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(Paper): An Agenda for Studying Big Deal Cancellation Projects as Information Practice

Abstract:

This article introduces a conceptual framework and approach for studying the information and decision-making practices of academic librarians involved in big deal cancellation projects—a type of collection management projects that are today prevalent across academic libraries in North America. We describe the nature and dynamics of big deal cancellation projects and conceptualize the quantitative and qualitative evaluations they entail. Predicated on this account, we present a theoretical and methodological agenda for empirical research. This conceptual paper goal, thus, is to describe and conceptualize big deal cancellation projects as an object of empirical research and to offer a perspective on how they can be studied as a type of information practice.

Keywords: academic libraries, e-journals, collections, big deal packages, evaluation, decision-making, information practice, information work

1. Introduction

The majority of academic journals in the sciences and the humanities are licenced to academic libraries in bundles, known colloquially among librarians as big deals. These bundles typically include an extensive catalogue of journal titles licensed to academic libraries for a fixed annual fee. Big deals emerged at the turn of the century with the wide adoption of electronic journals and became established early on as the norm (Frazier, 2001). By 2012 close to 90% of the Association of Research Libraries members subscribed to one or more big deals (Strieb and Blixrud, 2013, p.14; Jurczyk & Jacobs, 2014, p. 621). The revenue big deals generate is a key factor in the emergence of an oligopoly in the market for scholarly communication (Larivière, Haustein, & Mongeon, 2015). But while big deals have worked well for publishers' bottom line, the value they generate for libraries is much more difficult to identify. A key point to note is that the price of big deals has increased by 223%, between 1986 and 2011 (Shu et al. 2018, p. 791). This continuous price increase has for longed puzzled observers, given that the subscription fees of for-profit journals are, on average, 500% higher than those of non-profit journals, despite that their production costs are similar (Edlin and Rubinfeld, 2004, p. 120). This causes understandable concerns for academic libraries, whose budgets contribute close to 75% of the overall 10 billion revenue of the academic publishing industry (Beverungen et al., 2012, p. 931).

2. Research Focus

In this context, an important concern for academic librarians is that the majority of titles in big deal bundles provide little value to library users, with, on average, only one-third of the journals in a big deal being accessed and read. What librarians have been finding out when attempting to renegotiate the scope, size, and price of big deal bundles, however, is that subscribing to an entire big deal (of a few thousand journals) is often cheaper than subscribing individually to a few hundred highly-read journals. There is continuous research on developing better models for big deals' evaluation, as well as frequently reported success stories in breaking-up big deals into smaller, more affordable bundles (c.f., Wolfe et al., 2009; Jones and Marshall, 2013; Nabe and Fowler, 2015). But overall, how such projects unfold as an organizational practice situated in the context of academic libraries has not been extensively studied. Yet, studying the organizational practices through which librarians evaluate and negotiate big deals is important because it has been established that today big deal evaluation takes place predominantly at the organizational level of libraries (Strieb and Blixrud, 2013. p. 14). In our work, we are asking basic questions about how librarians engage in this type of organizational practice and about the challenges they encounter in evaluating big deal bundles.

3. Big Deal Evaluation Projects as Decision-Making in Social Context

Conceptually, the process of evaluating big deal bundles could be described as an organizational practice centred on determining if the *value* of a big deal bundle matches its *price*—the central question is whether the price of a big deal corresponds to the value it yields for a specific library. We label this as the practice of determining the *price-value equivalence* of big deal packages.

Determining the *price-value equivalence* of big deals is complicated because of the wellknown reliability and validity limitations of quantitative measures of journal value (cf. Seglen, 1994; Adler and Harzing, 2009; Jarwal et al., 2009; Baum 2011). To compensate for these limitations, academic librarians combine quantitative measures and indicators such as journal rankings and library analytics and metrics with qualitative insights gathered through focus groups and interviews with faculty and students, peer-reviews, surveys, and other methods for qualitative data acquisition. However, supplementing quantitative data with qualitative data is not a panacea to the problem of establishing the *price-value equivalence* of big deal bundles. This is because qualitative approaches to journal evaluation, too, pose unique validity and reliability challenges and often yield inconsistent and idiosyncratic results; in addition, they are also highly susceptible to cognitive and social biases and distortions (Osterloh and Frey, 2015, pp. 105-107). When situated in group settings (e.g., peer-review panels), qualitative approaches for evaluating academic quality also take on pronounced micro-political dynamics (Lamont, 2009). This latter aspect is particularly salient to examine in academic libraries, where there are complex relationships between faculty, students, librarians, publishers, and the need to balance fiscal budgets.

