

The Function of Book Reviews in Anomalistics¹

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Abstract—Cooperative intradisciplinary communication, including the recognition and critical discussion of the current literature, is essential for the success of any scientific endeavor. For at least two interrelated reasons, this is a particularly demanding task in the context of anomalistics. While the notorious "explosion" and diversification of accessible knowledge forms a serious problem for all scientific disciplines, a transdisciplinary endeavor such as anomalistics that is organized across established disciplinary boundaries must cope with a particularly heavy load of new, potentially relevant information and publications that must be seriously considered. Therefore, within the framework of the periodical literature, reviews of book publications on topics relevant to anomalistics fulfill an important task of individual and reciprocal information and education. Book reviews have the function of simultaneously widening and focusing the perspective of interested scientists. Analyses of the book review frequencies in two leading periodicals in the field of anomalistics (the *Journal of Scientific Exploration* and the German *Zeitschrift für Anomalistik*) reveal marked increases of the book review sections for both journals over recent years. This indicates that these journals and their respective editorial teams have developed a clear recognition of the important guiding function of book reviews. However, publishing reviews for the sake of reviews is insufficient and not basically scientific. Therefore, the two final sections of this essay explore the differences between and the respective scientific merits (or lack thereof) of two types of book reviews - analytical vs. descriptive - and discusses various editorial criteria and structural requirements pertaining to book reviews as scientific publications in their own right.

Keywords: communication in science — anomalistics — transdisciplinarity — book reviews (descriptive, analytical, objective) — book review frequency

Introduction

It is an undisputed fact that science is ultimately dependent on cooperation and organised according to the social division of labor. What is equally indubitable is that a tremendous variety of communication types are vital for the success of any scientific exercise organised on this cooperative basis. Furthermore, it is easy to understand that attempts at communication in the field of scientific

endeavor, just as in every other area where people interact, tend to meet with different amounts of success. That is reason enough to submit the various forms of communication prevalent in science to self-reflective scientific examination, together with the circumstances, causes and effects of successful and unsuccessful attempts at achieving mutual comprehension. In recent decades, the significance of the relevant science studies has appreciably increased, as can be easily ascertained from the corresponding host of publications.

When considering scientific communication, it is advisable to keep two important aspects carefully separate from one another. These are communication in science and communication of science. The first concept refers to communication within the scientific community, between researchers personally involved in the topic or those interested in it, whilst the second refers to the act of conveying science to a general, scientifically more or less uneducated public, which, however, is always affected to some extent by the results and developments of scientific research. In the current context we shall only be concerned with the first aspect, that of internal communication between scientists.

Within the framework of professional "science of science", as already mentioned, such an unwieldy mass of literature has been created during the last forty to fifty years that it is no longer of manageable proportions (for an extensive interim inventory, see Hovelmann, 1987). Sections of this literature highlight many aspects of scientific periodical literature from the multiple perspectives of communication theory, psychology, sociology, linguistics, scientometrics, politics and economics, to name but a few. When dealing with specialist scientific periodicals, these studies have concentrated on three intricate topics in particular. Firstly, they have focused on the logic, and especially on the doubts and imponderables concerning the processes involved in the external appraisal of manuscripts (peer review), which serves to bring about or to simplify publication decisions. Secondly, they have looked at the "publish or perish" rule and the conditions and consequences bound up with following it. Thirdly, much consideration has been given to the practices involved in scientific citation and to the motivations and complexities or even entanglements of citation cartels. It is apparent that all of these aspects of scientific communication are of great possible relevance for publishers, editors and readers of specialist scientific journals (Armstrong, 1982). However, comparable studies specifically looking at the book review sections of scientific journals, which one could also expect in the environment described, are found only sporadically. Focusing on particular themes, they generally go down to the tiniest individual detail, and prove to be rather unproductive from a more general, systematic point of view. Added to this comes the fact that such studies only ever concern themselves with the review sections of scientific journals that have a solid intradisciplinary basis, i.e., those that are associated with one set science, if not indeed with a narrowly defined branch of a discipline.

