

# Representing Publication and Distribution Practices for Scholarly Materials: A Cross-Disciplinary Comparison

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## ABSTRACT

In recent years, mechanisms for distributing scholarly products—for example, scholarly articles, working papers, datasets in the physical and social sciences, theses and dissertations, course materials, and digitized library collections—have increased dramatically in variety. Given the availability of numerous alternative venues for sharing scholarly work, the ways in which scholars decide where to publish or how to distribute the products of their scholarship have become increasingly unclear. One major obstacle facing scholarly communication research and the development of associated digital collections centers on how discipline-specific, cross-disciplinary, and discipline-independent findings about scholarly work practices are represented in the literature. On one hand, distilling participants' responses to a set of discipline-independent factors that are purported to influence scholars' behaviors (cf. [1]) masks the inherent complexity of individuals' daily work; on the other, intense focus on individual disciplines or groups (cf. [2], [3]) may make it difficult to speak to broader trends that are common to several fields.

This study employs a pluralistic approach for representing work practices related to scholarly communication. Faculty members in communication and the biological sciences at a public research university in the United States were selected to participate. Starting from their curricula vitae, in-depth interviews and sorting activities were used to elicit narratives about individuals' attitudes and practices from their own publishing histories and their use of networked tools to share their scholarship. The representations (cf. [4], [5]) that are generated from these narratives—or, sets of unstructured, strategic decision processes [8]—are combinations of authors' motivations, publication/distribution options, and decision-making criteria and processes. The resulting aggregate representations illustrate shared work practices as well as areas where diverse practices exist—as a *catalog of contextualized practices*—which can guide the development of digital collections of scholarly materials.

## RESEARCH QUESTIONS

- RQ1: At what stage of a scholarly project [participant-defined] do scholars begin the decision-making process with respect to publication/distribution, and what kinds of solutions to this concern do they consider throughout the process?
- RQ2: What decision-making routines and dynamic factors (e.g., interrupts) do scholars encounter during the publishing lifetime of a scholarly project [participant-defined]?
- RQ2.1: If active in some form of OA publication/distribution, how do scholars describe the ways in which OA initiatives extend, replace, and/or complement other methods of publication or distribution?
- RQ3: How do scholars explain their publishing/distribution behaviors, and to what extent do they attribute their behaviors to various entities?

## STUDY DESIGN

- Population: Two departments at a single institution, each with open access options available
- Responsive interviewing ("river-and-channel") [9] based on participants' curricula vitae (CV)
  - Each item/document on the CV is treated as a single unit of analysis
  - Initial question: "Please tell me about this article, or please tell me about the project that it reports about"
  - Follow-up questions and probes guided by models from [6], [8], and [10]
- Sorting activities derived from the full context repertory test [7] based on items/documents from participants' CV

## PARTICIPANT PROFILES

Rank	Biology Department		Communication Department	
	Proportion within department / sample	Number of participants [sex distribution]	Proportion within department / sample	Number of participants [sex distribution]
Professor	0.21 / 0.80	4 [3M, 1F]	0.18 / 0.25	1 [1M]
Associate Professor	0.08 / --	0	0.33 / 0.75	3 [1M, 2F]
Assistant Professor	0.08 / --	0	0.12 / --	0
Lecturer	0.13 / 0.20	1 [1M]	0.21 / --	0
Other rank	0.50 / --	0	0.18 / --	0
Total	1.00 / 1.00	5 [4M, 1F]	1.00 / 1.00	4 [2M, 2F]

## NARRATIVE EXCERPTS

"...Oh, that was, that was a, no, that was a strange thing, too. That one I really did not know where to send 'cause it was, my explanation was, and the piece was, evolutionary in nature, but most of the existing literature was in sort of hard-core physiology and anatomy journals, so they were mostly medical related, and it, so my paper wouldn't fit at all, uh, with that kind of readership, so I actually wrote to a guy in England named [RJ] who had written a lot on, there was a literature, and [RJ] had done this work. He was publishing articles in *Nature* and stuff on this. It was, people really thought it was cool, and so I wrote to him and said, 'I have this thing. Where should I send it?' And, and, um, he said, 'Well, *Journal of Theoretical Biology* might be,' 'cause he said it'll take stuff like this that's, um, and it wasn't a data paper, it was just an idea I had based on a literature review, so I took his recommendation and sent it there and they accepted it..."

