

Theoretical clarity is not “Manicheanism”: A reply to Marcia Bates

Journal of Information Science

XX (X) pp. 1-5

© The Author(s) 2011

Reprints and Permissions:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/016555150000000

jis.sagepub.com



Birger Hjørland

Royal School of Library and Information Science, 6 Birketinget, DK-2300 Copenhagen S, Denmark

Abstract

It is argued that in order to establish a new theoretical approach to information science it is necessary to express disagreement with some established views. The “social turn” in information science is not just exemplified in relation to the works of Marcia Bates but in relation to many different researchers in the field. Therefore it should not be taken personally, and the debate should focus on the substance. Marcia Bates has contributed considerably to information science. In spite of this some of her theoretical points of departure may be challenged. It is important to seek theoretical clarity and this may involve a degree of schematic confrontation that should not be confused with theoretical one-sidedness, “Manicheanism” or lack of respect.

Keywords:

Browsing, behavioral science, discursive view, social turn, information science

1. Introduction

In a number of papers I argue that a “paradigm shift” is needed in information science and that it may be developing. In [1] I described three major theoretical turns in psychology (behaviorism, cognitivism and the discursive view/the social turn). I argued that these theoretical turns are also important in other fields such as linguistics and information science and that we as information scientists may learn about our own field by considering the arguments which have been put forward in the debate about these positions. Such philosophical clarification is also relevant in relation to the study of major concepts such as browsing, information retrieval and indexing, relevance, etc. such as I have described in former papers [1,2,3] and which I am also preparing new articles on. I consider it very important for information science to develop a coherent theoretical view of our domain and have the implications worked out in every corner of our discipline.

In her paper professor Bates [4] continues the controversy about the concept of information [5-10] and also addresses my paper on browsing [1]. Although I think it is best to address one issue at a time, I’ll reply to both issues. As the point of departure I find that debates are important in science and scholarship: criticism is a vital element in the growth of science (cf. [11]). We have too few debates in information science. Philosopher of science Karl Popper (1902-1994) found that scientific theories compete with each other and that the best scientific theories are those that can withstand the most criticism. As a consequence a theory should be formulated in a strict way that allows it to be falsified. Unclear theories are bad science because there are no clear criteria by which they can be tested. Although I share Thomas Kuhn’s (1922-1996) criticism of Popper, I still believe that we should try to formulate our scientific understandings in ways which makes it clear which theories they are in opposition to. If the collective clarification of scientific theories should be possible, it is necessary that a scientific culture exist in which discussions are encouraged and in which scientific arguments are not taken personally. As I wrote [12, p. 1303]: “I find that a schematic approach

Corresponding author:

Birger Hjørland, Royal School of Library and Information Science, 6 Birketinget, DK-2300 Copenhagen S, Denmark.
Email: bh@iva.dk

is necessary to compare different positions. Such a schematic confrontation should not be confused with theoretical one-sidedness, but should be understood as an attempt to achieve clarity.”

A key argument made in Bates’ new article is:

“[Hjørland] has set up a Manichean opposition between key ideas in my work and his. Apparently, from his standpoint, if his ideas have value then mine cannot; the two perspectives stand in inalterable opposition to each other. In his view, his ideas represent the light, and mine are misguided, lost in the darkness.” [4, p. 1].

It is correct that I try to formulate theoretical positions in a clear way that allows us to distinguish between them and to choose the most fruitful position. My analysis is not personal, however. Instead, it is focused on core theoretical issues. It is correct that I *hereby* tend to neglect valuable substantive elements in Bates’ (and other’s) work in order to place analytic attention on their theoretical underpinnings and assumptions. Bates has made many important contributions to information science. For example her presentation of metatheories in information science [13] is still the best published overview, her metaphor “berrypicking” [14] has been a great inspiration for many information professionals and in numerous ways her research has challenged established models of information retrieval. Her research into the online searching of humanists [15] remains a landmark domain analytic case study. In the field of Browsing Dr. Bates is the most cited author (cf. [1, p. 595]). As already said it is still necessary to try to identify which theoretical views are in conflict with each other and which are complementary. I found her paper [16] useful in order to confront “behavioral views” with “discursive views”. In fact, it is an acknowledgement of the importance and popularity of Dr. Bates’ ideas that I place them in the spotlight for serious critical engagement and scrutiny. I read her new paper [4] as recognizing that I did contribute a new valuable perspective to the understanding of browsing based on the discursive view. What is here disputed by Bates is that the new discursive view is in contrast with the view formulated in [16] based on “behavioural science research”. This issue: whether behaviorism, cognitivism and the discursive view are in conflict or should be seen as supplementary approaches is itself a controversial issue. Bates is arguing that they are supplementary while I am arguing that they are in conflict.

