

Fathoming the Potential of Science-Prone Social Networks: On *ResearchGate*, *Academia.edu*, and *Mendeley*

1. Introduction

Hardly a day goes by without some media outlet commenting on the latest news regarding social networking. At least in the Western world, these reports predominantly revolve around a few big players, that being first and foremost Facebook, LinkedIn, and, more recently, Google+. In contrast, what seems far less visible to the public eye is that there exist quite a number of fairly specialized offerings that allow people to group not so much around the idea of friendship, kinship, business, or fellowship, but with respect to certain topics of interest. For example, while *BakeSpace*¹ is intended as a social networking platform for cooking enthusiasts, and *PatientsLikeMe*² seeks to bring together people that suffer from life-changing health conditions, *Busuu*³ hopes to succeed as a highly networked learning environment. The paper at hand, however, will focus on a quite different branch of specialized social network sites, namely those that have been created in particular for academic purposes, allowing scientists to connect, communicate, and share data. The genesis of these networks can be told as follows:

It was in between the years 2008 and 2009 when the digital valley behemoth *TechCrunch* first featured a series of articles^{4 5 6} covering the launch of a few startups that all sought to contribute to research by providing scientists with capable platforms that were meant to facilitate the exchange and cooperation within, and possibly across, various disciplines. Amongst the most promising of these academia-prone services were *ResearchGate*⁷, *Academia.edu*⁸, and *Mendeley*⁹, three services that to date still reside amongst the most popular science-related social networks. Yet, despite a sustained growth

¹ see <http://www.bakespace.com/>

² see <http://www.patientslikeme.com/>

³ see <http://www.busuu.com/>

⁴ Kincai, Jason (TechCrunch). *Academia.edu: A Geni For Researchers*, online available at: <http://goo.gl/va5L4> (shortened link).

⁵ Rao, Leena (TechCrunch). *Professional Network ResearchGATE Is A LinkedIn For Scientists*, online available at: <http://goo.gl/V30FD> (s.l.).

⁶ Wauters, Robin (TechCrunch). *Mendeley Snags \$2 Million in Early-Stage Funding for Research Paper Management Tool*, online available at: <http://goo.gl/FSZ9D> (s.l.).

⁷ see <http://www.researchgate.net/>

⁸ see <http://www.academia.edu/>

⁹ see <http://www.mendeley.com/>

in user numbers and occasional recognition in general-interest papers^{10 11 12}, up until now, none of the services seems to be able to live up to its assumed potential. As Nentwich and König (2011) have put it:

"Our observations and the available studies point towards certain tendencies: While the usage of SNS [Social Network Sites, G.R.] within academia seems to grow, it still cannot be considered as widespread or well-established."¹³

Even so, recent growth numbers give cause for some cautious optimism as *ResearchGate* has registered a plus of 70 percent in unique visits over the course of the last year in the US (now 101,568 unique visitors a month in the US), *Academia.edu* a plus of 151 percent (209,738), and *Mendeley*, now by far the largest of the networks in terms of unique visitors in the US, even a plus of 610 percent (277,490). Therewith, all of the mentioned networks clearly outperform direct competitors such as *Sciencestage.com* (26,998) or *Epernicus* (1,062).¹⁴ From a global perspective the balance of power seems to be distributed somewhat differently: According to *Alexia's* current traffic rank *Academia.edu* is by far the most popular and most linked of the three services (global traffic rank: 4,134; 19,074 sites linking in), followed by *Mendeley* (8,666; 4,260) and *ResearchGate* (14,460; 2,262).¹⁵ That said, all of the three science networks show strong growth over the course of the last year. Thus, even though the overall dissemination of the platforms still seems expandable, there appears to be some strong indication that roughly three years after launch none of these platforms have lost their momentum.

Following, the paper at hand intends to take this upward trend as an incentive to explore the qualities of the three social networks mentioned above, in an attempt to assess their

¹⁰ Hopkins, Curt (New York Times via ReadWriteWeb). *Mendeley Throws Open the Doors to Academic Data*, online available at: <http://goo.gl/J3RUi> (s.l.).

