. Not that people are any less important than they used to be. However, if there is something like a typical cost structure of contemporary industry (to a lesser degree also in services), this reviewer believes that certain nonlabor-related cost elements are not more important than before. This refers, in industrialized countries, mainly to capital expenditures – related costs and R&D – and in development countries, mainly to financial costs and unabsorbed fixed overhead. Even allowing for the human contents of some of those elements, much of their impact on productivity has to do with strategy and planning, i.e., with *what* is done, rather than with *how* it is done.

This is not detrimental to the book's value: let's not overdo the 'strategics' forgetting the tactics: we could well reverse Peter Drucker's dictum and end up 'doing badly what had to be done.' Therefore, I highly recommend Nash's contribution towards better selecting, training, motivating, appraising, compensating and retaining people. The suggestions with regards to jobs – people matching, and goal setting, are in my view the strongest messages for the practitioner.

The weakest parts are, in my opinion, the harsh criticisms of theories not favored by the author. One thing is to recognize that the world did not stop with Maslow, Herzberg or McGregor, and, another, to brand their contribution as dangerous or wrong. Nash's eminently practical work is simply not theoretical enough to support such an absolute rejection. In my own activity as business consultant, I can very well follow Nash's practical items of advice, without excluding those authors' ideas for what – in time and place – they provided as important steps in a discipline subject to development and change. A scientific research work may eventually support absolute approval or rejection of theories – but that would be a different book.

In summary, I recommend the practical Nash, the practitioner trained in the Hay Group and now acting in his own consulting firm, not the theorist Nash with his likes and dislikes of prior theorists.

Flamholtz's *Human Resource Accounting* is even more of the 'how to do' type than Nash's work, but in this case it is rather 'how to measure, report, and account for.'

This work offers a very direct contribution to several courses in the areas of Management Accounting and Human Resources. I recommend it warmly for classroom use both at the undergraduate and graduate level.

It covers with great professionalism a delicate subject, that presented serious threats of over-technicality and over-idealism, which were masterfully overcome.

Main features for this result are the well-developed structure, the concise and clear mini-cases and the easy-to-use figures and tables.

Although in this case I could also say (as I did for Nash's book) that the relative cost of human resources may be decreasing with the advancement of technology, market development and cost of money, this consideration does not affect Flamholtz' book as it did in that other case. One reason is that Flamholtz very clearly acknowledges the trend towards the service area, where the human resources still weighs very high. The other reason is that the whole basis of HRA is that conventional cost concepts are insufficient when human resource costs and assets become increasingly sophisticated.

This approach is what makes Flamholtz's book modern – it was modern in 1974 (so was, in its time, R. Likert's work, Flamholtz's main theoretical frame of reference) and it is modern today, in this revised and expanded edition.

It is true that even if human resources are better measured, reported and accounted for, it does not automatically follow that they will be better managed. However, this is perhaps one of the fields where good information is most essential for good decision making. So, it would not be surprising that better accounting, in the most profound sense of this term, often may achieve better results than more direct (but more naive and superficial) action on the measured phenomena themselves.

Srivastva's (et al.) *Executive Power* is, for this reviewer, the best and most relevant of the lot, mainly because of the critical importance of the subject and the clarity of most of its concepts.

Two or three chapters are again mostly anecdote-oriented, to the extent of constituting, from the methodological viewpoint, virtually anthropological research.

The rest forms, in spite of the diversity of authors, a unified approach of the 'thinking and modeling' type.

Instead of a general comment, this reviewer considers it more useful to highlight the seven more significant and conceptual chapters, which will show the general orientation of the book.

*J.P. Kotter* begins by stating that the development (he adds a value concept, 'responsible' development) and use of power is *the* central executive function. Projected to present complex social reality, this focus on power leads to a very different image of executive work than the classical ideas of economic decision making, shareholder wealth maximization of plain 'being the boss.' Instead, today the focus has shifted to managing complex interdependencies in order to minimize destructive conflicts and power struggles.

*D.E. Berlew* explains the difference between push and pull. The push energy – to move *against* or push people – manifests itself in organization, systems, and procedures. By contrast, the 'pull energy' – to move *with* or 'pull' people – is generated by a common vision and shared values. The need to balance these two ways of exercising power evolves, with a growing trend towards

'pull-type' leadership solutions, as opposed to 'push-type' management solutions.