2. The concept of Information

I do not believe Bates [4] provides any new arguments to our previous debate. She repeats a former statement:

“Hjørland seems unwilling to countenance the possibility, expounded in my articles, that information, differences, in the universe can exist in some objective sense while at the same time, we humans observe those differences according to our own subjective perspective, whether that of an individual with numerous idiosyncrasies or as a member of an intellectual community that approaches those differences out of a specific conceptual paradigm. [7, p. 843]” [4, p. 1].

However, I do accept that differences in the universe can exist in some objective sense while at the same time, we humans observe those differences according to our own subjective perspective. I see no need, however, to term such differences “information”. This is in my opinion not necessary and it is confusing. Following Bateson [17, p. 453] I consider information “a difference which makes a difference”. *Differences are thus not information until they inform somebody about something*. I see no need for Bates’ objective definition of information (termed “information 1”). I shall not comment further on this issue. Enough has already been said about the concept of information in our former debate.

3. On browsing

Bates wrote:

“I would argue, however, that the adherents of both “turns” browse physically and cognitively in very similar ways that are rooted in our history as exploratory, motile animals hunting for food and nesting opportunities” [4, p. 2].

Here is a very clear theoretical difference between Bates and myself (and between “behavioral” and “discursive” points of view). I do not consider browsing physically and cognitively very similar across cultures and contexts and do not consider browsing rooted on our biological history as exploratory, motile animals hunting for food and nesting opportunities. Alternatively, I consider browsing to be *fundamentally* formed by our cultural, social and domain specific influences.

Further:

“Hjørland’s article and my article do not represent different theories on the nature of

browsing itself ; only my article addresses that” [4, p. 3).

I may not have provided an explicit definition of browsing in [1] since my objective was to discuss the theoretical underpinnings of browsing. Differently, Bates had the goal of a definition in mind when she wrote:

“Browsing is the activity of engaging in a series of glimpses, each of which may or may not lead to closer examination of a (physical or represented) object, which examination may or may not lead to (physical and/or conceptual) acquisition of the object.” [16, electronic source, no page].

Alternatively my view may be formulated this way:

Browsing is a quick examination of the relevance of a number of objects which may or may not lead to a closer examination or acquisition/selection of (some of) these objects. It is a kind of orienting strategy that is formed by our “theories,” expectations and subjectivity.

I believe my definition provides an alternative and more socially rooted conception of browsing that is in line with the discursive view, and I recognize and appreciate that it was motivated by Bates’ definition.

Bates concluded the section:

“There is no conflict between Hjørland’s view that people make different choices in where and what they browse, based on their orienting strategies or other reasons, and my view that browsing is of a certain physical and behavioral character” [4, p. 3].

I do not agree with this conclusion. The way we look at things is culturally formed. The way we quickly examine the relevance or non-relevance of a given object is culturally formed. Of course our eyes and brains are biologically developed and are necessary preconditions. I do not believe, however, that our biological make-up shapes or determines our browsing behavior any more than Bates’ computer shapes or determines the content of the articles she writes. Vygotsky’s answer to the problem of the relation between biology and culture in human actions was the introduction of a distinction between lower mental functions and higher mental functions. Higher mental processes were considered mediated by tools, which can take one of three forms - symbols, material or another human being’s behavior [18]. This way of thinking admit the role of the biological infrastructure and at the same time opens the door the cultural-historic understanding of human activities.