¹¹ Chivers, Tom (The Telegraph). *Mendeley: If you like that research paper, try this one*, online available at: <http://goo.gl/BsxZI> (s.l.).

¹² Meloni, Julie (The Chronicle of Higher Education). *Using Mendeley for Research Management*, online available at: <http://goo.gl/7g9R5> (s.l.).

¹³ Nentwich and König (2011), pp. 39. Unauthorized translation by Gernot Rieder, original phrasing (German): "Unsere Beobachtungen bzw. die verfügbaren Studien weisen auf einige Tendenzen hin: Demnach nimmt die akademische Nutzung von SNS zu, sie ist jedoch noch nicht weit verbreitet und etabliert."

¹⁴ All numbers obtained from the webtraffic analysis service *Compete* on 18.11.2011, online available at: <http://www.compete.com/>. Numbers represent United States traffic only.

¹⁵ All numbers obtained from the webtraffic analysis service *Alexa* on 18.11.2011, online available at: <http://www.alexa.com/>. Numbers represent the *Alexa Global Traffic Rank*.

suitability for incorporation into the scientific workflow as well as to anticipate potential future developments in the field of academia-related social networking. More precisely, the subsequent deliberations will seek to give meaningful answers to the following questions:

- 1.) What are the most salient features of each of the three social networks (i.e. *ResearchGate*, *Academia.edu*, and *Mendeley*)? What distinguished them from one another and what makes them unique?
- 2.) How do these features correspond to the workflows of social scientists?¹⁶ Do they truly facilitate everyday tasks or do they rather represent another unwanted duty in an academic's already overly busy schedule.
- 3.) Finally, in an outlook section, the text will present some ideas as to how one could possibly increase the practical value of social networking sites for social scientists.

With regards to the applied method, the subsequent observations build upon three interconnected lines of investigations: First, there was a months-long first-hand examination of each of the platforms. Profiles were registered, network relations built, and features tested. Second, there were a number of informal conversations with other social scientists regarding their own experiences with the social networks of interest. Lastly, there was a self-reflexive phase that was supposed to allow for a better assessment of the gained impressions. During that phase, the incorporation of the social networks into the daily workflow was reflected upon at length, a process whose results have heavily informed the last part of this paper, where ideas regarding potentially promising future functionalities are being elaborated.

¹⁶ Indeed, in order to keep the discussion as focused as possible, the subsequent deliberations will focus exclusively on applicability within the realm of the social sciences.

2. Three Times Science Network: An in-depth Examination of *ResearchGATE*, *Academia.edu*, and *Mendeley*

2.1 *ResearchGate*

Research Gate was launched in Mai of 2008 as a joint American-German endeavor and follows the idea that "science can do more when it's driven by collaboration"¹⁷. For quite a while, *ResearchGate* has been the largest of the three social networks under considerations and the developers claim that over 1 million user accounts have been registered so far. However, the numbers presented above would suggest that the platform has now fallen behind its competitors.

There are a number of basic features that *ResearchGate* has in common with other social networks such as Facebook or Google+, most prominently a 'Live Feed' section that allows users to post public messages onto their wall. Compared to Facebook or Google+, the Live Feed feature gives users a few more options by not merely allowing the sharing of notes, links and images but also of (scientific) papers as well as any other files. Another well-known feature is the 'Message' function, which enables users to communicate privately with other users. Furthermore, apart from these very basic features, *ResearchGate* incorporates a number of other functions that go well beyond what one knows from traditional social network sites:

For starters, there is the 'Topics List', which fundamentally can be described as a question and answer module that enables users to follow discussions and post questions. In general, after a user has determined a number of topics she likes to follow (e.g. academic writing, science 2.0 & publication 2.0, web 3.0, or technology assessment), she can pose her own questions or provide answers to questions that other users have posted. For a large network there doesn't seem to be a lot of activity; nevertheless, if one poses a wide enough question of general interest, chances are that people will provide answers. For example, a question concerning plagiarism and how it might be prevented got more than 40 answers, many of them quite lengthy and well elaborated. Another telling example would be the question "Which culture has the oldest history of science", which got more than 70 responses, again many of them quite extensive, well thought-out and craftily formulated.

