

Competitive exposure and existential recognition: Visibility and legitimacy on academic social networking sites

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Abstract

Over the past decade, academic social networking sites, such as ResearchGate and Academia.edu, have become a common tool in academia for accessing publications and displaying metrics for research evaluation and self-monitoring. In this conceptual article, we discuss how these academic social networking sites, as devices of evaluation that build on both traditional values, objects, and metrics in academic publishing and on social media logics and algorithmic metrics, come to fulfil a need in the current academic (publishing) ecosystem. We approach this issue by identifying key affordances that arise in the interaction between platform and user. We then position these affordances in relation to potential needs of academics in today's publishing landscape by drawing on Hafermalz's metaphor of the 'fear of exile', which provides an alternative way of understanding the importance of visibility in the networked world, as a combination of *competitive exposure* and *existential recognition*. We end by considering the grounds on which the platforms may be attributed some level of legitimacy. This is done in order to understand the inherent contradiction between the broad use of the platforms and the fact that their integrity has been questioned repeatedly. We seek an answer to a legitimacy for the platforms in the fact that a pragmatic, mutual benefit exists between them and the research community; a benefit that is enhanced by the audit society influencing current academia.

Key words: academic social networking sites; devices of evaluation; affordances; legitimacy; fear of exile; metrics

1. Introduction

Parallel to the rise of social networking sites in society, specialized networking platforms targeted at academics have developed, such as *ResearchGate* and *Academia.edu*. The sites are simultaneously a place for academics to showcase their work, to build networks, and to compare themselves with others—something encouraged by the platforms' marketing models (Hammarfelt, de Rijcke and Rushforth 2016; Duffy and Pooley 2017; Delfanti 2021). The platforms are also used by others, such as colleagues, university management, and future employers, to evaluate researchers (Nández and Borrego 2013; Greifeneder et al. 2018; Jordan 2019a; Radford et al. 2020). Furthermore, the platforms collect large amounts of data from the users; data that in turn form the basis for feeding information back to users and to third parties (Komljenovic 2019; Fourcade and Klutetz 2020). As on general social networks, the researcher will

maintain a profile on the platform, where they will be encouraged to upload metadata about or full-text versions of publications and other academic achievements. These lists of achievements and publications are combined with the possibility to follow and—to some extent—interact with other researchers. On the academic social networking profiles, the publication becomes a node which combines the values and valuations of the traditional academic system with the logic of social media, especially the algorithmic use of agents' interactions with content and with each other.

The most important and apparent content on the researcher profiles on these platforms is thus lists of publications and other academic output, such as pre-prints, presentations, and projects. In this article, we will take a point of departure in two platforms (*ResearchGate* and *Academia.edu*) with a particular interest in how the platforms, through the lists of publications, utilize the ways in

work; an activity that is encouraged by the platforms through various functions. Applying, on the other hand, indicates a deeper level of engagement in the form of comments, discussions, and messages. Notably, many of these activities are automated on the platforms, as researchers to follow and publications to recommend or comment on are suggested through algorithms. Moreover, the platforms encourage deeper levels of engagement, for example by suggesting that you motivate to the author why you downloaded a specific publication. The overarching goal is thus to get users to spend more time on and add more material to the platforms, in order to attract more users and in turn make the platforms more attractive to advertisers. In achieving this goal, the services draw both on publications and metadata provided by users, and on already established infrastructures, journals, and publishers when forming connections between entities on the sites.

As noted by [Duffy and Pooley \(2017\)](#), the platforms adhere to core conventions of how social media platforms are structured. ResearchGate and Academia.edu both feature profile pictures, curated news feeds, lists of followers, and ways of recommending, sharing and 'liking'. A difference compared to social and professional networks like Facebook and LinkedIn is that connections do not need to be reciprocal. Hence, you have the option to 'follow' a researcher who does not 'follow' you back. One can also access profiles without being a member of the platforms, although downloading publications requires a login. However, what really distinguishes the platforms is the extensive emphasis on various metrics. As expressed by [Duffy and Pooley \(2017: 6\)](#), emphasis in original) in their analysis of Academia.edu, 'the news feed and the profile page [...] are plastered with *numbers*, some of them algorithmically generated. The point, in the site's profusion of figures, is to quantify the gauziest of academic qualities: influence'. In order to 'measure' influence, Academia.edu and ResearchGate make use of already established ways of assessing research, which are incorporated into their own systems of rating and appraising. Moreover, in order to motivate users to add content and engage with others through the platforms, features such as 'ratings' and 'achievements' are used. For example, the user might be notified when one of their publications has reached a certain number of users: 'Great job, Your article reached 700 reads!' Users' engagement with the platform contributes to platform-specific metrics such as ResearchGate's RG score, thus marrying 'social media metrics [with] academic measures of quality' ([Komljenovic 2019: 159](#); see also [Orduna-Malea et al. 2017](#)). Scoreboards, ratings, metrics, and achievements are all examples of how these platforms contribute to a 'gamification' of research. Gamification, in short, suggests that features from games are used in contexts which are not in themselves oriented toward leisure or play ([Raczkowski 2014](#)). Gamification can motivate by providing instant feedback to the individual scholar, and for some it might even provide a sense of meaning. However, gamification in the context of academic research is often discussed in terms of unwanted goal displacement (doing what counts instead of doing good) and it might lead to unsustainable or even unethical behaviour ([Hammarfelt, de Rijcke and Rushforth 2016](#)).