4. On the term “behavior”

In my paper [1] I made a connection between the study of behavior and the theoretical position of behaviorism. *I carefully mentioned that there is no necessary connection between using the term behavioral science and to be a behaviorist*, but I nonetheless claim that the term “behavior” is problematic and that the famous psychologist Jerome Bruner [19] suggested that we should speak of human acts, rather than human behavior. As I wrote in a collective book:

“Information behavior research is part of the behavioral sciences and may be associated with the highly criticized behaviorist approach. Jerome Bruner (1990) suggested using the term human acts, rather than human behavior, to indicate the focus on meaningful rather than mechanical activities. The use of actions and activities also connects with the core concepts of activity theory. We might thus speak of human information acts rather than of human information behavior. However, because information behavior is still the most frequent term, we continue to use it” [20, p. 27).

It remains for the information behavior research community to resolve this terminological problem. Among the candidates for alternative terms is the phrase “information practices” [21].

Bates asks:

“The 26-volume Encyclopedia of the Social & Behavioral Sciences contains not a single article about behavioral sciences? Does Hjørland mean an article devoted solely to the concept of behavioral sciences, or does he mean that behavioral science perspectives are not present in the encyclopedia, despite the title? If the latter is intended, he is making an extraordinary claim—that the editors do not even understand their own disciplines!” [4, p. 4)

What I did say was that the predecessor to Smelser& Baltes [22] contained an article about “behavioral sciences” [23] but that no such article exists in the new edition. This is remarkable because Smelser& Baltes included this term in the title of their edition of the encyclopedia although it was absent in the titles of previous editions. To include a term in the title of a work normally means an upgrading of that term (and what is covered by it). Therefore I found it strange that Smelser& Baltes [22] did not include an updated article about “behavioral sciences”. Such an article could help

understand what in the view of the editors should be understood as behavioral sciences and why the editors had chosen to upgrade that term to the title.

Bates' claim that "that the editors do not even understand their own disciplines" is thus not what I said, but it is a rhetorical strategy used by Bates to make my view suspicious in the eyes of the readers¹.

I maintain that there are connections between "behaviorism" on the one hand and the terms "behavior" and "behavioral sciences" on the other hand although these connections are not necessary. Language is not innocent and it matters which words we use (this view is, by the way, itself an example of a social understanding of language, which is connected to Bakhtinian thought, cf. [24]).

5. Conclusion

Information science needs theoretical work very much. We should encourage discussions and not portray proponents of other views in negative ways. We should avoid ad hominem arguments. I believe that many of the arguments that Bates has raised against me and my way of arguing can be turned against herself. I shall abstain from providing further examples of my own and just end with an ironic quote that might indicate that this may be the case:

"Manichean means "Pertaining to a strongly dualistic worldview," and in this article Bates complains that Birger Hjørland misinterprets her work by saying he is right and she is wrong. After a long and desultory explanation, Bates then concludes that she is right and Hjørland is wrong" [25].

