



Selected Papers of AoIR 2016:
The 17th Annual Conference of the
Association of Internet Researchers
Berlin, Germany / 5-8 October 2016

DIGITAL SCHOLARSHIP AND THE SOCIAL NETWORKING SITE: HOW ACADEMICS CONCEPTUALISE THEIR NETWORKS ON ACADEMIC SOCIAL NETWORKING SITES AND TWITTER

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Background

Academic social networking sites (SNS) seek to bring the benefits of online networking to an explicitly academic audience. Currently, the two most popular sites are Academia.edu and ResearchGate (Van Noorden, 2014). The ability to make connections to others is a defining affordance of SNS (Ellison & boyd, 2013); but what are the characteristics of the network structures being facilitated by academic SNS, and how does this relate to their professional use by academics? While the network structure is a fundamental characteristic of the platforms, it will have implications for the types of interactions the platforms support.

An earlier phase of the project examined the structure of academics' ego-networks on academic SNS and Twitter. Academic SNS networks were smaller and more highly clustered; Twitter networks were larger and more diffuse (Jordan, forthcoming). Trends in network structure were identified according to job position and discipline. However, there is a limit to the level of inference that can be made from network structures alone. To gain insight and understanding into the reasons why the trends in network structure came to be, and the role that the networks play in individuals' academic practice, co-interpretive interviews were held with a sample of participants. This paper will outline the results of the interviews.

Method

This study has used a mixed methods social network analysis approach (Dominguez & Hollstein, 2014). Co-interpretive interviews were held with 18 participants, sampled from a pool of 55 academics involved in the preceding network analysis phase (Jordan, 2016). The sample was created using a purposive sampling approach, stratified to include participants across four job positions and three disciplinary areas. For each participant, two ego-networks were collected, from contrasting platforms; either

Suggested Citation (APA): Jordan, K. (2016, October 5-8). Digital scholarship and the social networking site: How academics conceptualise their networks on academic social networking sites and Twitter. Paper presented at AoIR 2016: The 17th Annual Meeting of the Association of Internet Researchers. Berlin, Germany: AoIR. Retrieved from <http://spir.aoir.org>.

Academia.edu or ResearchGate.net (as an academic SNS, depending on which site they primarily use), and Twitter. The networks were visualized and analysed using Gephi; interactive versions of the networks were created with the sigma.js plugin and shared with participants. Interviews took place via Skype with interactive versions of their networks via screen sharing, to gain insight into the meaning of the network structures and how they were created from the participants' point-of-view (Molina, Maya-Jariego & McCarty, 2014). The interview data were analysed in two ways. First, to annotate the network structures in order to understand the participants' relationships with communities and connections in the networks; and second, qualitative analysis (using a grounded theory approach; Strauss & Corbin, 1998) identified themes in the discussions about why the structures were perceived to have developed in the ways observed.

Results and discussion

Annotating the networks revealed that in academics' ego-networks, communities are more frequently defined by institutions and research interests on academic SNS, compared to research interests and personal interests on Twitter (figure 1).

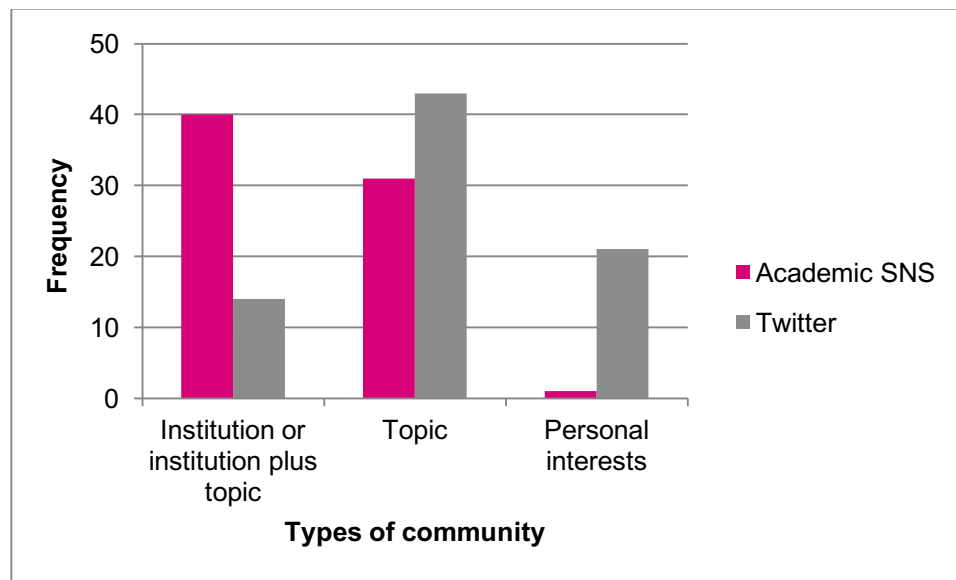


Figure 1: Frequency of different types of community on each platform.

Network analysis showed that the structure of academics' ego-networks differs according to platform (Jordan, forthcoming); discussing the structures with participants uncovered reasons behind the structural differences. Networks on academic SNS are built primarily on the basis of replicating existing professional connections, being defined by pre-existing affiliations with institutions and research groups. Twitter both reinforces existing professional relationships, through a mix of professional and personal interactions, and also fosters novel connections. This confirms that both bridging and bonding social capital are fostered by Twitter networks, as the structure suggested (Jordan, 2016). The finding that academic SNS largely replicate existing

working relationships resonates with conceptualisations of self through SNS as 'public displays of connection' (Donath & boyd, 2004) or 'relational self-portraits' (Hogan & Wellman, 2014). In contrast to these concepts, the interviews place strong emphasis on existing relationships as connections rather than imagining a future academic self.

Participants accounted for structural differences in their ego-nets through differences in how they conceptualise the roles of different platforms in relation to their professional life. Academic SNS are regarded as a more formal academic identity, akin to a business card, or as a personal repository. Twitter is viewed as a space where personal and professional are mixed, similar to a conference coffee break. Expectations of authenticity and negotiating the balance between mixing and dividing the personal and private on Twitter reflect concepts of 'context collapse' and 'microcelebrity' (boyd, 2011; Marwick, 2010). In the context of Twitter, the interviews showed that the academics in this study are aware of these issues, and have developed strategies for negotiating them. It is also notable that these issues were absent from discussions on academic SNS.

Furthermore, a number of ways in which interacting with SNS modulates the role of academics in relation to the formal institution were identified. These included: circumventing institutional constraints; extending academic space; finding a niche; promotion and impact; and academic freedom. Different pressures are active at different career stages, although differences according to discipline were not as pronounced. The lack of clear divisions along disciplinary lines may support the idea that digital scholarly practices represent a new academic paradigm and open practitioners have more in common with each other than their 'home' discipline (Weller, 2014).

The findings provide insight into the nuanced relationship between one professional setting – academia – and SNS. By considering two of the main types of platform, the differences between them are thrown into sharp contrast. Exploring the different roles that seemingly quite similar sites can play is useful for academics who do not currently use sites in their academic practice. The contrasts between academic SNS and Twitter also question the utility of studies addressing academics' use of social media as a homogenous whole, when individual tools can have different roles and social norms.

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