*W. Warner Burke* deals with the sources of power and the process of empowering. Following French and Raven, five primary bases of power are identified: reward power, coercive power, expert power (information or knowledge), legitimate power (authority), and referent power (charisma). Then, following Zaleznik, Wortman and Burns, Burke compares leaders with managers, in part using the Chrysler example: Iacocca and Sperlich. Most notable dimensions: active leader, reactive manager; leader's inspiration, manager's involvement; concern with institution and vision, concern with task and people; appreciation of contrariness, appreciation of conformity; and most interesting: a leader creates problems, a manager fixes them.

*E.H. Neilsen* develops a conceptual model that combines stages of group development, group structure, leadership style, and influence behavior. His five stages present a clear classification and valuable material for thought and further research: (1) safety versus anxiety (each for him/herself; directive style; to command and prescribe); (2) similarity versus dissimilarity (dyads; coaching style; to instruct and debate); (3) support versus panic (coalitions; participative style; to involve and commit); (4) concern versus isolation (connected coalitions; appreciative style; to nurture and applaud); (5) interdependence versus withdrawal (integrated group; inspirational style; to innovate and challenge).

*M.R. Louis* describes in a fresh way four executive roles: as interpreter, creator of high performance conditions, integrator and enabler.

*L.E. Greiner* develops, on the basis of an actual case (Gamma Industries), a simplified matrix of top management politics and organizational change. The two dimensions are: willingness of the CEO to assert influence over the group ('ASSERT'), and willingness of key subordinates as a group to accept the CEO's influence ('ACCEPT') – low ASSERT and low ACCEPT leads to peer rivalry; low ASSERT and high ACCEPT leads to passive loyalty; high ASSERT and low ACCEPT leads to covert resistance; and high ASSERT and high ACCEPT leads to active consensus.

*L.D. Brown*, following Lukes and Gaventa, presents three dimensions of power: control over resources (overt conflict, pluralistic negotiation);

control over access and agendas (covert conflict, nonparticipation); and control over awareness of myths and ideologies (covert cooperation, quiescence).

In summary, several excellent contributions and an overall high quality coverage of a very complex subject.

Kilmann's (et al.) *Gaining Control of the Corporate Culture* is an adequate complement of Srivastva's work: power and culture are closely related, in the corporation as everywhere else, and those may constitute leading catch words in the management sciences of the eighties, as much as more tangible or functional-oriented aspects did in earlier decades.

This book focuses on culture as the invisible force behind those tangibles, filling the gap between formal structure and reality. The book originated with a conference on 'Managing Corporate Cultures' sponsored in 1984 by the Graduate School of Business of the University of Pittsburgh, in the context of a permanent program 'to promote the study of the impact of culture on organizational effectiveness and to disseminate the knowledge acquired so that managers could use it to increase the effectiveness of their organizations.'

In my opinion, this work goes well beyond achieving this purpose: it provides above all a study on whether corporate culture can be changed, what for, how; when, and by whom. Through its four parts (What is Culture, Understanding and Managing Culture, The Dynamics of Cultural Change, and Specific Methods for Changing Culture) it presents several ideas of significant impact:

- that an organization can have more than one culture;
- that we should above all try to understand and use the strengths of the existing culture, and not assume that culture change is simple;
- that whenever cultural change becomes an issue (certainly not a frequent event), leadership will be the key;
- that in addition to the managerial perspective, culture-creating behavior should also be looked at from the lower-level employees' perspective: thus, different conceptual views (as studied by Mitroff and Turoff) and social differences become apparent.

As in the case of Srivastva's book, I would like to highlight the chapters that did most to systematize the material, show clear models and provide (me) with new and/or powerful ideas.

*E.H. Schein* explains with great precision eleven mechanisms of cultural change: (A) in the early stage of an organization: (1) natural evolution, (2) organizational therapy, (3) managed evolution through hybrids, (4) managed 'revolution' through outsiders; (B) during organizational midlife: (5) organizational development, (6) technological seduction, (7) change through scandal or explosion of myths, (8) incrementalism; and (C) during organizational maturity: (9) coercive persuasion, (10) turnaround, and (11) reorganization, destruction, and rebirth.

*M.R. Louis* (whose chapter in Srivastva's book I commented in the preceding section) deals with multiple cultures in one organization, with horizontal and vertical slices, with internal and external sites or sources of culture, with the pervasiveness, homogeneity and stability of cultural penetration.

*V. Sathe* identifies five action points at which managers must intervene (counteract) if they seek to create (prevent) culture change: behavior, justification of behavior, communications, hiring and socializing, and removal.

*A.L. Wilkins and K.J. Patterson* point out the basic shared assumptions underlying the ideal culture: an assumption of equity, a sense of collective competence, and an emphasis on adaptation and change.

