



Material Practices of Unity: The International Catalogue of Scientific Literature

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While the early history of the Institut International de Bibliographie has been the focus of a great deal of attention among historians of information science, much less notice has been taken of its principal rival, the International Catalogue of Scientific Literature. The little interest that *has* been paid to the latter has tended to emphasize its shortcomings in comparison with the Belgian program. Where the Institut was based on coordination and compromise, the Catalogue was centralized and inflexible; where the Institut aimed to develop scientific foundations for bibliographical classification, the Catalogue took a naively a priori, even logical, approach to classification; where the Institut looked to foster communication across political and disciplinary boundaries, the Catalogue seemed most intent on *erecting* boundaries -- between science / non-science, pure / applied knowledge, and even between the branches of knowledge themselves. In short, the contention goes, while the Belgian federation laid the conceptual groundwork for twentieth-century documentation practices, the Catalogue was a misguided, perhaps even harmful, attempt by arrogant natural scientists to reinvent the bibliographical wheel.

But however we choose to view the subsequent role of the Catalogue in the history of information science, its nearly unprecedented ability to engage the collaboration of hundreds of natural scientists in a massive collective endeavor to organize knowledge in print demands explanation. I suggest that if there is *any* historical precedent for this bibliographical enthusiasm among scientists, we should look *not* to the history of information organization *per se* -- from Alexandria to the Internet -- but rather to the history of scientific societies such as the Royal Society of London and the Académie des Sciences: *provided* we view these bodies as collective ventures for managing scientific authority and authorship, and in particular, following Adrian Johns, as collective mechanisms for mastering knowledge in print. Resituating the Catalogue within the history of scientific trust will render more intelligible the methodological commitments -- especially regarding classification -- that so baffled its rivals and even later historians. Doing so, however, requires that we resist construing these bibliographical activities as a natural consequence of an out-of-control flood of print (the information overload argument), or as heralding a new era in which researchers progressively replaced personal connections and informal methods for learning 'what is known' on a given topic by some more formal or rational system of information retrieval.

I focus here on one particularly crucial condition of possibility for the bibliographical fervor at the end of the century: the ascendancy of the modern scientific periodical as a crucial site for demarcating scientific authority. Although the twentieth-century scientific paper was a crucial *unit of measurement* by which to evaluate scientific progress and scientific careers, the authority we now ascribe to the specialized periodical literature would have puzzled men of science well into the nineteenth century. But the rise-to-dominance of serialized print is not the story of its finally becoming the source of immutable mobility it was always destined to be. Rather, this took place following the *failure* of the authority of the collectives that had traditionally set the terms for scientific trust and



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virtue. In the aftermath of this failure – in which the press was no savior of social order, but rather its principal *assailant* -- men of science were compelled, however awkwardly, to invest the scientific paper with the mechanisms – such as peer-review, adjudication of priority, and evaluation of professional qualifications -- for safeguarding and assessing credibility that had once been the territory of the societies and academies.

The difficulty of doing so is the context in which centralized institutions for the organization of scientific print came to seem crucial to scientific authority. In the decades following the Franco-Prussian war of 1870, French and British scientists, increasingly conscious of German scientific and industrial supremacy, were engaged in constant efforts to raise the profile and productivity of their respective scientific cadres. But by the late 1880s, to speak of the organization of science had become nearly identical to speaking of the organization of scientific *literature*. From this perspective, the idiosyncratic approach to bibliographical classification pursued by the International Catalogue may be viewed in the light of its coming to serve as a crucial medium for connecting the social order of science with the order of nature.

Biography

Alex Csiszar is a Ph.D. candidate in the Department of History of Science at Harvard University. He studies genres of scientific print in the late nineteenth century in France and Britain, with a focus on the rise of the modern scientific periodical. His dissertation examines the historical circumstances that led to the founding of the International Catalogue of Scientific Literature, a massive publishing venture spearheaded by the Royal Society of London beginning in 1895. Csiszar is particularly interested in the role that such endeavors to manage and reimagine scientific print played in the shifting methodological commitments of natural scientists around the turn of the twentieth century. His first publication on this theme, "The Search for Order and the Order of Search: Discontents and Entrepreneurs in the Organization of Scientific Serials, 1890-1900" is forthcoming in the journal *History of Science*.