Networked publics: investigating the bounds of personal and professional selves presented by academics through social media platforms

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Executive summary

Academics are increasingly using social media in their professional lives. Social network sites (SNS) have the potential to support a range of scholarly practices through connection to others, from personal network building to enhanced research impact. Expressions of identity online are a fundamental part of using SNS, while different platforms may have contrasting customs and expectations despite being technically similar. Previous studies have suggested that academics conceptualise their online identities along a spectrum from 'personal' to 'professional' selves, which may comprise clusters of 'identity fragments'. The first goal of the project was to map how personal to professional identities are mediated by a selection of the most frequently used SNS. The findings support the personal to professional continuum, and suggest that a single identity fragment may span more than one platform. The fragments are characterized by contrasting platforms, perceived audiences, and information sharing. Qualitative analysis of examples of interactions experienced by participants which they consider to be illustrative of research impact through social media show that the majority of examples extend traditional academic outputs or benefit an academic audiences rather than novel engagement with non-academic audiences. However, the prevalence of different types of perceived impacts differs according to platform, with novel engagement being more frequently associated with blogs and Twitter.

Project aims and objectives

Academics are increasingly encouraged to use social media as part of their professional lives. Social media represents one facet of Digital Scholarship (Weller, 2011). However, the use of social media by academics varies and carries concerns as well as benefits (Jordan & Weller, 2018). This is an important area for further research to allow academics to make informed decisions about how and why to incorporate social media into their practice.

Social media is a broad term and encompasses a range of platforms. Networked Participatory Scholarship refers to the particular benefits of social networking online for academics (Veletsianos & Kimmons, 2012). As such, social network sites (SNS) represent a type of social media which may be highly beneficial to academics. The requirement for profiles on SNS particularly necessitates presentation of the self online. However, while technically similar, different SNS platforms may have contrasting roles and customs (Jordan, 2017; Veletsianos & Shaw, 2018). This project has sought to clarify how academic identity is refracted through different major SNS, by exploring what types of information academics are willing to share and their perceptions about audiences and high impact interactions online.

Veletsianos and Kimmons propose that academics present different 'acceptable identity fragments' (AIFs) through different parts of their online social interactions (Kimmons & Veletsianos, 2014). However, the concept of AIFs requires further clarification; for example, it is not clear at what scale AIFs operate and how they are presented across multiple platforms. Findings from a previous interview-based study included a model suggesting that different SNS sit at different clusters (which may represent AIFs) within a spectrum from personal to professional identity (Figure 1) (Jordan, 2017). The first goal of the project was to test the model shown in Figure 1 by asking academics about the types of information that they would consider posting through major SNS.

