

Publishing Survey Articles on Information Retrieval Topics

**Douglas W. Oard,¹ Fabrizio Sebastiani,²
Jonathan Furner³ and Gary Marchionini⁴**

- (1) University of Maryland, College Park, MD20742, USA;
(2) Istituto di Scienza e Tecnologie dell'Informazione,
Consiglio Nazionale delle Ricerche, 56124 Pisa, Italy;
(3) University of California, Los Angeles, CA 90095, USA;
(4) University of North Carolina, Chapel Hill, NC 27599, USA
oard@umd.edu, fabrizio.sebastiani@isti.cnr.it,
furner@gseis.ucla.edu, gary@ils.unc.edu

Abstract

Survey articles are an important way of sharing knowledge among interested researchers and contributing to the growth of a field. This brief note identifies several outlets for survey articles on information retrieval, and identifies some reasons to write articles of this type.

1 Introduction

The role of research papers is well understood. Survey articles, however, are perhaps somewhat more mysterious. Why do people write survey articles? Where do they publish them? In this brief note, we offer our thoughts on those questions in the context of information retrieval research.

2 Why?

Survey articles, sometimes known as review articles, essentially fill a niche somewhere between tutorials and books. Tutorials at conferences such as SIGIR, JCDL, CIKM and WSDM often seek to address “hot topics,” and to cover them broadly and in understandable terms for the benefit of the uninitiated, or of the researcher coming from a neighboring field. The topics could consist of new methods or new applications—the unifying characteristic of a hot topic is the potential for a rapidly growing research community that is (or should be!) attracting substantial attention. At the other end of the spectrum, books often seek to present well formed perspectives on some coherent set of topics. Survey articles are in some sense a middle ground, focused on a specific topic in a manner similar to a tutorial, but bringing together a fairly well established picture of that topic in a manner similar to a book.

As with other publications, people write survey articles because they have something to say. Most survey authors review the state of knowledge on the topic using a unique perspective or organizational rubric. It is the perspective or rubric that constitutes an original contribution by the author. In survey articles, authors principally review and evaluate the work of others, although of course their own work should also receive balanced treatment. They give full references to the literature that reports on this previous work (journal articles, conference proceedings, technical reports, etc., both

published and unpublished), providing commentary on the relative significance of the findings and products of different projects, the soundness of the various approaches taken, and the utility of the theories and applications developed.

The typical author of a survey article is someone who has been conducting active research on the topic of the article for five years or more, although shorter surveys are sometimes authored by Ph.D. students. The initial survey on a topic often results from a recognition that the seminal work on a topic is simply too scattered across the research literature, and that bringing it together in one place could contribute to lowering the bar for a researcher wishing to enter the field and in general could contribute to a better understanding of the field. Subsequent surveys typically seek to update earlier ones, or to see their subject matter from a different angle. Good survey articles can be very influential, and thus highly cited. Just as writing a well regarded book can contribute to building your reputation, having a highly cited survey article on your CV can be a benefit as well.

3 Where?

A decade ago, survey articles on information retrieval (IR) topics were not at all common. *ACM Computing Surveys*, the primary venue for publishing survey articles in the field of computer science at large, did (and still does) occasionally publish something on IR, but the space it can devote to IR is obviously limited. Focusing more on some aspects of IR, one long-running venue was the American Society for Information Science and Technology's *Annual Review of Information Science and Technology* (ARIST), which has published a collection of surveys on topics in Library and Information Science (LIS) and related fields once each year since 1966.

Much has changed in recent years, however. Financial pressures resulted in ARIST ceasing publication with the 2011 volume and being replaced with a regular series of review articles in the *Journal of the American Society for Information Science and Technology*. Two other publishers have also started series that welcome surveys in a range of fields, including two devoted to information retrieval: *Synthesis Lectures on Information Concepts, Retrieval, and Services* (Morgan & Claypool Publishers), and *Foundations and Trends in Information Retrieval* (Now Publishers).

Here's a summary of some of the places where IR survey articles can now be found:

- *Synthesis Lectures on Information Concepts, Retrieval, and Services*. This series, founded and edited by Gary Marchionini, publishes 50-125 page monographs (called lectures) on topics that would be within the scope of conferences such as SIGIR, JCDL, CIKM, and ASIST. The series includes both survey articles and other topic-focused lectures. It started publication in 2009, and has published 18 monographs since then. Each lecture is available as an ebook as well as a paper format, and each format has its own ISBN number. Lectures are available 4-6 weeks after the final manuscript is delivered.
- *Foundations and Trends in Information Retrieval* (FnTIR). This journal, now edited by Doug Oard and Fabrizio Sebastiani (Fabrizio and Jamie Callan were the founding editors) publishes 80-150 page survey articles on topics that would be within the scope of conferences such as SIGIR, CIKM and WSDM. The journal started publication in

2006, and has published 15 issues since then (each consisting of a single survey). It is a *journal*, in the sense that it has an ISSN number, that it is indexed as such, and that it is organized in volumes. However, it can also be seen as a series of monographs, in the sense that each issue consists of a single survey paper, and as such is also sold individually (as a monograph with its own ISBN number).

- *Journal of the American Society for Information Science and Technology* (JASIST). This journal, edited by Blaise Cronin (with Jonathan Furner as the editor for survey articles), now additionally fills the role previously filled by ARIST. JASIST refers to its series of survey articles as “Advances in Information Science,” inviting articles of up to 36 pages (10,000 words) on topics in any area of information science. Publication of Advances in Information Science articles in JASIST began in mid-2011, with microblog search and social Q&A among the topics covered in the series’ first year.
- *ACM Computing Surveys*. This journal, edited by Chris Hankin (with Louiqa Raschid as Associate Editor for Information Systems), publishes survey articles of up to 40 pages on topics in any area of computer science. The most recent IR survey was published in 2009 (on Web search result clustering). Issues are available in the ACM Digital Library.

To this list we might add several other places where IR survey articles occasionally appear, including the Morgan & Claypool *Synthesis Lectures on Human Language Technologies* (3 IR surveys to date) and *Synthesis Lectures on Data Management* (4 IR surveys to date), and Now Publishers' *Foundations and Trends in Web Science* (1 IR survey to date).

Several criteria might come to mind when selecting a venue. Quite obviously, manuscript lengths vary considerably. All of these publications are typically available through the electronic holdings of most major research libraries, although the holdings of specific libraries may vary. Because some of the publications are relatively new, the availability of bibliometric data also varies. It takes about five years for a journal to acquire a publication record that allows an impact factor to be computed, so for example an impact factor (i.e., citations per article) for FnTIR was first reported (using Scopus data) only this year. Policies regarding authors’ rights to post preprints or final versions of their work on their personal Web sites also differ somewhat. And, of course, the time in review and the time from review to publication will surely differ as well. Some of these factors are easily researched on the Web, others are best found by contacting the editors.

4 Conclusion

We are fortunate to now have a rich range of venues through which we can share reflective syntheses of our progress as a research community. Our hope is that this brief note will help those who are ready to write to think through where best to publish their work, and to help those who are looking for that work to know where they can find it.