Anomalistics Is Essentially Transdisciplinary

Recently, within the context of a lengthy obituary of the sociologist Marcello Truzzi published, in German, in the *Zeitschrift für Anomalistik*, I attempted a description of the subject matter and fields of inquiry involved in anomalistics, as well as of its interdisciplinary or, to put it more precisely, *transdisciplinary* (i.e., discipline-encompassing) nature (Hovelmann, 2005a, pp. 15–20). Although short, that description is also sufficient for the present purpose. One of the facets of anomalistics that is explained in detail there and that also has many methodological consequences is its very inter-, multi- or transdisciplinary nature, which results from the subject matter itself. This subject matter is comprised of unusual claims or presumptions regarding existence, effects or correlations, whose examination and appraisal often requires a solid basic understanding of scientific work and argument beyond the limits of an actual specialist branch of science, in addition to sound knowledge and ability in the discipline itself.

Academically established science studies that have been carried out since the late 1950s² frequently claim that there has been a so-called "exponential" increase in specialist scientific literature and scientific knowledge, which some like to describe as a doubling in the scope of knowledge (however this may be calculated) within ever decreasing periods of time (Brookes, 1970; Campbell & Halliday, 1985; Drubba, 1976; Edge, 1979; Moravcsik, 1973; Price, 1969; Stuhlhofer, 1983). When examined more closely, it is safe to say that this now notorious "explosion of knowledge" is more an increase in *what can potentially be known* than in *what is actually known*. Meanwhile, contrasting with this (and sometimes also standing in its way) is a self-inflicted disciplinary modesty, almost unavoidable in scientific education, which, to put it less generously, also characterises large sections of research and teaching as a self-confident one-track specialism. Against this background, any work carried out by aspiring young scientists which crosses the boundaries to other disciplines, let alone strays into the areas with which anomalistics professionally concerns itself—areas that are not (as yet) firmly defined and are also not currently sufficiently empirically secured—is, at first, generally not scheduled in the curriculum, later expressly undesired, being dangerous to the scientist's career, and then at some point mostly no longer even possible.

This diagnosed increase and diversification in the scientific knowledge that is principally accessible can now be clearly seen to pose unavoidable problems even, and indeed particularly, for an undertaking such as anomalistics that is necessarily constructed in a transdisciplinary fashion. It must be expected that the scientists and other experts from an extensive number of disciplines (ranging from the "hard" sciences such as physics, astronomy and geology to "softer" ones such as anthropology, literature and the history of religion) who are involved in studies, discussions and consideration within the context of anomalistics are not merely sufficiently familiar with the specialist literature

of their own fields and possibly also that of a neighboring discipline. Rather, they must also have acquired competence in a wide spectrum of other branches of science—and ideally also in the philosophy and history of science and cultural history—or must at least be sufficiently competent to carry out studies or assess supposed anomalies in interaction with their scientific colleagues, and ultimately to explain these convincingly, as far as is possible. In addition, they should take note in their specific area of interest of all the anomalistic claims and findings, sometimes subject to revision at short notice, and should be able to retain an overview. All this places very high demands on the scientists involved in this way, particularly since they generally have to deal with this work load in addition to their usual research and/or teaching obligations. However, as Gertrude Schmeidler once remarked, referring to scientists with ambitions in parapsychology, which doubtlessly is one of the most down-to-earth sectors of anomalistics: "Unless you're very good, you're not good enough" (Schmeidler, 1987, p. 86).

Consequently, reviews of pertinent book publications, particularly in specialized journals on anomalistics but also in the various periodicals for certain anomalistic specialties, fulfil an important task of individual and reciprocal information and education, indeed one that is almost vital against the aforementioned background. Although anomalistics is also structured on the implementation of empirical research work, this is not its principal focus. Rather, its main task is to systematically consider and appraise the research done by other scientists and the argumentation bound up with this as far as they relate to anomalistic issues (Hovelmann, 2005a). As a result, this work has more of the character of a critical, disinterested review of, comment on and appraisal of descriptions of the empirical studies, field research reports or theoretical reflections of other scientists (or even laypersons submitting reports [see Hovelmann, 2005b]) than of personal empirical research. Faced with the extremely broad spectrum of anomalistic or anomaly-relevant topics, ranging from well-known but currently unexplained anomalies within the context of established science itself (of which there are many today, even if they are mentioned only reluctantly or on the quiet) to sometimes obscure reports of singular extraordinary experiences, a single observer can certainly not be expected to maintain a personal overview of all the principal literature available, especially all new publications, and to succeed in separating the chaff from the wheat. Whilst it is permissible to demand that a scientist have a comprehensive overview of the pertinent specialist literature in his or her own discipline, whether that be a matter of, say, the Doppler effect in acoustics and astronomy or of Neolithic Bandkeramik culture in archaeology, the idea that an individual should be fully up to date with the vast literature relevant to anomalistics and its transdisciplinary branches is, although it is legitimate to aim high, rather too much to ask.

