Editorial Comment

Epistemological foundations of a publication policy: its application to HSM

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The criteria which editors should follow to evaluate the material they accept for publication are examined. Given that what is written must satisfy two audiences, one of scientists/academicians and another of managers/practitioners, two types of knowledge are defined and described. Criteria for both sets are presented and advanced. Publications intended for scientists/academicians should be appraised by (a) the extent to which they promote the progress of knowledge, as measured by criteria drawn from epistemology, and (b) the quality of the article, as determined by the level in the hierarchy of publications as defined herein. Publications intended for managers/practitioners must satisfy criteria which relate to standards of timeliness, applicability, effectiveness, explanatory power-all factors designed to improve the managers' job performance. Finally, all publications, regardless for whom intended, must satisfy standards of readability, composition, and style. These principles are applied to evaluate the first two volumes of *HSM* and to enunciate recommendations for future publication policies.

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1. Introduction

In this article, the criteria by which the editors of professional journals should judge the suitability of material submitted to them for publication are examined. Over the years, they have waivered between theory and application, between readability and quantitative jargon, between satisfying the manager/practitioner or the scientist/academician. I submit that the criteria to be followed in making these decisions must depend, first, on whether the material is meant for one audience or the other. The criteria by which these two audiences evaluate what they read is different, and this difference should be reflected in any publication policy.

The first audience, that of academicians, appraises material by the extent to which it advances knowledge in their respective field. The growth of knowledge can only be measured epistemologically, i.e., with criteria which evaluate, with rigor, the explanatory and predictive power of the propounded theories.

The second audience, that of managers, will favor publication material which can help improve their job performance.

2. Kinds of knowledge defined

For the purposes which will become evident, two kinds or types of knowledge are considered:

(1) *Knowledge Type 1.* This type of knowledge results from research projects carried out by scientists, academics, and others, pretending to advance the state of the art in their particular field. To a large extent, they also hope that this knowledge will eventually filter down and become Knowledge Type 2. Knowledge Type 1 is defined as the *possession of truth*. To legitimize truth requires criteria drawn from epistemology, a branch of

philosophy of science which studies the theory of knowledge, its sources, and the methods of reasoning used to arrive at true assertions. No difference in value is ascribed between Knowledge Type 1 and 2. Both are valuable but address themselves to a different set of people and issues.

(2) *Knowledge Type 2.* This knowledge is particularly useful to managers and practitioners who seek to find information to improve their job performance. Tangentially, they also seek to "understand better what is going on" and make incursions into Knowledge of Type 1.

3. Progress and truth

Readers of professional journals have often felt the frustration "to keep up with one's subject" and to determine what is worth reading. Obviously, editors are always concerned with the problem of what to accept and what not to accept for publication. How this decision affects the state or the growth of Knowledge Type 1 or 2 is what I would like to discuss.

I am concerned whether it can be said that the body of knowledge known to management and managers has 'progressed' or 'is progressing'. Some concern must be placed on the term 'current' because it connotes that this body of ideas keeps changing. On the other hand, if I were to hold the absolute truth, I would certainly not have to keep revising it all the time.

Note that authors of texts, always emphasize that their own approach is 'best' because it is the more recent and the most fashionable. We need to pose the question whether 'being up-to-date' necessarily represents 'progress' or holds more 'truth' than predecessor views and theories. We need to ask what is meant by the terms 'progress' and 'truth'. If we are to critically assess the flow of management thought and its production, 'progress' cannot be construed as merely meaning 'more' or 'up-to-date'. We complain bitterly of the information explosion. We must, therefore, stem its tide and review critically what we publish and read. Are we to label 'progress' the advent of a new school of thought, the addition of a new technique or of a new method? Can useful conceptualizations such as those described by the classical Theory X and Theory Y be considered 'progress'?

In the next sections, criteria by which potential publication material in the two categories of knowledge – Types 1 and 2 – are presented.

4. Criteria of progress of knowledge type 1

(1) *Validation of Progress and of Truth.* Epistemologists and philosophers of science are not in agreement among themselves about what constitutes progress of knowledge. At present, a raging dispute is taking place among inductionists, pragmatists, and neorationalists (or reconstructionists) regarding what is meant by scientific knowledge and how growth of knowledge is to take place and be evaluated.

(a) For inductionists, the growth of knowledge is carried out by induction and verification which constitute the two cornerstones of their science. Inductionism is the methodology of science represented by empiricists such as Hume, Locke, and Berkeley.