—from a faculty member in the biology department talking about how he choose a particular journal where he would submit his manuscript

"...I found myself in a situation recently advising one of my recently completed graduate students about a paper that he was publishing, and he wanted to know where we thought it would be published, and he wanted to publish it in one of these online journals, and I advised him against it for a reason that I, I have been mulling over in my mind ever since, and that is that he was going to be, was then, he now has a job, but on the job market, and his, uh, CV was going to be sent out and reviewed by professors at the institutions where he was applying, and I think there is still a sense among, mostly among the older faculty but often the more influential ones in institutions, that those strictly online journals are somehow not as, um, substantive as the more traditional publish-, paper-published journals that may also have an online version, of course...And so I told him that, y'know, at this stage in your career, go with the traditional format...And if you're publishing something on evolutionary biology, if it's in the journal *Evolution*, which has been around since, y'know, the 19-, early 1950s, uh, and is the, sort of the premier journal in the field of evolution, or in *BMC Evolution*, y'know, people are going to weigh those two and say, y'know, 'Well, he got to be in *Evolution*, y'know, instead of just submitting it to *BMC* where they're, there is still the appearance that the, the, uh, thought that, that publication is easier in those online journals and that people dump things there that they don't think they would get published someplace else. I don't know if any of that is true, 'cause I still have not yet published in any of those journals, um, but that's, y'know, that's a perception that I think needs to be overcome in order for online journals to really succeed..."

—from a faculty member in the biology department talking about mentoring a graduate student as an author

