

Additional Reading Summary by Douglas W. Oard, July 25, 2014

Peter Ingwersen and Kalervo Järvelin, *The Turn: Integration of Information Seeking and Retrieval in Context*, Chapter 1, Springer, 2005.

This book, by two iSchool faculty from Europe, seeks to bridge what the authors perceive as a problematic divide between the oversimplified “Laboratory Model” that they see as dominating the field that has come to be called “Information Retrieval” and a parallel line of work on “Information Seeking” that they see as seeking to capture that full complexity and nuance of human behavior. They advocate for a “Cognitive Turn” in IR to better reflect that complexity (hence the name of the book) and for the emergence of a newly unified discipline that they call “Information Seeking & Retrieval.”

The key idea behind the Laboratory Model is that interaction happens in small steps in which the searcher issues a query and the system responds with some result, and that a reasonable goal is to optimize the system’s response to each query. This is done by having some person note which documents should be found, and then seeing how well the system can find them when presented with a query.

The key idea behind Cognitive Models is that people who use IR systems are often engaged in a complex iterative learning task, and that what they learn is as (or more) important than what they find. This perspective challenges several aspects of the Laboratory Model, and the authors list 10 such challenges, along with what they see as the proper response from those whose work is nevertheless grounded in the Laboratory Model. As an example, they point out that how useful some document will be to a reader may depend on which documents that reader has seen previously. The Laboratory Model simply has no good way of accounting for that, and it is thus an acknowledged limitation of that approach. As another example, they point out that the Laboratory Model is often applied to collections that are far less “messy” than the document collections that are found in the wild, to which a proper response is that there is nothing about the Laboratory Model that requires such limitations, and thus in the future more representative document collections could be used. On balance, about half the points fall into the first category (limitations to the Laboratory Model) and half fall in the second (limitations in how the Laboratory Model has to date been employed).

The chapter then draws on this analysis to argue that we are at an inflection point that is reminiscent (to me; they do not frame it this way) of what Thomas Kuhn describes in his well-known book “The Structure of Scientific Revolutions.” The key idea here is that when our need for understanding exceeds what present theories can explain, then development of new theory is needed. They conclude by framing four objectives for the development of their ideas on IS&R that they will pursue in the remainder of the book in terms of the development of new theory. These are: (1) integrating formerly separate parts of knowledge, (2) pointing out fruitful problems, (3) proposing totally new lines of research, and (4) modeling the objects and relationships in some salient aspects of reality.

Writing Good Reading Summaries

First, limit yourself to one page, in 12-pont font, with normal margins. The reason for this is that over the course of the semester everyone will need to read 60 of these, and 60 pages is already a lot of reading. Our goal with these is to develop greater breadth of exposure to ideas, and a well-written page is enough to convey a few key ideas. So don't get long winded, and if one of your classmates does, simply stop reading after the first page.

Second, choose which ideas to focus on. You can't reproduce all the ideas from the full reading in less space, and we're not looking for an outline that has breadth but no depth. What we want is an summary that highlights some of the important ideas in the reading at a depth that your classmates will have found to be worth reading. For example, in a technical paper you might skip over the implementation details and focus on what the system was trying to do and how well it worked. Or in a paper on evaluation you might identify what problems the paper identifies with present evaluation approaches, what solutions it proposes, and how it argues for those solutions. Note that your focus does not need to match the main focus of the author – in a paper that includes a small user study at the end, you might choose to focus almost entirely on the design of the user study if at that point in the semester we are studying the design of user studies. The choice of focus is up to you, and any reasonable choice will be fine. Note, however, that failing to make such a choice is not fine; good summaries have a focus.

Third, your goal should be to summarize what is in the reading, not to critique it. Our discussion board is a fine place for critiques, and critiques there are welcome, but the summaries you write should be about what the reading actually says. That doesn't mean you can't add some interpretation (as I did with the reference Kuhn) or that you can't use different terminology than the authors chose (for example, the Laboratory Model is called by some the Cranfield Paradigm, and I could have used that term). But your goal should be to write a summary that the authors would agree with, not a paper that outlines your own position on the topic.

Finally, write for your classmates. Every time you speak or write you need to consider who the audience is. Your classmates know what IR is now, and later in the semester they will know what MAP is. So you can use acronyms that they will likely know without definition. But take great care to introduce ideas and terms that your readers will not likely yet be familiar with, because failing to do so will impair the usefulness of your summary. You are writing what is formally called an informative abstract, where by informative we mean that it should not be necessary for the intended reader to consult the reading after reading your abstract.

Writing one of these summaries well might take you a couple of hours the first time (don't let it take longer!), but after you have done it a few times you should be able to do it in an hour (for the writing; plus the time it took you to do the reading). I find that it is useful to write in two stages when I need to write concisely – the first time I write a bit long, then I come back to it an hour or so later to read it afresh and to edit for conciseness and focus. I suggest you try something like that the first time through and see how well it works for you.