(b) Pragmatists such as Pierce, James, and Dewey are also strong empiricists. For them, the truth must be "satisfactory, useful, expedient to believe because it is safe from the danger of unconsistency because it is corroborated and confirmed by experience."

(c) Refutation is to reconstructionists (or neorationalists) like Popper and Lakatos, what verification is to inductionists and pragmatists [2,3,4,5]. Refutation consists of using theories to build independently testable propositions whose predictions can be conjecturized and empirically refuted, i.e., found to be false. The growth of knowledge occurs by the iterative process of building successive theories which explain and predict an ever larger set of phenomena and events. Truth is never absolute, but an adjustment process in continuous refinement [6]. Confronted by a choice of competing theories, the scientist is supposed to keep the one with the best explanatory or predictive power.

Regardless of whether one ascribes to an inductionist, pragmatist, or neorationalist epistemology, the results of scientific research must be evaluated to determine whether the knowledge and truth stemming thereof, constitute 'progress' and can be validated.

To the extent possible, editors/referees should assess whether the authors of the proposed publi-

cation have applied strict criteria of verification, refutation, or other validating tests to the results of their research.

One author suggested that editors should refuse the publication of papers which do not satisfy established procedures by which 'research programs' (paradigms) can be rigorously tested and found to be 'progressive' in the sense of advancing the state of knowledge [2].

(2) *Hierarchy of Publications.* One of the indices of quality by which information and knowledge can be assessed, is the level of the publication in which is appears. A *hierarchy of publications* with four levels can be hypothesized to exist.

Level 4 – Professional Journals. These are owned by associations of professionals or specialists. These journals only publish articles 'refereed' by their peers and are considered highest in the hierarchy. *Examples: Journal of Political Economy, Journal of Social Psychology, Management Science, Human Factors, Administrative Science Quarterly,* etc.

Level 3 – Technical Journals. These journals are usually of lower prestige and reputation than those in Level 4. They do not attract the top scholars nor do they report the latest advances in their respective disciplines. They may still pertain to associations of professionals, but for the most part, they are commercial ventures that cater to a specific group of specialists and technicians. Articles in these journals may appear at the pleasure of the editors. A strict review policy with referees, is not always followed. *Examples: Journal of Safety Research, Journal of Systems Management, California Management Review, Harvard Business Review,* etc.

Level 2 – Trade Magazines. As their name implies, trade magazines refer to publications designed to reach practitioners in a specific market. These publications serve a narrow spectrum of people who usually work in a particular industry. The aim to be informative in their particular field, but normally try to 'water down' explanations to reach readers at all levels of sophistication and expertise. For the most part, they emphasize the practical aspects of issues and events – avoid theoretical issues. The material published is seldom, if ever, reviewed by 'referees'. *Examples: Industrial Management, General Systems Bulletin, Federal Reserve Bulletin, Industrial Relations News,* etc.

Level 1 – Magazines and Newspapers. These publications aim to reach a mass market. Material published has an ephemeral life and serves to inform on a day-to-day basis. They try to popularize news events and deal in in a superficial way with issues of substance. *Examples: Time, Newsweek,* and all dailies.

5. Criteria of progress of knowledge type 2

Knowledge Type 1 'filters' and 'trickles down' to serve managers/practitioners and becomes Knowledge Type 2. The criteria used to guage its progress are the following:

(1) *Timeliness.* The manager finds himself in a world of change. He/she must keep abreast of contemporary, economic, political, and social trends and events. This information must be provided but does not always need the forum of professional journals. These 'views' do not constitute 'new knowledge'.

(2) *Applicability.* We often hear the clamor for more reports on management science applications i.e., descriptions of how a technique, a method, has received a successful and novel application. Whereas it is important for managers to learn where known methods can be used to increase their organization effectiveness, this type of information has limited scope and longevity. We also note that unsuccessful applications merit reporting to avoid repetition of failures. However, we should ask ourselves, where does this type of evidence fit in the spectrum of knowledge?