Through these various functions, the academic social networking sites can be said to build on and remediate earlier infrastructures in various ways. In providing lists of publications and full-text documents they build on bibliographic databases, such as library catalogues, and on full-text databases. They share the paywall-free accessibility to bibliographic records and full-texts with institutional or subject repositories. However, to an even larger extent than the

repositories, they are unpredictable in what posts they include. The lists of both publications and other types of 'bibliographic information' ([Kaltenbrunner and de Rijcke 2019](#)) also remediate the researcher CV, in that they provide information which can be used to assess the researcher's career and productivity. In fact, the profiles on the platforms sometimes act as full-fledged CVs with information on past employers, competencies, languages spoken, etc. Furthermore, ResearchGate to some degree provides competition to citation indexes through its inclusion of citations and metrics built on citations. Thus the platforms build on and make use of the established academic publishing system in several ways while at the same time combining these traditional genres with a social media logic based on accessing, appraising, and applying both documents and agents (researchers). In the remediation described above, the social media logics of networking and quantifying activities in the form of altmetrics can be said to recontextualize ([Bolter and Grusin 2000](#)) traditional devices of evaluation.

3. Visualizing academic worth through capitalizing on platform affordances

Studies of what motivates researchers to create and maintain a profile on academic social networking sites have shown that the platforms fulfil at least four different needs: they allow the researcher to make their publications (and possibly other work) visible and to promote them, sometimes to a larger audience than through other means; they provide networking opportunities and, to some, the sense of belonging to a community; they enable the researcher to monitor news and updates or to find information; and they can both increase impact and help the researcher display that impact to evaluators in different situations (e.g. [Nicholas et al. 2014](#); [Van Noorden 2014](#); [Meishar-Tal and Pieterse 2017](#); [Greifeneder et al. 2018](#); [Jordan and Weller 2018](#); [Kjellberg and Haider 2019](#); [Jordan 2019a](#)). These features contribute to making the platforms attractive to researchers in an increasingly complex academic landscape, in which researchers often are employed at many different institutions during their career. A profile at an academic social networking site might then provide a stable 'home' for the nomadic academic. Furthermore, the platforms allow researchers to increase their visibility to colleagues, employers, and other stakeholders in research and society. This is perceived to be of increasing importance in an academic system where both individuals and organizations are expected to build name recognition and a strong metric track record.

One way of approaching the relation between the possibilities for action offered by the platforms and how researchers perceive their usefulness is through the concept of *affordances*. A number of studies have developed this concept (originally from [Gibson 1986](#)) to discuss the intersection of how social media allow users to act and how these possibilities are perceived and acted upon (e.g. [boyd 2011](#); [Treem and Leonardi 2013](#); [Bucher and Helmond 2017](#); [Mansour 2021](#)). These studies generally emphasize the relational character of this potential interaction between people and technology or material thing ([Treem and Leonardi 2013: 146](#)). [Bucher and Helmond \(2017\)](#) suggest an even more symmetrical understanding of affordances in relation to social media, pointing out that the platforms may afford changes to people's actions, but that people's actions may also afford changes to the platform's technologies. In terms of academic social networking sites, one way in which the latter takes place is how researchers' interactions on the platform

between extensive use and lack of credibility? If a claim to legitimacy can be made for the platforms as tools for dissemination of publications, for self-promotion, and as tools for comparison and evaluation, it is drawn from the pragmatic, mutual benefit that arises between the platforms and the research community. A pragmatic view of legitimacy occurs when considering legitimacy as something that is attributed to an entity when there is an interdependence between it and a community in that the community can benefit from the entity (Suchman 1995: 578). In this case, legitimacy could be argued to stem from the platforms' capacity as socio-technical infrastructure as well as commercial product. Relevant benefits to the academic community as well as the individual researcher have been illustrated above in terms of affordances and tools for visibility, and include:

1. the *visibility* that the platforms offer for both researchers and their publications (driven by the platforms' business models), including promises of free access to publications;
2. the *usability* (ease of use), including the possibility to upload pre-prints or even published versions of publications (Jordan 2019a);
3. the *computability* that allows the researcher and evaluator to view metrics such as readers, downloads, and citations;
4. the *comparability* that allows both temporal comparisons of metrics and the comparison with colleagues (Andersen and Lomborg 2020). The latter two affordances are both encouraged by the platforms' gamification design (Hammarfelt, de Rijcke and Rushforth 2016) and, not least, by the academic system's reliance on worth as evaluated in terms of metrics and indicators.
5. Finally, the platforms' visualizations of *associations* contribute to a sense of being part of a community—of *existential recognition*—in a distributed work environment and connected world of scholars that for many may be accompanied by a 'fear of exile'.

The above-mentioned benefits can be said to contribute to needs experienced by researchers regarding both *competitive exposure* and *existential recognition*. Moreover, the popularity and legitimacy of these platforms are dependent on a research community that is increasingly employing judgment devices to compare and evaluate its own members. While the pragmatic legitimacy draws heavily on established and recognized genres and publishers, not least on the peer reviewed journal article, which Borgman (2007: 66) has identified as ‘the fixed point’ where legitimization occurs in scholarly communication, one could even argue that it supports Delfanti’s claim that ‘Academic social media [...] obliterate any “fixed point” other than the production of scholarly objects that can be dated and then valued algorithmically’ (Delfanti 2021: 7).

6. Conclusion

The popularity of academic social networking sites indicates that these platforms have come to fulfil a need in the academic (publishing) ecosystem. We have argued above that the platforms draw heavily on the legitimacy and importance associated in academia with peer-reviewed publications, indicators that have become institutionalized, such as number of publications and citations or the JIF, and employment at reputable institutions. By drawing on these accepted indicators of worth in the research community, profiles on academic social networking sites serve not only to display researchers' worth, but also to build it by attracting readers of their work and, as a

consequence, potential future citations. Thus, the platforms become part of a cyclic movement with already established and more respectable devices of evaluation, such as the citation indices.

However, the academic social networking sites can be said to transform such bibliographic and bibliometric devices through its use of social media logics and algorithms. The ways in which the platforms, in particular ResearchGate, afford associations between platform users contribute, we have argued, to their supporting not only *competitive exposure* (which includes being able to compare oneself and be compared to others), but also *existential recognition* through which researchers can stay connected to others in their field, both known and unknown others. At the same time, the associations seem to be primarily superficial and oriented towards the dissemination of publications and on the equivalents of 'likes' (Van Noorden 2014; Franke 2019). Another element of social media logic that characterizes the academic social networking sites, and that differentiates the sites from many other devices of evaluation, is the fact that they build on user-generated content; on publications, biobibliographic information, and associations willingly provided by the researcher, although sometimes through prompting from the platforms. Any academic librarian or university middle-manager will attest to the difficulties of getting all faculty members to volunteer information about their publications to the Current Research Information System or publication database at the end of the year. Yet a large number of researchers eagerly upload their publications to their academic social networking profile as soon as they have been published. Similarly to such subject repositories as arXiv, which provides exceptional visibility to researchers in some disciplines, the visibility offered on the platforms and amplified by their broadcasting affordance bring exposure to the researcher's work and the worth it represents. The broadcasting draws heavily on the platforms' algorithms and their aggressive marketing to the platform members.

Our interpretation is that the extensive use of academic social networking sites is due to their being attributed a certain legitimacy by large parts of the research community. This legitimacy is, however, pragmatic and grounded in mutual benefit. Researchers draw on the visibility, computability, and comparability of the platforms to self-monitor their performance as authors and to take some control over how they are represented and assessed (Hammarfelt, de Rijcke and Rushforth 2016). As reviewers, managers, and potential collaborators or competitors, they draw on the accessibility of the platforms to compare and evaluate other researchers. The platforms thus form part of a culture of mutual evaluation. Alongside this pragmatic legitimacy, the value of the platforms is clearly contested, and the popularity of the platforms, for instance, is associated with, and sometimes seen to enhance, notions of a neoliberal academia inhabited by researchers that act as entrepreneurs of themselves (Gill and Donaghue 2016; Duffy and Pooley 2017). Moreover, it has been argued that these platforms value speed, numbers, and visibility over more in-depth conversations and critical evaluations (Djonov and Van Leeuwen 2018), thus contributing to what are often considered as the negative aspects of evaluation. Whether one focuses on the benefits or downsides of academic social networking sites, the metrics generated and visualized through their various affordances contribute to the performance of both individual researchers and the academic ecosystem. In this way, the sites largely build on, remediate, and sometimes even strengthen, already established ways to categorize, organize, disseminate, and evaluate research.

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