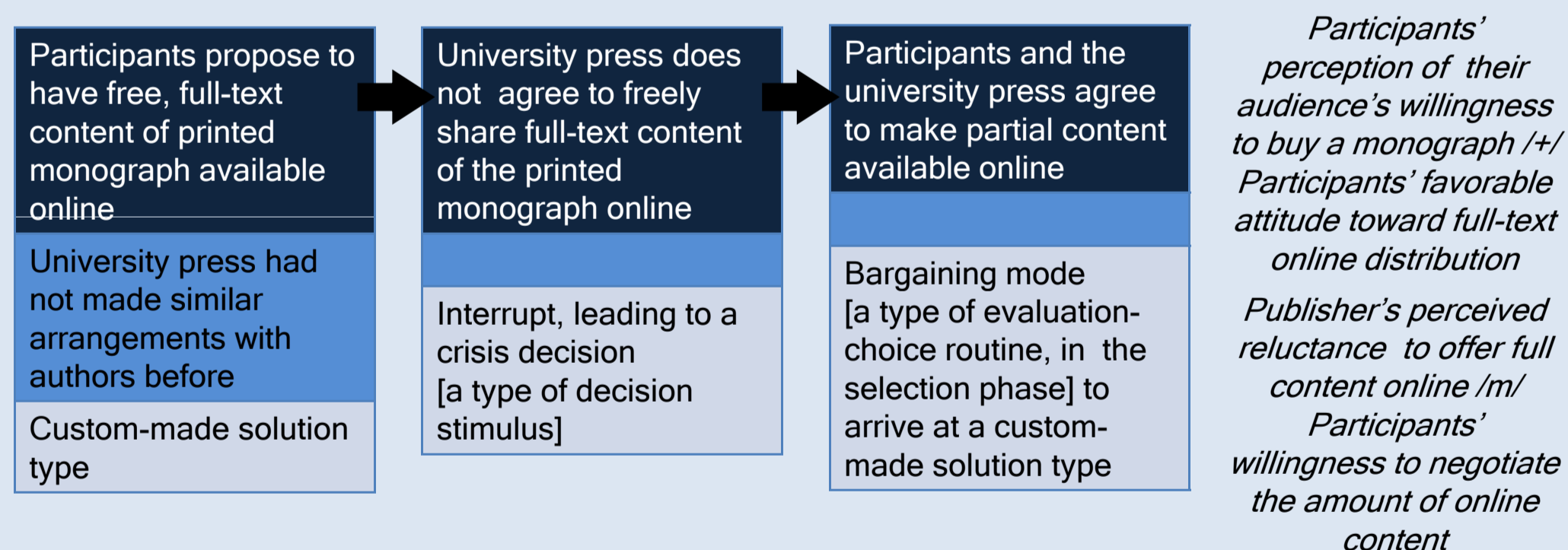
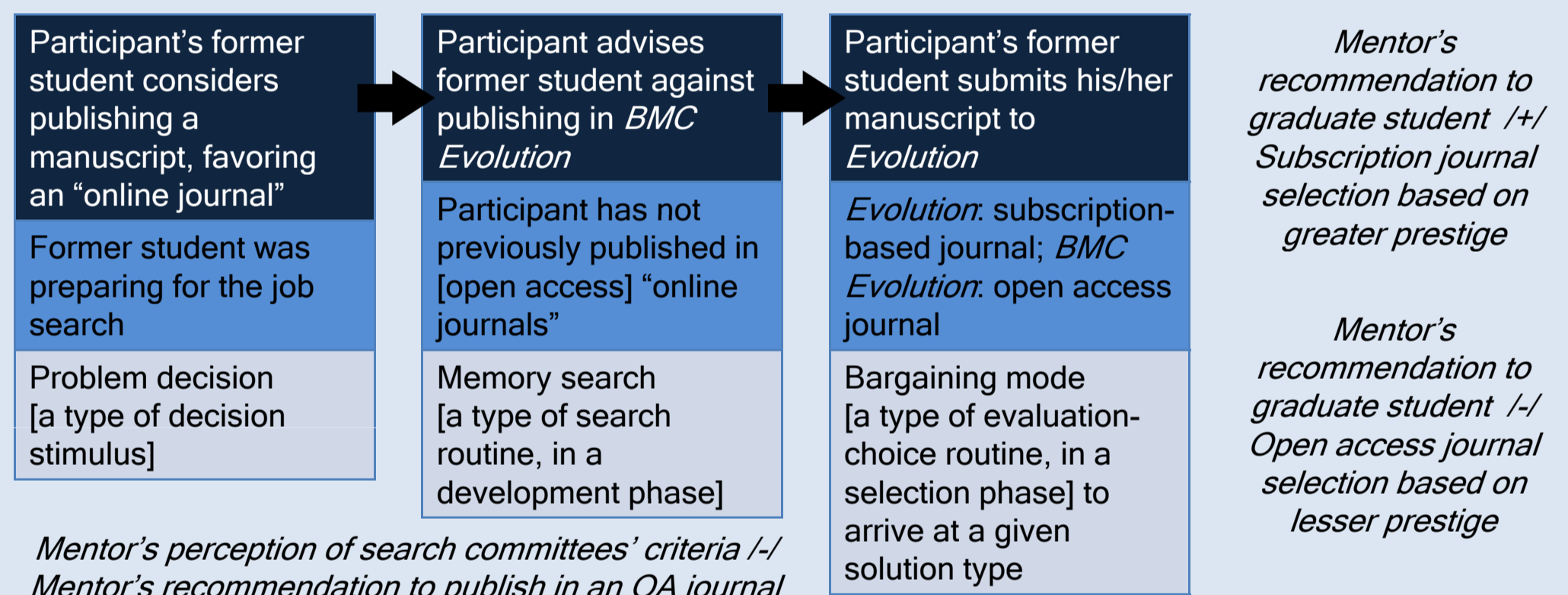
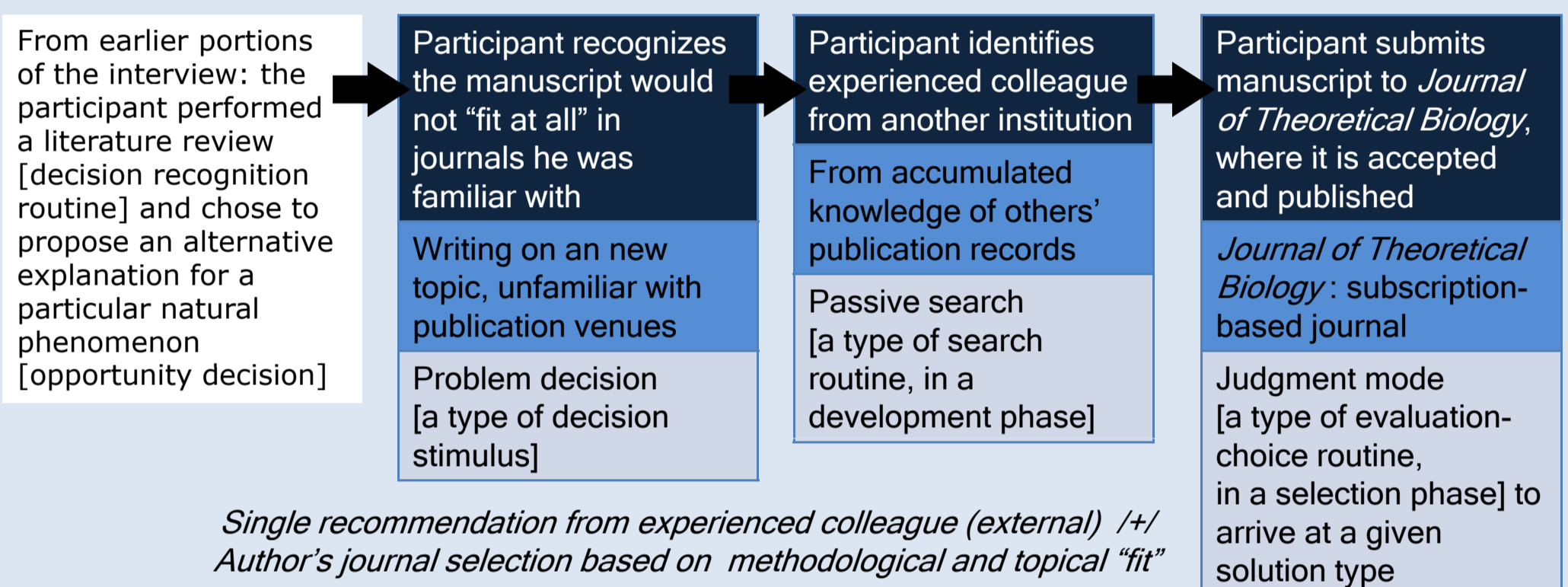
"...So we were willing to, um, compromise on having the full text online, um, we, we, our hunch was that, y'know, people, if they're interested in the book, they're going to buy the book. We're not, we were not worried as authors about if we put it online no one would buy the book. The [university] press is, is, is still, most publishers are still wondering about that. They're curious about it, concerned about it, so they, that was their main concern. They were totally willing to do the site, y'know, producer, um, screenshot thing. They didn't want full text. We said, 'Okay, fine, give us the screenshots and we will do partial text,' and so we negotiated, I don't know, I don't remember the details of it, we went back and forth. Once we'd agreed that it would be less than a hundred percent of the text, then we negotiated on how much..."