*T.E. Deal* draws a relation between cultural change and the wrenching emotional and spiritual impact of loss. Following Kubler-Ross, he outlines the typical mourning sequences: denial, anger, depression, bargaining and acceptance, and suggest a similar change-loss-reaction sequence in the case of cultural changes in organizations.

In summary, this book shows an almost perfect equilibrium between story-telling, unstructured thinking, and modeling. My only criticism is that the relation between the culture of the corporation and that of the context is rather neglected. In other words, a great part of the analysis is based on the hidden assumption that it refers to the United States. For instance, the description of organizational rites to change culture (especially with regards to enhancement, renewal and integration rites), only makes sense in the cultural

context of the U.S., for which, in effect, it has been written.

All in all, the five books commented represent a most valuable contribution to the study of the human-political-cultural aspects of management: they will truly satisfy the expectations of anyone wanting to read and consult outstanding opinions and suggestions in order to improve his or her ability to manage human resources – a term that includes not only labor, but above all, managerial, cultural, and social-political resources.

Enrique G. HERRSCHER  
*School of Business and P. Admin.*  
*California State University*  
*Sacramento, CA 95819, USA, and*  
*Universidad de Belgrano*  
*Buenos Aires, Rep. Argentina*

## References

- [1] Jay, A., *Business and Macchiavello – An inquiry into the politics of corporate life* (Bantam, New York, 1967).
- [2] Mason, R.O. and I.I. Mitroff, *Challenging strategic planning assumptions* (Wiley, New York, 1981).

B.W. MAR, W.T. NEWELL and B.O. SAXBERG (eds.)

### **Managing High Technology**

Based on papers from the Third International Conference on Interdisciplinary Research, Seattle, WA, August 1984

North-Holland, Amsterdam, 1985, 420 papers, \$55.00.

One approaches the review of a conference proceedings with some trepidation. Often there is little that unifies such a collection, except the common desire of the authors for free room, board, and transportation to a far off and exotic venue. Happily, such is not the case here. These papers do have an organic unity and the editors are to be complimented on their success in bringing this about.

INTERSTUDY is an informal group of scholars interested in the management of interdisciplinary research. The theme of this third conference grew out of the group's perception that the

issues reported on in their first two conferences are not really matters of greatest concern. INTERSTUDY now believes that the major problems in the management of interdisciplinary research are those related to the ability to cope with change rather than those related to the disciplines themselves, and this book reports on their investigations into this issue.

Of course, one can not expect complete unanimity of focus in papers presented at such a meeting. As anyone who has managed an international conference can attest, some authors will persist in following their own agenda, while promising faithfully that in the next version of their paper, all of the guidelines will be carefully observed.

There are about 34 papers with technical content in this collection and the majority are of enduring interest. They are divided into four, seemingly somewhat arbitrary sections. The editors succeeded in attracting about a dozen papers from industry authors and/or focused on specific industry R&D management issues, a difficult task in itself. A further half dozen came from government authors, with academic authors or subjects making up the remainder.

A study of some of the pitfalls in high technology corporate startups by Rossen and Martin, illustrated with data and anecdotes concerning four Canadian electronics firms, and a paper by Reeves on the matrix management process at TRW are particularly useful in the industry section.

R.S. and R.C. Friedman contributed a rather complete review of university Organized Research Units, ORUs, their term for centers, institutes and the like, with statistics and perceptions. Toft and Sparrow give a summary of an earlier NSF-sponsored conference on 'Making Interdisciplinary Engineering Centers Work.' This matter of effective research organization design is critical for NSF of course, given that the establishment of a number of Engineering Research Centers (ERCs) in American universities is NSF's major 'new money' initiative for the middle and late 1980s. Both of these papers are germane to the point, but much more needs to be said on this critical issue.

For example, the authors of both papers understand, at a surface level at least, some of the tensions produced between academic departments and ORUs, but the authors seem to have failed to grasp the underlying dynamic. Of course, this

tension exists, and of course most of the participants don't understand the world in which they live, (conventional complaints of 'second-class citizenship' by non-tenured researchers, etc.). But rather than a 'problem,' one might postulate that this particular tension is healthy, desirable and indeed necessary. Unlike many tensions in ill-designed organizations, this one seems to have contributed to stability and continued attention to research excellence in leading American universities.

One can go further, I am aware of at least one major American academic institution that under pressure from its 'second-class-citizen researchers' attempted to redress the balance, and in doing so, destroyed its leadership position in a major sector of applied science for twenty years. It might be well for the authors, or someone, to work the inverse problem. Given that the sociology of university applied-science research exists, is stable over time and across national boundaries (viz the amusing contribution by Daras on Hungarian University faculty politics), what is the goal set or value set being optimized?