In this context, the book review sections of anomalistics journals have the extremely important dual function of simultaneously widening and focusing the perspective of interested scientists. Indeed, it appears undeniable that the rel-

TABLE 1
Proportion of Book Reviews in the *Journal of Scientific Exploration*

Volume*	Total pages	Pages of reviews	Number of reviews	Average length of reviews in pages	Percentage of reviews in the entire volume
Vol. 1, 1987	196	0	0	—	—
Vol. 2, 1988	244	7	2	3.5	2.9
Vol. 3, 1989	219	3	1	3.0	1.4
Vol. 4, 1990	284	0	0	—	—
Vol. 5, 1991	270	6	2	3.0	2.2
Vol. 6, 1992	402	30	8	3.8	7.5
Vol. 7, 1993	476	38	16	2.4	8.0
Vol. 8, 1994	588	69	26	2.7	12
Vol. 9, 1995	611	64	25	2.6	11
Vol. 10, 1996	626	60	15	4.0	10
Vol. 11, 1997	590	94	27	3.5	16
Vol. 12, 1998	654	74	26	2.9	11
Vol. 13, 1999	724	56	19	3.0	7.8
Vol. 14, 2000	680	86	31	2.8	13
Vol. 15, 2001	586	140	39	3.6	24
Vol. 16, 2002	715	123	35	3.5	17
Vol. 17, 2003	796	159	45	3.5	20
Vol. 18, 2004	737	129	41	3.2	18
Vol. 19, 2005	670	180	42	4.3	27
Vol. 20, 2006	510	183	33	5.6	36
Vol. 1–20	10,578	1,501	433	3.5	14
Vol. 14–20	4,694	1,000	266	3.8	21

* From 1987 to 1991 (Vol. 1–5), two issues of the *JSE* were published each year, since then there have been four issues. At the time of this survey only three issues for 2006 (Vol. 20) had appeared.

evant periodicals and their respective editorial teams have, by now, a very clear recognition of this important guiding function of book reviews and show this understanding by giving reviews a proportionately large amount of space.

Book Review Frequency in Periodicals on Anomalistics

This premise is confirmed by a more in-depth look at what are, as far as I am aware, currently the only two specialist journals worldwide that deal explicitly with scientific discussion throughout the entire spectrum of anomalistics—the relatively new *Zeitschrift für Anomalistik (ZfA)*, published in German with abstracts in English and occasional English contributions and, more particularly, its "big sister", the excellent *Journal of Scientific Exploration (JSE)*, published in the United States by the Society for Scientific Exploration and boasting 20 increasingly comprehensive periodical volumes since 1987. For both periodicals in this study, both the total length of the publication and the number and length of the book reviews included in each volume were noted. In this process, those book reviews discussing multiple thematically-linked books within a single review were counted as only one review. However, two reviews contrasting linked discussions of the same book by two different reviewers with disparate

TABLE 2
Proportion of Book Reviews in the *Zeitschrift für Anomalistik*

Volume*	Total pages	Pages of reviews	Number of reviews	Average length of reviews in pages	Percentage of reviews in the entire volume
Vol. 1, 2001	118	7	3	2.3	6.0
Vol. 2, 2002	324	11	3	3.7	3.4
Vol. 3, 2003	291	18	6	3.0	6.2
Vol. 4, 2004	292	19	6	3.2	6.5
Vol. 5, 2005	376	74	18	4.1	20
Vol. 1–5	1401	129	36	3.6	9.2

* In general, the *ZfA* publishes one single and one double issue each year. In 2004 it produced a collected volume for the year instead. In 2001, only the initial issue came out, around the end of the year.

perspectives or approaches (only the case once in the *ZfA* up to now, but already seen at least a dozen times in the *JSE*) were regarded as two reviews. The section "Further Books of Note", which has appeared, with short book reviews, in almost every issue of the *JSE* for many years,³ was not taken into account in these calculations. Consequently, the total number of books discussed in the *JSE* and the amount of space taken up with these within its pages are actually slightly higher than is apparent under the aforementioned aspects of the calculation, displayed in tabular form.