6. References

- [1] B. Hjørland, The importance of theories of knowledge: Browsing as an example, *Journal of the American Society for Information Science and Technology* 62(3) (2011) 594–603.
- [2] B. Hjørland, The Importance of Theories of Knowledge: Indexing and Information retrieval as an example, *Journal of the American Society for Information Science and Technology* 62(1) (2011) 72-77.
- [3] B. Hjørland, The foundation of the concept of relevance, *Journal of the American Society for Information Science and Technology* 61(2) (2010) 217-237.
- [4] M. J. Bates, Birger Hjørland's Manichean Misconstruction of Marcia Bates' Work, *Journal of the American Society for Information Science and Technology*, Published online in Wiley Online Library, (wileyonlinelibrary.com). DOI: 10.1002/asi.21594, 1-7.
- [5] M. J. Bates, Information and knowledge: An evolutionary framework for information science, *Information Research* 10(4), (2005) paper 239. Available at <http://InformationR.net/ir/10-4/paper239.html>
- [6] M. J. Bates, Fundamental forms of information, *Journal of the American Society for Information Science and Technology* 57(8) (2006) 1033–1045.
- [7] M. J. Bates, Hjørland's critique of Bates' work on defining information. *Journal of the American Society for Information Science and Technology*, 59(5) (2008), 842–844.
- [8] M. J. Bates, Information, *Encyclopedia of Library and Information Sciences*, Third Edition, (2010) Vol. 3, 2347–2360.
- [9] B. Hjørland, Information: Objective or Subjective/Situational? *Journal of the American Society for Information Science and Technology* 58(10) (2007) 1448-1456.
- [10] B. Hjørland, The controversy over the concept of information: A rejoinder to Professor Bates, *Journal of the American Society for Information Science and Technology* 60(3) (2009) 643-643.
- [11] I. Lakatos and A. Musgrave (eds.), *Criticism and the Growth of Knowledge*. Cambridge, UK: Cambridge University Press, 1970.
- [12] B. Hjørland, Evidence based practice: An analysis based on the philosophy of science, *Journal of the American Society for Information Science and Technology* 62(7) (2011) 1301–1310.

¹ The idea that somebody (such as editors of encyclopedias) simply "understands their own disciplines" is in my eyes also a problematic formulation because anybody always understands anything from a certain background and from some perspectives and interests. Any encyclopedia can therefore be analyzed and the preferences (and thus theoretical views) of the editors can be uncovered. I also think that Smelser & Baltes [22] has a "bias" in having too much neuroscience and too little information about social institutions, which could be interpreted as a bias related to a behavioral perspective. I would hasten to add, however, that it is a very rich source, also from the perspective of new discursive and socially informed views.

- [13] M. J. Bates, An introduction to metatheories, theories, and models, in K. E. Fisher, S. Erdelez, & L. McKechnie (Eds.), *Theories of information behavior*. Medford, NJ: Information Today, 2005, pp. 1-24.
- [14] M.J. Bates, The design of browsing and berrypicking techniques for the online search interface, *Online Review* 13(5) (1989) 407-427.
- [15] M. J. Bates, The Getty End-User Online Searching Project in the Humanities: Report No. 6: Overview and Conclusions, *College & Research Libraries* 57(6) (1996) 514-523.
- [16] M. J. Bates, What is browsing—really? A model drawing from behavioural science research. *Information Research*, 12(4) (2007) paper 330. Retrieved from <http://informationr.net/ir/12-4/paper330.html>
- [17] G. Bateson, G., *Steps to an ecology of mind*. New York: Ballantine Books, 1972.
- [18] L. S. Vygotsky, Thinking and speech, *The collected works of L. S. Vygotsky* (Vol. 1, pp. 39-285): Problems in general psychology. Ed. By R.W. Rieber & A.S. Carton. New York: Plenum, 1987. (Original work published 1934.)
- [19] J. Bruner, *Acts of Meaning*. Cambridge, MA: Harvard University Press, 1990.
- [20] C. H. Davis and D. Shaw (eds.), *Introduction to Information Science and Technology*. Medford, NJ: Information Today, 2011.
- [21] R. Savolainen, *Everyday information practices: a social phenomenological perspective*. Lanham, MD: Scarecrow Press, 2008.
- [22] N. J. Smelser and P. B. Baltes, P.B. (Eds.), *International encyclopedia of the social & behavioral sciences* (Vols. 1–26). Amsterdam, The Netherlands: Elsevier, 2001.
- [23] B. Berelson, Behavioral sciences, in D.L. Sills (Ed.), *International Encyclopedia of the Social Sciences*. New York: Macmillan Company & The Free Press, 1968 (Vol. 2, pp. 41–44).
- [24] S. Dentith, *Bakhtinian thought: An introductory reader*. London: Routledge, 1995.
- [25] J. Beall, Article Review: "Birger Hjørland's Manichean misconception of Marcia Bates' work" by Marcia J. Bates. Retrieved August 17, 2011 from: <http://metadata.posterous.com/article-review-birger-hjorlands-manichean-mis>