The ORU/Departmental split common in American universities is not the only way in which to conduct interdisciplinary applied research, however. One wishes that a discussion of the Fraunhofer Institute system in the Federal Republic of Germany had been included in this overview, as a point of contrast.

The area of research of organizational design is a new field of managerial study and not completely understood. We do know, however, that proper structure in an organization will contribute to its success or failure. One hopes NSF and its new ERC directors do not simply impose a major new funding structure on the university without considering the potential and unintended negative cross impacts on the existing university infrastructure and its sociology. If they persist, the ERCs may fare no better than the late and unlamented NSF program on 'Research Applied to National Needs;' the justly infamous RANN program. One hopes that INTERSTUDY is on the way to understanding and clarifying this issue.

In a related paper, Teich and Pace report on U.S. Federal funding patterns in interdisciplinary applied research. They say that 'crude as it may be, there is a good deal to be learned from this exercise.' I agree. But, I do not agree that they

have necessarily come away with the correct lessons. Rather than the trivial and probably incorrect conclusion 'that certain types of applied R&D are appropriate for the federal government to be funding and others are not.' Teich and Pace might have sought for more than a scoreboard of winners and losers. They mention a market mechanism at work in Federal funding of research, but seem not to understand the underlying dynamic for unintended warping of university research direction or the threat to organizational stability mentioned above. Certainly NSF needs more guidance in setting up its ERCs than a list of past failures.

The problem of reorganizing the U.S. Agricultural Research Service discussed by Rubenstein et al., is a particularly relevant and poignant one at this time. The USARS is a large and long-standing research organization that has contributed much to the incredible agricultural productivity of the US farmer. Yet this productivity, politically mishandled, has become a monster. Furthermore, as in many 'over-mature' organizations, research quality at USAR has slipped and its direction has wandered. Rubenstein et al., have conducted a goals analysis, laid out many of the critical issues and sketched a transition scenario to the future. Making the transition will not be easy, as the editors of this volume recognize, but this paper is a valuable roadmap. One should not in particular the quantitative success indicators established a priori.

Sections II and III of the book, on interface issues and management alternatives, consist of shorter, more speculative papers, which deserve reading. The papers in these sections are not presented by the authors as definitive and should not be so taken by the reader, or reviewer. The point is that here is a group of intelligent, dedicated professionals meeting together to pioneer new territory in organization theory and the management of interdisciplinary research.

The territory that the INTERSTUDY group has chosen to explore is vital for the health and wealth of nations. The individual issues are fascinating. Does the traditional disciplinary departmental structure of universities support applied research? Probably not; see Porter and Rosine and the Friedmans etc. What are the effects of federal research support with conscious inattention to a national science policy? Teich and Pace have worked this problem, without saying so. Is

technical competence, adequate funding, a good idea and hard work enough to insure high tech start-up success? See Rosson and Martin. Is 'matrix' management so far 'out' that is is 'in' again? See Reeves. Is resistance to change a major inhibitor of continued organizational success? Yes, so the editors believe with Rubenstein et al., in support. Etc., etc.

I agree with the editors that change resistance is a meta-issue worthy of the concentration the INTERSTUDY group is giving it. I might suggest for their next plenary session the equally important and more neglected meta-issue of organizational design in the management of interdisciplinary research. Most research managers can quote anecdotal evidence of ORUs and richly-funded free-standing interdisciplinary research organizations that have failed and/or that are failing, primarily because their structures are at war with the value set held by their individual professional members and/or science at large, and/or the larger organization of which they are a part.

I warmly urge those who are interested in the management of interdisciplinary research to read the volume under review and to ponder its contents. I would further suggest that those of us at the working levels of interdisciplinary research organizations would profit by these attempts to understand what is going on about us.

J.E. GIBSON

*Dept. of Systems Engineering  
University of Virginia  
Charlottesville, VA 22901, USA*

Jonas SALK

**Anatomy of Reality. Merging of Intuition and Reason**

With an Introduction by Ruth Nanda Anshen  
Praeger, New York, 1985, 128 pages.

This is an interesting short book which provides Salk's cosmology. It is interesting because Salk is not necessarily known for such progressive views. He provides us here with what he considers 'a paradigm for a more expanded view of human experience.' He states that there is a need to weigh

the importance of the human mind in evolution: 'Just as we look into the causes of diseases for a clue as to their remedy, so we can look into the human mind and into the process of evolution itself for clues to the remedy of the maladies from which human beings are now suffering' ... 'Survival depends upon the capacity of human beings to learn from nature to develop evolutionary responses to threats to evolution's own survival'.