Beyond those methodological drawbacks, on a more fundamental level, an inevitable challenge in determining the *price-value equivalence* of big deal bundles is simply that the values journals may carry for the research of faculty and students, and for the cumulative growth of knowledge, cannot be accurately measured, predicted, and assigned a monetary price. Following work on evaluative practices in economic sociology, we label these values of journals as their *incommensurable values*—i.e., values that cannot be effectively quantified (Espeland and Stevens, 1998).

Based on these characteristic features of the evaluation of big deals, we further argue that big deal cancellation projects fall under the category of what Bruch and Feinberg (2017, p. 209) describe *as decision-making processes in social context*—i.e., a decision-making process "characterized by obscurity, where there is no obvious correct or optimal answer" to a given problem. What this asks us to examine, thus, is how librarians evaluate big deals situated in the social, material, and cultural context of the academic libraries in which they work.

4. An Approach for Studying Big deal Cancellation Projects as as Decision-Making in Social Context

To study big deal cancellation projects as decision-making in a social context, we propose adopting a practice theory approach that has been established in organizational and information studies (Feldman & Orlikowski, 2011; Huizing, & Cavanagh, 2011). Practice theory is useful in developing both causal and interpretive accounts of social phenomena, placing equal weight on understanding the situated experience of social actors and the structural, material, and contextual features of their environment (Harré 2001; Schatzki 2001; Gross 2009). Studying journal cancellation through a practice-theory lens has several advantages. As Camic et al (2011) note, such an analytical focus can reveal the causal mechanisms, subjective meanings, and concealed regularities of knowledge-making practices (p. 8). The approach is furthermore useful for our work as it allows us to identify the individual cognitive deliberations guiding evaluation and decision-making in journal cancellation projects, while it also enables us to examine how the context-specific social and technological features and dynamics among different library

environments may or may not influence the evaluation of big deals and the decision-making this evaluation supports.

In line with this theoretical perspective, we focus on three units of analysis: the *social*, *material*, and *cultural* dimesons of big deal unbundling projects. All these three units of analysis can be successfully studied with the methods of organizational ethnography—i.e., fieldwork, interviews, and document analysis (Van Maanen, 1979)—which we adopt in our work.

Specifically, the social dimension can be empirically studied through the analysis of the institutional mission, values, identity, and management and organizational structures of different library environments. This view is supported by research in management, strategy and organization studies, which have demonstrated that institutional logics correlate to organizational structures, technologies, and practices (Lounsbury, 2008; Labatut et al, 2012).

Furthermore, our empirical research on the material elements of big deal cancellation projects will examine the methods and tools librarians use in support of evaluation and decision-making. These include a range of tools for capturing, managing, and analyzing quantitative and qualitative data. We further argue that it is necessary to also identify not only the formal but also the informal methods and workarounds used in practice (Gerson and Star 1986), and to keep open the possibility that technology may independently influence evaluation and decision-making processes (Orlikowski 2008; Pollock, 2012; Orlikowski & Scott, 2014).

The third element of our conceptual framework for empirical research is the cultural element, or what following Schatzki (2001), we call "practical understanding" (p. 11). This element eludes easy conceptualization as it constitutes a non-observational phenomenon well familiar to information and knowledge management scholars. In this literature, practical understanding is discussed under the rubric of "tacit knowledge," defined as "the personal knowledge used by [organizational] members to perform their work and to make sense of their worlds" (Choo 2000, p. 395). Our conceptualization builds onto this definition by drawing on work in cultural sociology, and in particular, on the so-called tool-kit theory of culture (Swidler, 1986). This perspective has been previously applied to studying "decision-making in social contexts" similar to ours, such as peer-review and arts journalism (Lamont 2009; Chong 2013) and has been advanced as a lens for the study of the role of culture in information practices (Ivanov, 2017). From this perspective, practical understandings are seen as organized in cultural tool-kits used by social actors to support and justify practical action (Swidler 1986). These toolkits include the cultural codes, customary rules, norms, and epistemic values that support cognition and decision-making by giving coherence and meaning to social action and collectively constitute what DiMaggio (1997) calls "cultural frames of understanding" (p. 265). This conceptualization of culture is advantageous to the study of big deal evaluation projects because it allows us to use in-depth interviews to describe and categorize the range of strategies librarians use to justify journal cancellation decisions (Lamont & Swidler, 2014). The approach is also consistent with how the relationship between culture and cognition is understood and studied in sociology and the cognitive sciences (DiMaggio, 1997; Lizardo & Strand, 2010).