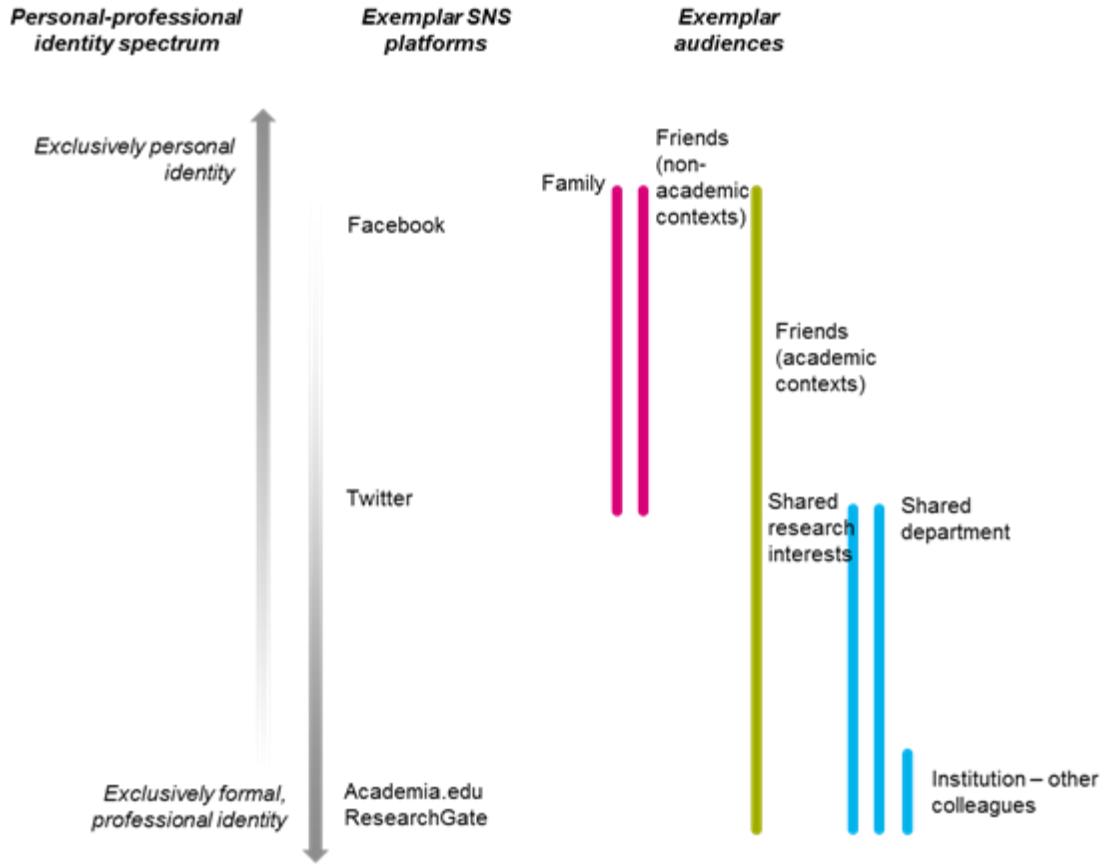

Figure 1. Emergent personal-professional online academic identity spectrum (Jordan, 2017).

The link between platforms, identity and perceived audiences is of particular relevance for academics, as social media adoption may be encouraged as a way of enhancing public engagement and research impact. The 'networked publics' (boyd, 2011) that result from the merging of identity and audiences through social media require elaboration to understand their role in academia, and their affordances in this context. The second goal was therefore to explore the different and nuanced forms of research impact that academics experience through social media platforms.

Research questions

1. How are academics' acceptable identity fragments mediated by different platforms?
2. What do academics perceive to be indicative of significant impact of their research through the networked publics of social media platforms?

Outline of methodology and project timetable

Data collection took place via an online survey. As the project goals contained both confirmatory and exploratory elements, the survey was designed with multiple sections and both quantitative and qualitative elements to address this. The survey was designed and executed using Bristol Online Surveys and comprised three main sections. First, demographic information about the participants; second, an inventory of statements; and third, free-text response questions. It was active during April and May 2018 and completed by 198 participants.

The first research question was addressed through the second part of the survey, which contained 32 statements about information participants would include in their profiles or posts, information they might seek or discussion topics, and perceived audiences at different social platforms. The inventory drew upon existing interview studies (Jordan, 2017; Veletsianos & Shaw, 2018) or larger single-platform datasets (Jordan, 2015; Veletsianos, 2011). For each statement, participants were asked to indicate to which the statement applied from a list of eight major platforms (A blog, Academia.edu, Facebook, Google+, Instagram, LinkedIn, ResearchGate, Twitter). The data were then converted to a network graph, by conceptualising an item and whether it is shared on a particular site as a connection (or 'edge'). Edges were weighted as a percentage of the total number of participants who used each site, and the network imported into social network analysis software (Gephi) and rendered using the Force Atlas 2 algorithm (Jacomy et al., 2014). A community detection algorithm (Blondel et al., 2008) was applied in order to determine clusters within the network.

The third part of the survey provided data for the second research question. Participants were invited to give up to three free text responses of examples fulfilling the following brief: "describe any activities or interactions which have taken place through social media that you personally consider to be examples of valuable research impact". 238 examples were submitted by 107 participants. Examples were imported into nVivo for analysis, using an open coding approach. Six themes were identified. To assess the accuracy of the analysis, a subsample of 50 examples drawn at random

were coded by a second coder. This gave an average Cohen's Kappa value of 0.917, indicating near perfect agreement (Cohen, 1960; Landis & Koch, 1977).

Project timetable

2017	August to October	Literature review updated Draft survey developed Application to research ethics committee
	November	Ethical approval granted Project suspended for maternity leave
2018	March	Project resumed Survey pilot tested and revised in light of feedback
	April to May	Survey active
	June to July	Network analysis (research question 1)
	August to October	Qualitative analysis (research question 2)
	November to December	Writing up and dissemination strategy

Analysis of results

The overall network of platforms and survey items is shown in Figure 2. Note that only platforms are labelled here, for clarity; each cluster will be shown in detail subsequently. Three clusters were identified and the nodes and edges are colour-coded to reflect the clusters (pink, green and blue).