Salk predicts that the present version of human beings will evolve until a more evolved version of human beings who can solve the problems which haunt us, will emerge. This will require a refinement in the development of the human mind.

Salk provides a broad picture of how this will occur through the expansion and evolution of our 'conceptual maps'. *Evolution* is used in the sense of universal evolution, evolution of the universe, and not in the restricted sense of biological evolution. Even the process of evolution itself has undergone evolution. We are witnessing *metabiological evolution*, 'the period in which the human mind and human consciousness are operative', and where 'a mechanism beyond the molecular and the genetic seems to be inherent'.

The author visualizes an 'anatomy of order' which encompasses the evolution of the disciplines which are concerned not only with the physical order (Ontology), but those such as Sociometabiology which considers the collective mind in the context of culture and society. At a lower level in the anatomy of order and in the hierarchy of disciplines, he places the Mind, whose binary components, intuition and reason, are the province of Metabiology. He also conceptualizes manifestations of universal evolution starting from physical matter, through living matter and on to human matter where, initially, the emergence of cosmos leads, later, to the emergence of life and, much later, to that of consciousness. Thus, his 'Matrix of Fundamental Evolutionary Relationships' covers the determinants, attributes, components, units and emergence of universal evolution.

In his *Anatomy of Reality*, Salk finds that *relationship* is the most fundamental phenomenon in the universe and that *changes in context* constitute the most significant turbulence that affects our lives. He conceives the human mind as a *metasystem*, 'a metabiological system, serving the human biological and other ecosystems in the course of

serving itself' (p. 56). And of course, he attributes to the mind the ability to regulate itself, correctness, fallability, openness and the capacity to change. At the highest levels of metabiological evolution, he finds human creativity which will involve learning to improve the quality of performance of the human mind itself.

Salk continues his treatise through chapters on the human experience, the consciousness of evolution, the emergence of mind, unitary vision, metabiological health etc. To him the main problem lies in asking whether individuals with 'sociometabiological islands of sanity' will emerge to counter the effects of 'pathogenic influences' which are responsible for the present state of humankind. 'The remedy for the human predicament, for the malfunctions in the human condition, lies in the reconciliation of the intuitive and the reasoning powers of human beings', of science and knowledge, of ethics and morality.

Thus, Salk considers the process of universal evolution as central to the new reality, one which will provide humanity with new powers to cope and to be conscious of its own evolutionary force. Whereas Salk's vision is fraught with very abstract terms and concepts, it is relatively easy to read and to understand. To this reviewer's knowledge, Salk is one of the few American scientists that have attempted such an all-encompassing 'manifesto'. He calls it a new 'paradigm' or 'epistemology of human experience' (pp. 2 and 10). It is interesting that he found his inspiration for such an endeavor in his preparation as a microbiologist: He placed himself 'in a dialogue with nature using viruses, immune systems', and when observing a certain phenomenon in the laboratory he would ask: 'Why would I do that if I were a virus or a cancer cell or the immune system?'. This shift provided Salk with a radical new perspective, he could move from one domain to another: '[He]

could be at home as an objective/subjective scientist in one state of mind and as a subjective/objective human being in another state of mind'.

With this work, Salk places himself in the tradition of many of the Europeans like Prigogine and Edgar Morin and others to provide us with a new vision of reality, one which is much broader and more encompassing than those presented heretofore.

We cannot avoid mentioning that this text is included in a series called *Convergence* whose symbol is the Möbius Strip. According to the Introduction, the Möbius Strip is the name given to an unresolved topological problem which derives its name from Augustus Möbius, a German mathematician who lived from 1790 to 1868. 'The Möbius Strip has only one continuous surface, in contrast to a cylindrical strip, which has two surfaces – the inside and the outside. An examination will reveal that the Strip, having one continuous edge, produces *one* ring, twice the circumference of the original Strip with one half of a twist in it, which eventually *converges with itself*'. Furthermore, 'the Möbius Strip, in fact, presents only one monodimensional, continuous ring having no inside, no outside, no beginning, no end. Converging with itself it symbolizes the structural kinship, the intimate relationship between subject and object, matter and energy, demonstrating the error of any attempt to bifurcate the observer and participant, the universe and man, into two or more systems of reality. All, all is unity'.

Indeed, the Möbius Strip is the perfect representation of Salk's new vision and anatomy of reality.

John P. van GIGCH  
*School of Business and Public Administration*  
*California State University*  
*Sacramento, CA 95819, USA*