—from a faculty member in the communication department talking about working with a university press to negotiate an online supplement for a printed monograph

## GENERAL FORM OF REPRESENTATION

Narrative (paraphrased)	A +/- B	A positively affects B
Researcher's interpretation and supplemental notes	A /- / B	A negatively affects B
Corresponding aspect of the decision process (from [3])	A /m / B	A affected B in some non-zero way
	A /0 / B	A has no effect on B (all adapted from [5])

## NARRATIVE EXCERPTS, REPRESENTED/AUGMENTED BY CONCEPTS FROM [6], [8], [10]



## DISCUSSION

Reducing scholarly communication and publication practices to a handful of general principles across and within the disciplines ignores the richness and variety of scholarship that individuals produce through their work. Information professionals are, perhaps, better served by thinking of individuals' behaviors as part of a *catalog of contextualized practices*, some of which are displayed more often by a particular individual and some of which are less frequent (or absent). The extent to which choices and behavior can be clustered by their common characteristics (e.g., all "problem decisions", all "+/+/" attributions) will help illustrate richer patterns of attitudes and behavior in a manner that allows for cross-disciplinary comparisons.

## REFERENCES

- Foster, N. F., and Gibbons, S. 2005. Understanding faculty to improve content recruitment for institutional repositories. *D-Lib Magazine* 11(1). Available at <http://www.dlib.org/dlib/january05/foster/01foster.html>.
- Fry, J. 2006. Scholarly research and information practices: A domain analytic approach. *Inform. Process. Manag.* 42(1): 299-316. DOI= <http://dx.doi.org/10.1016/j.ipm.2004.09.004>.
- Harley, D., Earl-Novell, S., Arter, J., Lawrence, S., King, C. J. 2007. The influence of academic values on scholarly publication and communication practices. *Journal of Electronic Publishing* 10(2). DOI= <http://dx.doi.org/10.3998/3336451.0010.204>.
- Huberman, M. B., and Huberman, A. M. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd ed. Thousand Oaks, CA: Sage.
- Huff, A. S., Narapareddy, V., and Fletcher, K. E. 1990. Coding the causal association of concepts. In *Mapping Strategic Thought*, A. S. Huff, Ed. Chichester: John Wiley and Sons, 311-325.
- Kelley, H. H. 1967. Attribution theory in social psychology. In *Nebraska Symposium on Motivation*, D. Levine, Ed. Lincoln, NE: University of Nebraska.
- Kelly, G. A. 1955. *Theory and Personality*. Vol. 1 of *The Psychology of Personal Constructs*. New York: W. W. Norton.
- Mintzberg, H., Raisinghani, D., and Théorêt, A. 1976. The structure of "unstructured" decision processes. *Admin. Sci. Quart.* 21(2): 246-275. Available at <http://www.jstor.org/stable/2392045>.
- Rubin, H. J., and Rubin, I. S. 2005. *Qualitative Interviewing: The Art of Hearing Data*, 2nd ed. Thousand Oaks, CA: Sage.
- Weiner, B. 1979. A theory of motivation for some classroom experiences. *Journal of Educational Psychology* 71(1): 3-25.