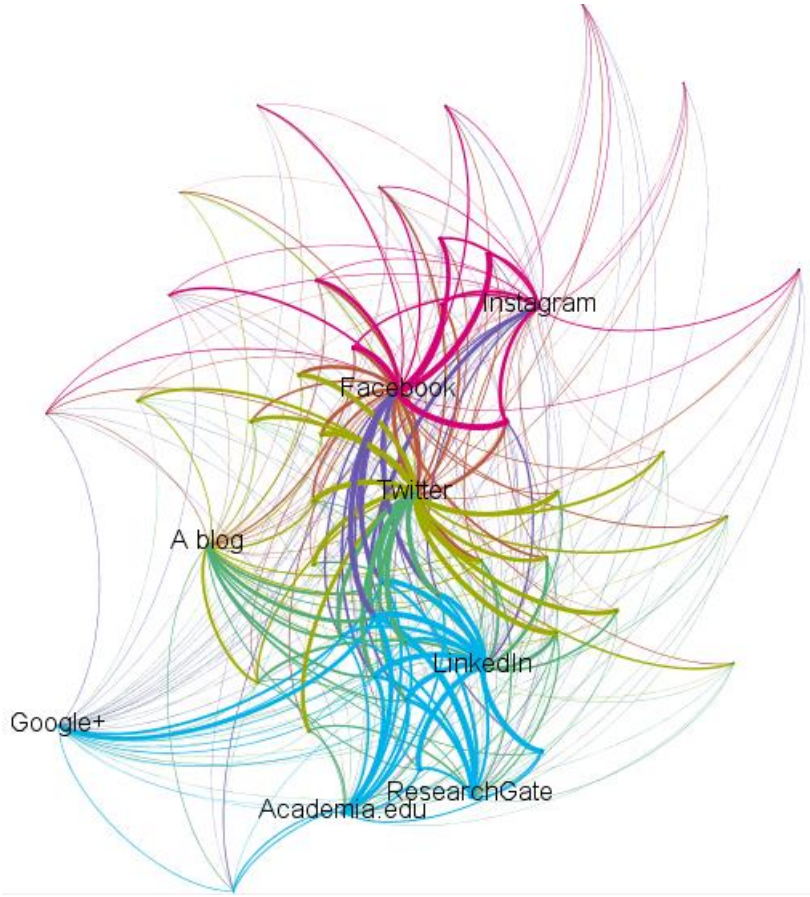

Figure 2: Network of connections between the inventory of information types and audiences and the platforms that academics associate those items with.

The three clusters within the graph, identified by the community detection algorithm, align well with the hypothesised groups between personal and professional identities shown in Figure 1. The network therefore provides confirmatory evidence for the model, and provides further detail and characterisation of identity fragments expressed by academics across the selected platforms. At the top of the graph, the first cluster represents a primarily personal identity fragment (Figure 3). Facebook and Instagram are the platforms associated with this cluster, while friends and family are the most closely associated audiences. In contrast, the blue cluster represents a primarily professional identity fragment (Figure 4), enacted through professional networking sites, and associated with academics as an audience.