5. Conclusion

The outline of the research agenda described above underpins our ongoing empirical research on big deal cancellation projects in Canadian academic libraries. We believe that pursuing this research agenda will reveal insights into how librarians make cancellation decisions and the extent to which the organizational context in which they work is causally significant to the

outcome of big deal cancellation projects. Doing so, we argue, is warranted because without actually going inside these complex projects to try to understand how librarians evaluate big deal packages, we are left to speculate about what does and what does not make these projects successful. The knowledge our research will generate thus can enhance the ways librarians do their work and advance our approach for teaching such topics to future librarians. But understanding evaluation and decision-making within the context of big deal cancellation projects is also important on a societal level. This is because undue cancellation decisions could marginalize smaller, niche areas of knowledge or stem the development of new, fringe areas.

Reference List:

- Adler, N J., and Harzing, A.W. (2009), "When knowledge wins: Transcending the sense and nonsense of academic rankings", *Academy of Management Learning & Education* Vol. 8 No. 1, pp. 72-95.
- Baum, J. A. (2011), "Free-riding on power laws: Questioning the validity of the impact factor as a measure of research quality in organization studies." *Organization*, Vol. 18 No. 4, pp. 449-466.
- Beverungen, A., Bohm, S. & Land, C. (2012), "The poverty of journal publishing", *Organization* Vol. 19 No. 6, pp. 929-938.
- Bruch, E., & Feinberg, F. (2017), "Decision-making processes in social contexts", *Annual Review of Sociology*, Vol. 43, pp. 207-227.
- Camic, C., Gross, N., and Lamont, M. (2011), "The study of social knowledge making". In Camic, C., Gross, N., and Lamont, M. (Eds.) *Social Knowledge in the Making* (pp. 1-43). Chicago, IL: The University of Chicago Press.
- Choo, C. W. (2000), "Working with knowledge: how information professionals help organisations manage what they know", *Library Management* Vol. 21 No. 8, pp. 395-403.
- Chong, P. (2013), "Legitimate Judgment in Art, the Scientific World Reversed? Maintaining Critical Distance in Evaluation." *Social Studies of Science* Vol. 43 No. 2, pp. 265-281.
- DiMaggio, P. J. (1997), "Culture and cognition", *Annual Review of Sociology* Vol. 23 No. 1, pp. 263-287.
- Edlin, A. S., & Rubinfeld, D. L. (2004), "Exclusion or Efficient Pricing-The Big Deal Bundling of Academic Journals." *Antitrust Law Journal*, Vol. 72 No. 1, pp. 119-157.

- Espeland, W. N., & Stevens, M. L. (1998), "Commensuration as a social process", *Annual Review of Sociology*, Vol. 24 No. 1, pp. 313-343.
- Feldman, M S., and Orlikowski, W. J. (2011). "Theorizing practice and practicing theory," *Organization Science* vol. 22 No. 5, pp. 1240-1253.
- Frazier, K. (2001), "The librarian's dilemma: Contemplating the costs of the Big Deal", *D-Lib Magazine* Vol. 7 No. 3, Retrieved from: http://www.dlib.org/dlib/march01/frazier/03frazier.html
- Gerson, E., M., and Star S. L. (1986), "Analyzing due process in the workplace. *ACM Transactions on Information Systems* Vol. 4 No. 3: pp. 257-270.
- Gross, N. (2009), "A pragmatist theory of social mechanisms." *American Sociological Review*, Vol. 74 No. 3, pp. 358-379.
- Harré, R. (2001), "Causal mechanisms and social practices: What can social science contribute to social practice?" *Social Sciences for Knowledge and Decision Making*, OECD, Bruges, Belgium, 26-28 June, 2000.
- Huizing, A., & Cavanagh, M. (2011), "Planting contemporary practice theory in the garden of information science" *Information Research*, Vol. 16 No. 4, pp. 16-4.
- Ivanov, A.O. (2017), "Practice theory: a new approach for archival and recordkeeping research" *Records Management Journal*, Vol. 27 No. 2, pp. 104-124.
- Jarwal, S. D., Brion, A. M., & King, M. L. (2009), "Measuring research quality using the journal impact factor, citations and 'Ranked Journals': Blunt instruments or inspired metrics?" *Journal of Higher Education Policy and Management*, Vol. 31 No. 4, pp. 289-300.
- Jones, M.A. & Marshall, D., Purtee, S. (2013), "Big Deal Deconstruction", *The Serials Librarian* Vol. 64, pp. 137-140.
- Jurczyk, E. & Jacobs, P. (2014), "What's the Big Deal? Collection evaluation at the national level" *Libraries and the Academy*, Vol. 14 No. 4, pp. 617-631.
- Labatut, J., Aggeri, F., and Girard N. (2012), "Discipline and change: how technologies and organizational routines interact in new practice creation", *Organization Studies*, Vol. 33 No. 1, pp. 39-69.
- Larivière, V., Haustein, S., Mongeon, P. (2015), "The oligopoly of academic publishers in the digital era", *PLOS One*, Vol. 10 No. 6, available at: https://doi.org/10.1371/journal.pone.0127502
- Lamont, M, and Swidler, A. (2014), "Methodological pluralism and the possibilities and limits of interviewing." *Qualitative Sociology* Vol. 37 No. 2, pp. 153-171.