The overview for the *JSE* in Table 1 shows—besides the fact that the total length of this periodical has increased continually since the beginning of the 1990s—that both the length of the book review section overall and the number of books discussed have grown by a markedly disproportionate amount. Whilst the average length of text for individual book reviews has also risen during this period of nearly 20 years, although only slightly, the relative proportion of the review section within the entire periodical has increased very significantly. For the first seven years this proportion was always a percentage in single figures (between 1.4% and 8.0%), yet even an average taken across the entire period shows it reaching 14%. If we take only the last almost seven years into account (2000 to fall 2006), since Henry H. Bauer has taken over as editor-in-chief and David Moncrief as editor of the book review section, then the relative proportion of reviews measured against the entire *JSE* publication reaches 21%, more than a fifth. This is sufficient evidence that the aforementioned weighting of book reviews for anomalistics is at least implicitly understood by the *JSE*'s editorial board.

In contrast, the tabular overview of the book reviews in the *ZfA* (Table 2) is currently still relatively uninformative, as it can, inevitably, only draw on five years work—or more precisely on a mere four and a third periodical volumes. However, even here a marked growth in the relative proportion of reviews within the entire body of the periodical can be noted.⁴ Taken as an average, this proportion has already reached nearly 10% (9.2% to be precise), and for the last volume considered (2005), it stood at around a fifth (20%). Consequently, it is

obvious that the *ZfA* is taking a very similar course to the *JSE* as regards the relative proportion of reviews within the body of the periodical.⁵

A Book Review Is a Scientific Publication

In the everyday business of academia, and consequently in one's own and others' lists of publications, book reviews do not enjoy a particularly high status. This is largely due to the fact that the distinction between two possible sorts of book reviews—descriptive vs. analytical ones—is not made with sufficient care. Even scientific periodicals themselves occasionally contribute significantly to this undesirable state of affairs.

Descriptive Book Reviews

The following instructions to reviewers were issued by a scientific journal, the periodical of a renowned society whose name shall remain mercifully unmentioned. They are quoted almost in full, and clearly illustrate what is meant by this type of review. "For our 'Book Reviews' column, we want exciting and informative appraisals of books in the subject area covered by our [...]. They can also reflect personal impressions gained from reading, but should not be longer than two pages of print. Do not be afraid to be critical!!! We cannot consider reviews longer than two pages of print." Anyone who encourages his or her authors to write book reviews in this way clearly does not take either his work as editor of a scientific journal, his authors or indeed his readers seriously (although it may be a different matter for the publishers advertising in his journal). He would do just as well to abstain from printing a review section at all. It is quite understandable if a scientific reviewer is not keen to show off a book review created in accordance with these requirements. The approval from the readership and academic colleagues (ideally eager for knowledge) will also be correspondingly muted.

Even the so-called "academic review journals", which, in many disciplines, fulfil the function of informing professional scientists about new publications, contain, besides sometimes comprehensive and highly instructive essay reviews, a great number of descriptive short (and extremely short) reviews. These are usually restricted to sparse summaries of the text, which sometimes are not even sufficient to reproduce the flap texts of the books. In all respects, it is rather questionable what useful purpose they fulfil. It is possible that purely descriptive brief synopses may be in the interest of the publisher, and perhaps even that of the author, as they promote sales. However, even in the best cases, they represent only a competent piece of journalism, no actual scientific achievement. In an era when it is easy to access readers' reviews on the sites of wholesale dispatchers such as Amazon, and when publishers' websites contain an increasing amount of information, the aforementioned descriptive reviews are generally a waste of time for those who write or read them.

Analytical Book Reviews

In the literature, a second type of book review is generally referred to by the term "critical review". However, I prefer to call them "analytical reviews", as, in view of the often negligent misuse of its ambiguous meaning, the adjective "critical" has been appreciably devalued and has become unusable, particularly in the context of discussions of anomalistics. An analytical discussion of a recently published book also requires (1) a concise description of its content (without retelling the entire story) and (2) a short characterisation of the author and his or her professional background. However, there are some further requirements for a review that aims additionally to satisfy scientific demands. The following provides some brief examples of these, although they must always be adapted to suit specific cases: (3) an elucidation of the argumentative perspectives that are expressly formulated in the book, or that can safely be drawn from it; (4) an explanation of the level of difficulty or complexity; (5) an analysis and classification of these perspectives against the background of previous findings or discussion; (6) an appraisal of the methodological sophistication of the study plans or analytic procedures used and of the logical coherence of the arguments; (7) a balanced appraisal of the success of the author's work, measured against (a) what objectives the author aimed to achieve and, possibly, (b) what the reviewer judges would have actually been necessary for the author to achieve; (8) the provision by the reviewer of sufficient documentation to support his or her own statements, if necessary, and (9) a conclusive evaluation. It is usually just as desirable—and sometimes vital—to include representative key quotations from the work discussed (perhaps in the form of paraphrases), as it is to consult (and compare) previous similar or indeed alternative pieces of work, backed up by quotations and references.