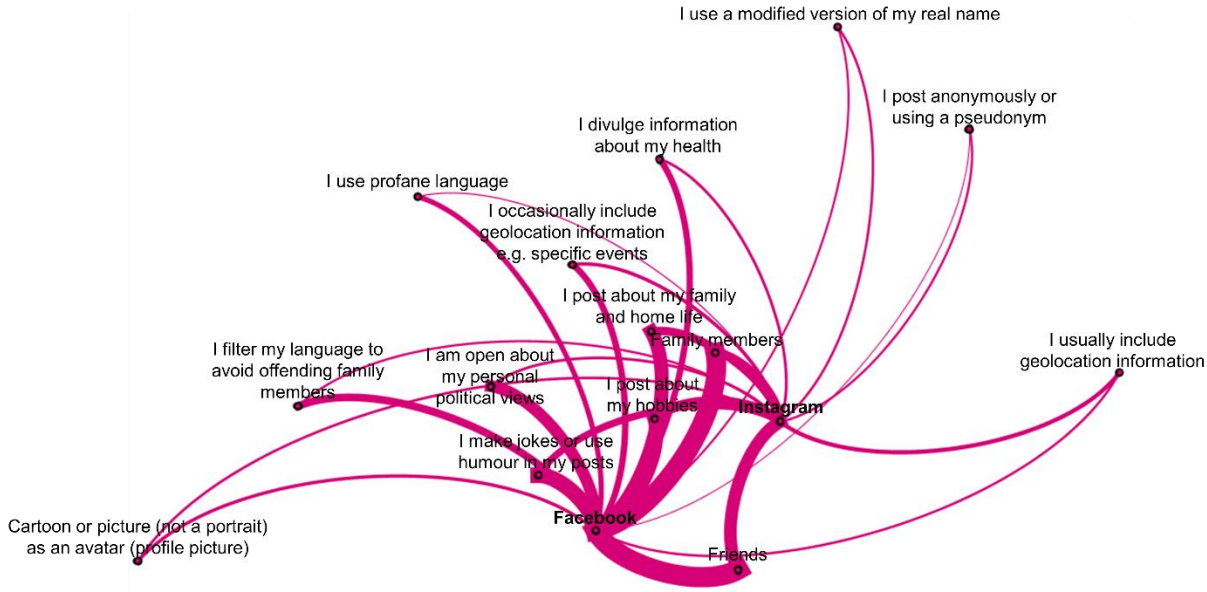

Figure 3: Survey items and platforms associated with the top cluster, representing primarily personal aspects of identity.

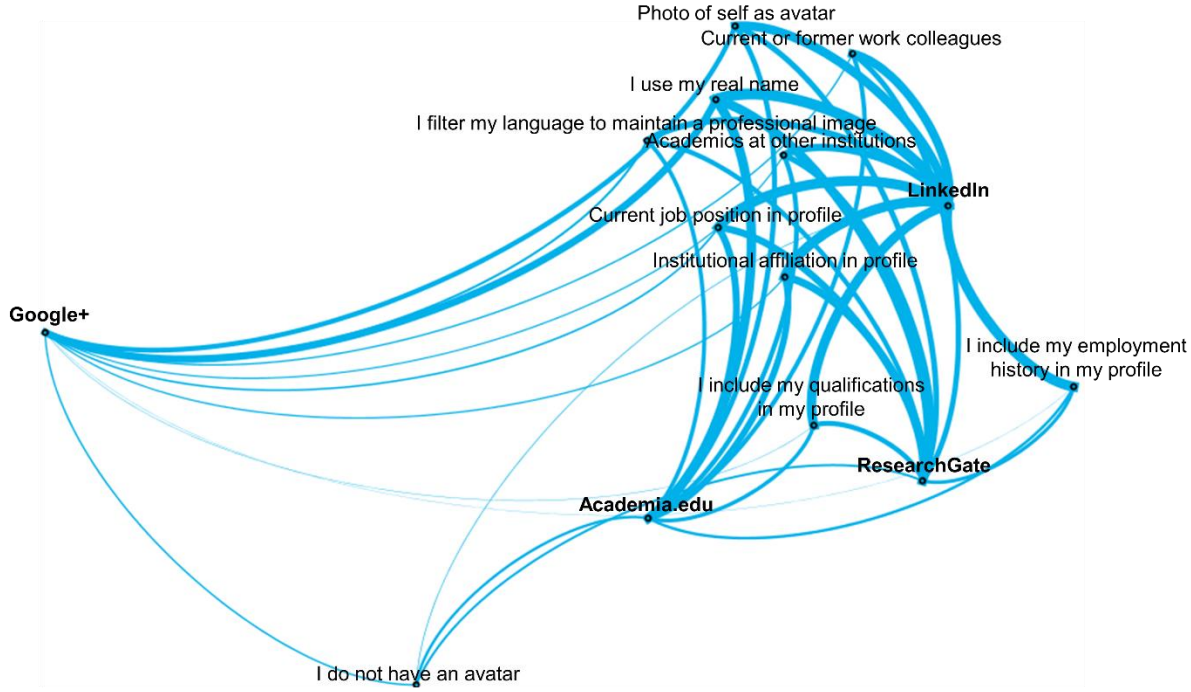

Figure 4: Survey items and platforms associated with the bottom cluster, representing primarily professional aspects of identity.

The third cluster (green; Figure 5) sits in the centre of the graph and acts as a bridge between the personal and professional identity fragments. Blogging and microblogging (Twitter) underpin this fragment, which is the richest cluster for active discussion and engagement with a range of different audiences.