(3) *Effectiveness.* The manager is interested to increase the effectiveness of his/her stewardship. Therefore, the manager needs information which can be used to improve any or all of the measures of effectiveness by which the enterprise's success is evaluated. Profits, costs, satisfaction, productivity, etc., you name it. The manager wants information on how to strike the right balance among the conflicting claims of employees, consumers, suppliers, stockholders, the public at large, and so on, who each demand that their own goals be met before those of others. The manager also needs to realize that working conditions, job enlargement, achievement, and commitment to company goals mean something quite different in 1973 than they did a generation ago. Theory 'Z' [1] has replaced Theory X and Theory Y. The notion that workers

are capable of self-control and that their responsibilities are 'culture related' are now in vogue.

(4) *Understanding the Relationship Among Factors.* Most of all, the manager needs to understand the relationship among factors and/or variables which interact to produce a certain effect. Policies and actions should be grounded on this knowledge if they are to hit their target and accomplish what is expected from them. In science, this understanding is given the name of *explanation and prediction.* Satisfying these aims are not only the objectives of the scientific academic community, but also those of managers – the second group of readers which the editors must satisfy.

Thus, we end this section by concluding that to satisfy the community of managers and practitioners, the content of our journals should concentrate for the most part on providing Knowledge Type 2. Assuming that this knowledge can meet the four criteria given: (a) timeliness, (b) applicability, (c) effectiveness, and (d) help to explain the relationship among factors, managers would be well served.

6. Criteria of readability for both types of knowledge

We shall not indulge to detail here the form and style standards by which all types of writing must follow. Authors, editors, and readers can consult manuals on the subject. The only point to be made is that, regardless of the type of knowledge it publishes, a journal must decide on its particular standards of style. These standards are not solely spelled out in the *Instructions to Contributors.* They will also depend on the writing style and ability of the authors it chooses to publish and, to a certain extent, on the subject matter. What may appear readable to one individual may be 'gibberish' to another. Obviously, *readability* is a criterion which must be defined in terms of the readers which the Editorial Board wants to reach.

Armed with the sets of criteria by which knowledge and material published in journals should abide, we can now proceed to evaluate the first two volumes of publication of *Human Systems Management.*

The issue of readability can be disposed of readily because most articles rated high or average (5 or higher on a scale of 10) on readability. We can, thus, turn to the issues of knowledge type, and of the different groups which *HSM* aims to serve.

7. Two types of knowledge in HSM

The author counted 51 articles in the eight issues of HSM (Volumes 1 and 2). This count does not include short articles, book reviews, and editorial comments. It is estimated that 30 articles or 60% of the articles published tried to report progress of Knowledge Type 1, i.e., they were academically-oriented and produced evidence to back claims. They were solid, substantial, and tried to be rigorous. Most, but not all, of these 30 articles pertain to the highest level (Level 4) in the hierarchy of publications postulated earlier.

Two examples will serve to illustrate this type of contribution. I chose A.S. Huff's "Evocative metaphors" (*HSM 1* (1980) 219–228) and "Multilectic methods of inquiry" (*HSM 2* (1981) 83–94). Huff's articles are interesting, ecclectic, and enhance the calibre of HSM. My choice is not meant to deprecate any of the other articles which must be considered just as worthy.

In terms of the hierarchy of publications level, out of the 51 HSM articles reviewed, 24 or 47% were classified in Level 4; 22 or 43% in Level 3; and 5 or 10% in Level 2. The classification and rating of each of the published articles will be kept confidential.

It is interesting to note that almost all of the articles which, in my estimation, could aspire to the Level 4 in the publication hierarchy, were categorized as dealing with Knowledge Type 1 but rated *low* in terms of the four criteria chosen to evaluate Knowledge Type 2.

Volume 2, Number 1, is noteworthy in this regard. All of its contents were rated as contributing to the progress of Knowledge Type 1 and were considered as worthy of Level 4 in the hierarchy. Unfortunately, most of these articles were rated *low* according to the criteria of interest to managers. Three articles scored high on timeliness (8 out of 10) but low in applicability and low as contributing to the increase of the manager's effectiveness.

Thus, a cleavage between publication material of interest to academics/scientists and that of interest to managers/practitioners appears to exist. In part, this characterization may be due to the

bias of the present reviewer who, due to his affiliation, favors articles for academics/scientists instead of articles written for managers/practitioners. However, this result may have a different interpretation. It can show that:

(1) It is very difficult to write articles which satisfy *both* the Knowledge Type 1 and Type 2 criteria. It would appear that authors who write for the first world cannot (or do not) want to pay attention to the criteria which would make their contribution palatable to the second world.

