

Concepts: Classes and colligation

To the Editor:

Ryan Shaw (2009) published in *Bulletin of the American Society for Information Science and Technology* a very interesting article in which he criticizes my definition of “concept” (from Hjørland, 2009). He wrote:

Even though concepts are of primary interest in library and information studies, colligatory concepts have been mostly overlooked. Even the most sophisticated theoretical discussions of concepts in the literature tend to equate concepts with classes or categories. For example in his recent survey of concept theories Hjørland (2009, p. 1522) asserts that “[c]oncepts are dynamically constructed and collectively negotiated meanings that classify the world according to interests and theories” (emphasis added). This preoccupation with classification is perhaps understandable in light of the aforementioned focus on scientific domains. The sciences seek to abstract away from unique individuals to generalized classes that can be related by laws. While historians do generalize, they also – arguably primarily – seek to assemble descriptions of unique past events into connected and coherent but no less unique representations. Concepts like “The Renaissance” colligate rather than classify. (Shaw, 2009, p. 15).

I do not find this criticism justified. Consider the following quotes: “Unlike McCullagh, L. B. Cebik insists that colligation is simply a form of classification” (Roberts, 1996, p. 19). And

The term *colligation* has thus come to have two meanings: the tracing of the connections between events and the grouping of events under appropriate conceptions. One could adopt the procedure of referring to colligation, and

colligation, in order to distinguish between the two meanings but this is an awkward and cumbersome procedure. Instead, throughout this book I use *colligation* to mean the tracking of the causal connections between events, and *classification* to mean the grouping of events under appropriate conceptions (Roberts, 1996, p. 20).

These quotes alone should be sufficient to justify my definition of concept, but let me explain by one of the concepts he uses.

Shaw mentions, among other terms, “Renaissance” as a concept, which, according to him, colligates events, but does not classify them. I believe this is wrong (as also Cebik and Roberts found): The concept Renaissance is a fine example of my definitions of concepts: If we have a book on history, some events may be collected in a chapter termed “The Renaissance.” The events presented by the author are thus classified by labels in volumes, parts, chapters or sections. Also, if a library catalog or an electronic database uses “Renaissance” as a subject heading or as a descriptor, documents are being classified under that concept. (But another author or another catalog may have another understanding of Renaissance and either avoid the term or classify events differently under this term.) The term is theory dependent (and has, for example been criticized for underestimating the influence of the scientific revolution). I thus find that this term perfectly matches my definition of concept: “[c]oncepts are dynamically constructed and collectively negotiated meanings that *classify* the world according to interests and theories.”

A more general critique might be that Shaw overemphasizes the difference between science and the humanities: Scientific concepts like “mammal” are in a similar way theory based and not a simple classification of “given” properties.”

Despite this disagreement about whether concepts are

classifications, I found Shaw's paper very qualified and relevant. There is certainly a big need of information scientists looking into specific domains, in this case, history. I do hope that my article about concept theory may be useful for this purpose. It also discusses another concept found in Shaw's paper: "cup." And I believe it opens more ways to understand the classification of cups (and any other concept) compared to the two ways (extensionally and intensionally) discussed by Shaw.

References

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The author's response:

Dr. Hjørland advocates for a broad definition of classification as any grouping associated with a concept. If we accept such a definition then we certainly must agree that what concepts do is classify. But such a broad definition obscures an important distinction between grouping *like* things under a concept (thereby arguing for a particular theory of likeness) and grouping *unlike* things under a concept (thereby arguing for a way of seeing those various things as a connected whole). The distinction between likeness and connectedness is particularly salient for understanding the practice of historians. When a historian employs a concept such as "The Renaissance," she typically is not simply using the concept as a stable label for grouping a collection of like events, but is also proposing a new meaning for the concept. The "theory" upon which the proposed new meaning depends is the narrative in which the events are connected.

Not everyone accepts this distinction. Cebik (1969) argues that no clear difference exists between colligation and classification and that both are simply ways of using concepts. McCullagh (1978) argues that colligation and classification overlap: some colligatory concepts classify and others do not. Roberts (1996) argues that any grouping associated with a concept is classification, except when that concept is a causal process, in which case he calls it colligation. These writers make their arguments on mainly rationalist grounds, proceeding from idealized models of explanation to develop their definitions of colligatory and classificatory concepts.

These arguments have their merits (I find McCullagh's the most compelling), but for the purpose of knowledge organization, the views of Thompson (1967) are more relevant. Thompson addresses the issue not as a philosopher or a historian but as a teacher of history. He thus wishes to distinguish between classification and colligation on pedagogical grounds. His argument is a pragmatic one: treating colligation as a distinct form of conceptualization has real consequences for the construction of history syllabi. Likewise, I believe that making a distinction

between colligation and classification is useful for designing semantic tools intended to help people comprehend history.

The distinction is complicated by the fact that historians' proposals are usually responses to earlier proposals, so that over time colligatory concepts can acquire classificatory functions as well. As Dr. Hjørland points out, once a colligatory concept becomes so entrenched that catalogers hypostatize it as a subject heading, it is no longer being used to colligate events but to classify documents. Thus he is correct that I should have written "Concepts like 'The Renaissance' colligate *as well as* classify."

Despite my criticism of his definition of the relationship between classification and concepts, I agree wholeheartedly that Dr. Hjørland's article about concept theory is very useful for understanding ways of thinking about concepts. My work on colligatory concepts in the domain of history is an attempt to contribute to the program outlined in that article of historicist and pragmatist theorizing about concepts in LIS.

References

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