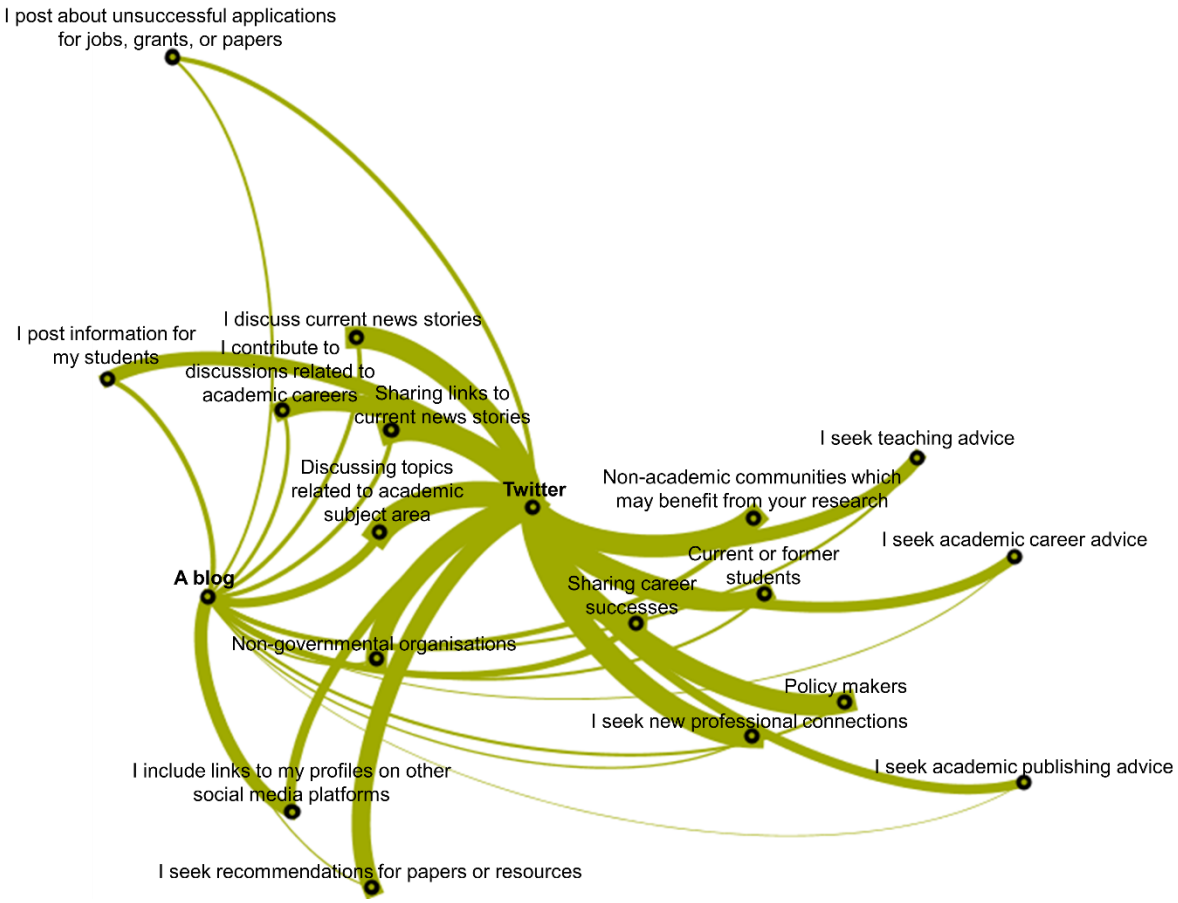

Figure 5: Survey items and platforms associated with the middle cluster, representing the intersection of personal and professional aspects of identity.

The emergent coding scheme derived from the free-text responses comprised six themes. The themes are distinguished from each other by a combination of different types of impact, and beneficiaries:

New opportunities (45)

Social media as a mechanism for individual academics to find out about traditional academic opportunities, such as speaking, writing and funding opportunities. Self and other academics as main beneficiaries.

Amplified dissemination (53)

Traditional dissemination models (academic publications and conferences) have the potential to reach a larger audience through social media. Primarily academic beneficiaries (through perceived wider reach) although potential for other unknown audiences.

Knowledge transfer (58)

Less formal exchange of ideas and resources but still between primarily academic participants. For example, keeping up-to-date with their research area, discussing their topic, sharing teaching materials and requests to access papers.