If the separation between these two worlds is as definite as shown here, the *HSM* Editorial Board will have to decide *the mix* of the two types of knowledge it wants to strike in the journal, or which it wants to favor. Given the impossibility to publish at the same time for both groups, it will have to choose *to favor* one camp at the expense of the other.

(2) The articles which were written with managers/practitioners in mind seldom attained the Level 4 in the hierarchy and, for the most part, were classified in Level 3. Therefore, it is pertinent to ask whether (1) the articles which are addressed for this group can be improved in terms of substance and of rigor to attain Level 4, and whether (2) articles published for managers must necessarily be superficial, redundant, and uninteresting to the other group? I do not believe so. I think that authors and editors alike must face up to the elusive goal to write for managers and to present Knowledge Type 2, while at the same time to satisfy the criteria of progress of knowledge and reach Level 4 in the hierarchy. Achieving both goals *can be done*. I list below my candidate articles for this achievement from the pages of *HSM*:

J. Lederberg, Digital communications and the conduct of science: The new literacy, *HSM 1* (1980) 29–37.

I.I. Mitroff and R.O. Mason, A logic for strategic management, *HSM 1* (1980) 115–126.

S.R. Rosenthal, When is applied urban research 'policy relevant'? *HSM 1* (1980) 135–150.

R. Triffin, Affinity groups representation, *HSM 2* (1981) 13–25.

W.R. Torbert, The role of self-study in improving managerial and institutional effectiveness, *HSM 2* (1981) 72–82.

R.P. Herden and M.A. Lyles, Individual attributes and the problem conceptualization process, *HSM 2* (1981) 275–284.

The publication goals of *HSM*, as printed on its cover, are to serve both worlds by:

...promoting *a synthesis* of two complementary aspects of managing:

– *Management of Human Systems* – the science and technology of management (presumably similar to Knowledge Type 1),

– *Human Systems Management* – the art of management (similar to Knowledge Type 2).

Can the synthesis promised by *HSM* in its Editorial Policy be achieved, given the paradox shown by the evidence of its two first years of publication – the articles which rate high in the eyes of academicians/scientists rate low when evaluated by criteria of interest to managers/practitioners and vice versa?

8. Recommendation for the HSM Editorial Board

HSM's future lies in having the Editorial Board decide the following:

(1) The type of knowledge it wants to favor in its columns, i.e., whether it wants to publish more Knowledge Type 1 or Knowledge Type 2. The decision entails setting the *mix* of articles which satisfy each of these two worlds.

(2) Criteria by which contributions to each type of knowledge will be reviewed and evaluated, prior to publication. We recall that the evidence of the first two years revealed that articles pertaining to Knowledge Type 1 were stronger and of a higher calibre than those accepted for Type 2 knowledge.

(3) The level in the publication hierarchy in which it wants the journal to be placed. The choice is between Level 4, the highest level which represents the top-most level among refereed professional journals, and Level 3, the next lower level in which most technical journals and a few professional journals are to be found. The level of the journal is, of course, a function of quality of contributions which it attracts which, in turn, influences the kind of authors who would consider sending their work to it.

(4) A model which represents what the Editorial Board thinks *HSM* ought to look like. This model, which can involve the example of other journals, should stand as an example against which future contributions to *HSM* should be compared and evaluated.

(5) Given that authors follow other authors who have written on a particular subject, the Editorial Board should establish a priority list of subjects that it wants to favor in its columns. If this kind of publication policy is instituted, the journal will specialize in certain fields for which it will be known. Authors in these topics will gravitate to the journal. Concentration and specialization should lead to improvement in quality and greater percentage of contributions in the top levels of the publications hierarchy.

(6) Who does *HSM* represent? *HSM* should be a journal which attracts contributions of top scholars in a well defined range of topics. It should be well known in its field for its high quality articles. At this moment, and after two volumes, *HSM* is not identifiable by any significant traits that make it unique when compared to all the other journals that compete for the same market. It should be the aim of authors and readers to make it *their* journal which can be distinguished by some unique features not to be found elsewhere.

(7) The *HSM* "Co-Enzyme Circle" should be revitalized in order to provide the journal with a true community which it can consider its own. A journal only survives to the extent that its readers think it serves to carry their ideas and views.

(8) A poll of readers should be instituted to find what articles they liked and which they disliked. It is only by appraising the desires of the *HSM* community that a journal which satisfies its needs and its expectations can be produced.

References

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