It is mostly left to the discretion of the reviewer dealing with the specific book to be discussed to decide whether all this can be suitably achieved over two, three or only over 10 pages of print. The *Zeitschrift für Anomalistik* (and, to the best of my knowledge, also the *Journal of Scientific Exploration*) does not, in principle, place any blanket space limits on reviews, as long as the scientific discussion and possible contribution to knowledge that are the objectives of the book review justify the expenditure of time, effort and journal space. If one understands an analytical review to be principally a scientific piece of work, then it follows consequently that this type of review, just as every other pertinent specialist publication, should, if necessary, be allowed to include supplementary scientific apparatus (bibliography, tables, diagrams, etc.).

Unattainable Expectations of Objectivity

In principle, there can be no such thing as an "objective" book review, and tedious arguments can result from the question of whether they would actually be desirable should they be possible. Henry H. Bauer, the editor-in-chief of the *Journal of Scientific Exploration*, recently cut these unattainable expectations of

objectivity down to size in an editorial: "[T]here is surely no such thing as an 'objective' review of a book, unless it were merely a compendium of data like a table of logarithms. Surely books are interesting to readers for their particular take on a given set of facts. If reviewers are to say what is interesting about a book, then they must inject their own take on that in some manner. It is *interpretations* of facts, the *meaning* of facts, that is significant; and interpretations, being the product of human minds, are never strictly objective. Interpretations are bound to differ." (Bauer, 2005, p. 397; italics in original).

However, what can actually be emphatically demanded of a reviewer, as opposed to strict objectivity, is the attempt (incidentally in the best tradition of anomalistics) to present the content of a book impartially and to reflect its key statements as representatively as possible, firstly giving the author as much credit as is possible and is justifiable, before expressing any criticism in a balanced and comprehensible fashion, if necessary with appropriate emphasis, whilst providing sufficient justification and documentation for any necessary counterclaims. Using the example of book reviews in parapsychological scientific periodicals, Scott Rogo showed that this does not always succeed as well as would be desirable (Rogo, 1977). His study clearly highlights some of the more questionable strategies employed by reviewers, including excessively shortened quotations or selective summaries, long critiques of rather insignificant details, assumptions that are not covered by the content of the book discussed, criticism of the fact that questions have not been clarified in cases where the author never set out to answer them in the first place, criticism that the work is not in line with standards (of whatever type), although the author never announced or even intended that they would be met, and much more.

Admittedly, parapsychology consists of a very small international community made up of fewer than two hundred natural and social scientists, almost all of whom are personally acquainted. There are some very close personal relationships, both friendships and animosities. However, after decades of reading the literature in this field extensively, including perhaps several thousand book reviews, I have the impression that, in spite of what is sometimes very frank mutual criticism, even among colleagues who are friends, an amazingly small number of matters end up getting out of hand. Furthermore, in scientific groupings and fields of interest where there are larger numbers, including anomalistics (which principally contains the subject of parapsychology), potential influences resulting from personal obligations are not a prominent peril.

What is more, the onus is on the book review editors of journals in the field of anomalistics and other scientific disciplines to ensure that no personal or indeed institutional interests threaten to conflict with the obligations of any reviewer. They can achieve this by making an appropriate selection of competent reviewers for the books to be discussed. Faced with a pool of potential reviewers that is relatively small, and given that reviewers should bring, on the one hand, a suitable scientific qualification in the relevant discipline and, on the other, at least a basic knowledge of the sometimes intricate problems inherent in a transdisciplinary

field such as anomalistics, this task is certainly not always easy. However, in the end, it is successfully achieved more often than one might fear.

The book review editor of any scientific journal, including one in the field of anomalistics, can not exactly enforce upon reviewers that all the structural requirements for an analytical review be met, or that the reviewer take all the criteria mentioned into account (in many cases unlike the editor of a public organ with a high turnover, who works with paid authors). It is hardly possible for him to undertake, of his own accord, changes to the text of a book review that go beyond minor editorial measures to smooth out the text, adapt it to linguistic standards or remove formulations that are too rustic, at least not without consulting the reviewer. At most, he can, if necessary, completely refuse to print a review that was requested or submitted uninvited (something that has already happened with the *Zeitschrift für Anomalistik*). In any case, the usual rule applies: Everyone is responsible for what he or she writes.