Developing self (81)

Ways in which the individual academic and their career development is the main beneficiary, such as network building, getting support from the community, and career opportunities.

Novel engagement (49)

Examples of engagement in novel ways or with non-academic audiences through social media. Includes using social media as a research data source, engagement with non-academics, and scholar-activism.

Proof of impact (17)

Instances where social media is explicitly identified as a source of ‘evidence’ to illustrate impact to institutions or funding bodies.

The relative prevalence of different themes according to platform is shown (for platforms where n>10) in Figure 6.

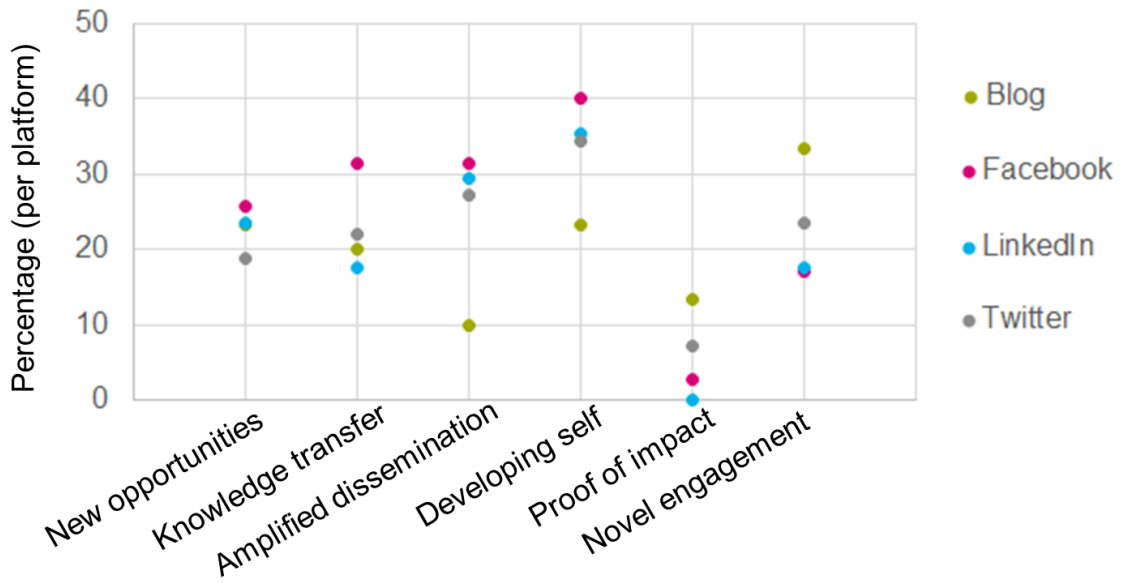

Figure 6: Percentage of items per platform categorised according to each of the six themes.

Project conclusions and outcomes

In relation to the first research question, the results help to clarify the nature of academic identity online and the extent to which academics' identity fragments are defined by particular facets of identity, or different SNS. The network suggests that several platforms may be used to express the same identity fragment, and supports the concept of fragments being defined by varying degrees of personal to professional identities. The three communities have contrasting ways in which the self is presented, uses, and audiences.

Analysis of the free-text responses addressed the second research question. Six themes were identified in participants' examples of perceived high research impact interactions they had experienced through social media. The majority of examples and themes relate to traditional academic impacts but on a larger scale, for example such as wider dissemination of journal articles, or being invited to present at conferences. Social and economic impacts or engagement with non-academic audiences represent a minority of the examples given, and the prevalence of different themes differs according to platform. The findings underscore how social media for academics

encompasses a wide and nuanced range of platforms and practices, and have practical implications for academics wishing to develop their online profile and engage with social media and the types of research impact that can be achieved.

Summary of next steps planned

The project has been presented at the following conferences:

- Computers and Learning Research Group Conference (Open University, June 2018);
- 9th International Conference on Social Media & Society (Copenhagen, July 2018);
- SRHE Newer Researchers and main conferences (Newport, December 2018);
- Capitalism, Social Science and the Platform University (Cambridge, December 2018).

I will sit on the Program Committee for the 2019 Social Media & Society Conference, and present at a SRHE Digital University network event in Belfast in February 2019. Two journal papers based on the project are currently being prepared for submission.

Further project proposals have been developed in order to build upon the work by examining the relationship between social media and formal academia through recent Higher Education hashtag movements, and analysis of the ways in which social media was used in the 2014 REF impact case studies.

Acknowledgments

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