- Lamont, M. (2009), *How professors think: Inside the curious world of academic judgment,* Harvard University Press, Boston, MA.
- Lizardo, O., and Strand, M. (2010), "Skills, toolkits, contexts and institutions: *Clarifying the relationship between different approaches to cognition in cultural sociology.*" *Poetics* Vol. 38 No. 3, pp. 205-228.
- Lounsbury, M. (2008), "Institutional rationality and practice variation: New directions in the institutional analysis of practice", *Accounting, Organizations and Society*, Vol. 33 No. 4, pp. 349-361.
- Nabe, J., & Fowler, D. C. (2015), Leaving the "Big Deal... five years later", *The Serials Librarian*, Vol. 69 No. 1, pp. 20-28.
- Orlikowski, W. J. (2008) Sociomateriality: Challenging the separation of technology, work and organization. *The Academy of Management Annals* Vol. 2 No. 1, pp. 433-474.
- Orlikowski, W. J., & Scott, S. V. (2014). What happens when evaluation goes online? Exploring apparatuses of valuation in the travel sector. *Organization Science*, Vol. 25 No. 3, pp. 868-891.
- Osterloh, M. and Frey, B.S. (2015), Ranking Games. Evaluation Review, Vol. 39 No. 1, 102-129.
- Pollock, N. 2012. "Ranking devices: The socio-materiality of ratings." In Leonadri, P. Nardi, B., Kallinikos, J. (Eds). *Materiality and Organizing: Social Interactions in Technological World*. Oxford, UK: Oxford University Press, pp. 91-113.
- Schatzki, T. R. (2001), "Practice Theory." In Schatzki, T. R., Knorr-Cetina, K., and von Savigny, E. (Eds.) *The Practice Turn in Contemporary Theory*, Psychology Press, New York, NY, pp. 11-24.
- Seglen, P. O. (1994), "Causal relationship between article citedness and journal impact", *Journal of the American Society for Information Science*, Vol. 45 No.1, pp. 1-11.
- Shu, F., M, P., Haustein, S., Siler, K., Alperin, J. P., & Larivière, V. (2018), "Is it such a big deal? On the cost of journal use in the digital era." *College & Research Libraries Vol.* 79 No. 6, pp. 785-798.
- Strieb, Karla L., and Blixrud. C. J. (2013), "The state of large-publisher bundles in 2012." *Research Library Issues: A report from ARL, CNI, AND SPARC*, Retrieved from https://kb.osu.edu/bitstream/handle/1811/54955/1/RLI 282 Strieb Blixrud.pdf
- Swidler, A. (1986), "Culture in action: Symbols and strategies", *American Sociological Review*, Vol. 51 No. 2, pp. 273-286.

- Van Maanen, J. (1979). "Reclaiming qualitative methods for organizational research: A preface", *Administrative Science Quarterly*, Vol. 24, No. 4, pp. 520-526.
- Wolfe, D., Tafuri, N., Owen, N., Day, R., & Lesher, M. (2009), "Smoking out the big deal: Getting what you want without getting stung", *The Serials Librarian*, Vol. 56 No. 1-4, pp. 116-121.