Notes

- ¹ This is the invited, updated and very slightly revised English version of an essay that was originally published, in German, under the title "Die Rolle von Rezensionen in der Anomalistik", in the *Zeitschrift für Anomalistik*, 5, 2005, 302–311.
- ² I do not want to dissimulate the fact that I certainly see considerable problems with established science studies, the overwhelming majority of which have a purely descriptive focus. Although they sometimes provide significant empirical findings, these studies frequently, and without need, dispense with legitimate science-critical and, even more so, with all normative approaches and interests. This happens because, in a widespread naturalistic self-limitation, they treat the objects of their studies as if they were naturally occurring things or events, rather than cultural undertakings with a focus on the determination of human aims (Hovelmann, 1988).
- ³ Starting with the upcoming 2006 volume, the *Zeitschrift für Anomalistik* will also introduce an additional section with short reviews of books that—although they may not focus on issues and topics of anomalistics—provide material or arguments that are important for discussions within the framework of anomalistics, or could become so, and do this, incidentally, in such a way that interested persons could easily miss it.
- ⁴ Moreover, the type area in the *ZfA* is a little more generous than that in the *JSE*. As a consequence, the latter can fit slightly more text on a printed page.
- ⁵ As I am writing this, double issue 1/2 of the 2006 volume of the *ZfA* is about to go to the printers. It will contain approximately 70 pages of book reviews, covering 19 recent books, plus a 10-page "Further Books of Note" section.

References

- Armstrong, J. S. (1982). Research on scientific journals: Implications for editors and authors. *Journal of Forecasting*, 1, 83–104.
- Bauer, H. H. (2005). Editorial about book reviews and letters. *Journal of Scientific Exploration*, 19, 397–400.
- Brookes, B. C. (1970). The growth, utility and obsolescence of scientific periodical literature. *Journal of Documentation*, 26, 283–294.
- Campbell, R., & Halliday, T. (1985). Why so many papers? *Scholarly Publishing*, 16, 313–316.
- Drubba, H. (1976). 90.000 wissenschaftliche Zeitschriften? [90,000 scientific journals?] *Nachrichten für Dokumentation*, 27, 115–117.
- Edge, D. O. (1979). Quantitative measures of communication in science: A critical review. *History of Science*, 17, 102–134.
- Hovelmann, G. H. (1987). *Bibliographie zur Selbstthematization der Wissenschaft [Bibliography on the Self-Reflection of Science]*. Erlangen: Institut für Gesellschaft und Wissenschaft, Universität Erlangen-Nürnberg (567 pp.).
- Hovelmann, G. H. (1988). *The Science of Science: Some Neglected Problems*. Invited lecture at the Hoger Instituut voor Wijsbegeerte, Centrum voor Logica, Filosofie van de Wetenschappen en Taalwetenschap, Katholieke Universiteit Leuven, Belgium.
- Hovelmann, G. H. (2005a). Devianz und Anomalistik: **Bewährungsproben** der Wissenschaft. Prof. Dr. Marcello Truzzi (1935–2003) [Deviance and anomalistics: Probing the limits of science. Prof. Dr. Marcello Truzzi (1935–2003)]. *Zeitschrift für Anomalistik*, 5, 5–30.
- Hovelmann, G. H. (2005b). Laienforschung und Wissenschaftsanspruch [Amateur research and claims to scientific respectability]. *Zeitschrift für Anomalistik*, 5, 126–135.
- Moravcsik, M. J. (1973). Measures of scientific growth. *Research Policy*, 2, 266–275.
- Price, D. J. de S. (1969). Measuring the size of science. *Proceedings of the Israel Academy of Sciences and Humanities*, 4, 98–111.
- Rogo, D. S. (1977). Understanding book reviews in parapsychology. *Parapsychology Review*, 8(1), 26–28.
- Schmeidler, G. R. (1987). Questions and attempts at answers (pp. 76–88). In Pilkington, R. (Ed.), *Men and Women of Parapsychology: Personal Reflections*. Jefferson, NC & London: McFarland and Co.
- Stuhlhofer, F. (1983). Unser Wissen verdoppelt sich alle 100 Jahre. Grundlegung einer "Wissensmessung" [Our knowledge doubles every 100 years: Foundations of "knowledge measurement"]. *Berichte zur Wissenschaftsgeschichte*, 6, 169–193.