

Unsorting Ourselves: A Critical Role for LIS Education. A Short Communication

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The way that information users select information and news sources is impacted upon by the way that information providers package their material. This packaging has the potential to reinforce already-held beliefs and diminish social diversity. A group of scholars convened at iConference 2016 in a session for interactive engagement to discuss how the iSchools could contribute to solving America's information silo problem.

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Introduction

Increasingly, Americans select information and news sources that reinforce already-held beliefs. This process, abetted by commercial information retrieval algorithms, results in groups of Americans that are segregated both geographically and ideologically and seldom interact with people who think and act differently from themselves. Bill Bishop (2008) documented the trend, which he called America's "Big Sort"—a now decades-old, national trend of cultural and political divisions. Academics and politicians continue to discuss and debate aspects of this phenomena (Abrams and Fiorina, 2012; Purdom, 2013; Sides, 2012). While this commentary is valuable, the evident informational nature of the issue calls for special consideration by library and information science researchers, practitioners and educators.

As information professionals, we explore and influence how people interact with information. We design, organize and provide access to information and technologies that support information interaction; as educators, we also prepare the information professionals of tomorrow. To the extent that the issues surrounding

the Big Sort involve both human information behavior and the nature of modern information systems, we are—for better or worse—implicated in the history and future of this issue. Have we, unwittingly, been working to reinforce the Big Sort status quo? This possibility appears more grave than ever as, in the United States and around the world, violent and impassioned conflicts have arisen between polarized and clashing worldviews.

Given the center-stage role that information and information technologies play in modern life, we as information professionals have the opportunity and responsibility to contribute our knowledge and talents to reverse this trend—and all the more, in light of the continued convergence of computer science and information science programs (CS/IS) at many iSchools. Indeed, recently an international scholar challenged computer and information scientists to develop ways to reverse this damaging trend (Torsella, 2015). How might this be done? A starting point, we think, would be to enact technologies and other means to help Americans access information that represents diverse worldviews.

A group of scholars convened at iConference 2016 in a session for interactive

engagement to discuss how the iSchools could contribute to solving America's information silo problem (Turner, Heidorn, and Rosenbaum, 2016). Though the group conceded that the problem is too big for the iSchools alone to solve, it was recognized that there are a number of concrete steps that can—and should—be taken, many of which revolve around education.

In this short communication, we summarize the most popular topics that were discussed at the iConference session and call on CS/IS educators to continue this discussion and move it forward. Here we offer but a springboard for considering how we as information professionals can apply our collective knowledge and scholarship to pressing social issues—namely, how the nature of information access and use can constitute cultural and national identities.

A Broader Understanding of “Information”

The first step in elucidating the role of CS/IS in undoing the Big Sort is fostering a broader understanding of what “information” is. In recent decades, science—and society in general—has privileged information that is quantifiable (Porter, 1996). Yet “big data” necessarily obfuscates the richness of “thick data” (Wang, 2013); and so numerical, massive conceptualizations of “information” cannot tell the whole story. In recent years, scholars have begun to explore the broader reaches of information. Some examples include: oral information, corporeal information, affective information and leisure information (respectively: Turner, Heidorn, and Rosenbaum, 2010; Lloyd, 2010; Nahl and Bilal, 2007; Hartel, 2010). This work demonstrates how information proliferates in all areas of social life. Still, it is in the hands of CS/IS educators to ensure that this understanding makes its way into the CS/IS and LIS curriculum, lest these aspects of information continue to operate incognito.

CS/IS Education for Undergraduates and K–12

Next, the session participants concluded that any solution to the sorting problem relies on the emerging generation of Americans. Thus the values of unsorting should be inherent in the educational curriculum at all age levels. Not least so that students appreciate that it happens and why.

LIS education has traditionally been postgraduate in the USA, but some iSchools—particularly CS/IS iSchools—are beginning to offer undergraduate programs. This is a welcome development for many reasons. For instance, growing recognition of the centrality of information in modern society begs information-literate college graduates; moreover, undergraduate education offers a way to prepare students for CS/IS careers, and to encourage them to embark on such. It also constitutes a funding source for the perpetuity of CS/IS departments. Given the importance of information literacy, however, CS/IS programs should rally for information-related required coursework, much in the way that many undergraduate programs require a studies in arts/literature, humanities, or statistics. Such coursework could include sociotechnical literacy regarding information visualizations, filter bubbles and the like, as well as issues dealing with information ethics. In this way, the next generation of programmers and users would be better attuned to the social values embedded, for instance, in something as seemingly innocuous as a Google search. This knowledge could inform the future development of such tools.

Beyond “mere” education, universities have a responsibility for encouraging students to engage with their communities, both during their courses and after graduation. A service learning model, already in practice at some universities, contributes to this end, and would dovetail well with the information-related undergraduate coursework described above. Undergraduate students could provide information

technology services and education, either through service learning or internships, to other community organizations, such as K–12 schools. This would be beneficial, as CS/IS education in K–12 is needed, but many K–12 teachers do not have the skills or bandwidth to incorporate it into the curriculum without assistance. And, importantly, such interfacing of undergraduates and K–12 students would simultaneously foster a spirit of collaboration between generations.

Diversifying the Next Generation

iConference session participants noted on-going criticism (Abrams and Fiorina, 2012) claiming no evidence substantiates Bishop's claims (2008) in part because technological proliferation minimizes the importance and influence of neighborhoods. This short communication emerges in recognition of such criticism and of research that presents insight into the essence of the sorting problem, a lack of diversity (Abramowitz, 2010; Mutz, 2006). In sum, these measures focus on diversifying the next generation: both conceptually, in terms of understanding "information," and socially, in terms of promoting interactions among people of different age groups and interests. While this discussion speaks to a problem of serious importance, the ideas for exploring solutions are well within reach. We encourage educators of all levels to seize the opportunity to explore the possibility of offering and expanding undergraduate education in CS/IS at their institution. Even without broad institutional support, any given CS/IS educator could institute, for example, a service learning extra credit opportunity in which MLIS students provide support—be it a lecture, a workshop or simple presence—to a community organization of their choosing. Change, in this way, may bubble upwards from below. Other possibilities are, surely, similarly low-hanging, and we welcome further consideration of ideas for unsorting ourselves. Even if real

change rests with the next generation, it is the prerogative of the current generation to usher it in.

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