¹⁷ ResearchGate. *About Us*, online available at: <http://goo.gl/HVbuX> (s.l.)

Second, there is the 'Publications' category. The developers claim to have incorporated an extensive database; however, most of these publications seem to derive from a medicine, biology, chemistry, computer science, or engineering background, with social science content being rather scarce, even though, according to a diagram on the platform's main page, there should be more than 300,000 social science papers available. Implemented into the Publications area one can find 'Literature Match' service, which is supposed to suggest similar publications to the one currently selected. Again, this feature seems somewhat improvable as most of the suggested articles had little to do with the original paper. Quite often, STS (Science-Technology-Society) articles would be matched with medical publications, which wouldn't even fit with regard to the topic.

Third, similar to the 'Literature Match', the 'Friend Recommendation' algorithms didn't work well either, what could be a direct result of the smallish user base, at least within the Social Sciences and STS. As a result, the indicator most crucial for my recommendations seemed to be people's academic affiliations. Thus, I was recommended people from the University of Vienna who I did not know and shared no apparent scientific agenda with.

Fourth, there are the 'Workgroups'. In essence, one can create one's own workgroups and invite people who are already registered, or else use *GoogleMail*, *Yahoo*, or other services to find and invite people to join. These people will then receive an invitation via email. Within the workgroup area one can find a set of tools that make for a pretty elaborate group management experience; for example there is a general information page, a members list, an area for debate and discussion, an appointments section, possibilities for conducting polls, and a section for uploading files. All in all, the plethora of functions incorporated into the workgroup area, combined with the overall stability and responsiveness of the *ResearchGate* platform, leaves the fairly good impression of adept platform building.

Fifth, there is the 'Conference Calendar', where conferences will be suggested according to the information given in the user's profile. As with data mining often the case, the more information one provides to the platform, the better the results will eventually fit to one's interests. For me, the conference suggestions worked quite nicely, for instance when I was suggested to visit a cyberculture conference or a social media & web science conference, both areas that fit my interests rather well.

Finally, there is the 'Job Section'. David Crotty has argued that job offers might reside amongst the most promising features of science networks when he contended: "For

scientists, social networks are all about jobs, finding openings or finding candidates for openings." (Crotty 2008) While this assessment might hold true within the vicinity of the natural sciences, I'm not so sure when it comes to the social sciences or the humanities. At least over the course of the conversations I had with other social scientists, nobody mentioned job offerings as an incentive to engage in science-related social network. But even if Crotty's argument would be applicable beyond the field of the natural sciences, *ResearchGate* surely wouldn't be place to go, as the job section currently seems to comprise no offerings for social scientists. Thus, even though my profile was that of a social scientist, the jobs that were proposed to me exclusively stemmed from natural science backgrounds, and becoming a molecular biologist or an automation engineer just isn't included in my career perspectives.

I would like to conclude this section by commenting briefly on the *ResearchGate* community. As stated, the network claims to have more than one million registered users. Yet, most of them stem from a background in medicine or biology, and there are also a lot of engineers, chemists, and computer scientists. According to the diagram mentioned earlier, only 46,000 people have earned their stripes within the social sciences. With respect to the activity of the community it is difficult to come to any conclusion. However, one detail strikes as particularly intriguing: While the ratio of publications per registered user amounts to 1 to 32 in the medical field (250,000 users as opposed to roughly 8 million publications), 1 to 42 in the computer sciences (75,000 versus 3,2 million), and 1 to 44 in biology (210,000 versus 9,2 million), this ratio seems significantly less impressive for the social sciences with a balance of merely 1 to 6,5 (46,000 users versus 300,000 publications). While this difference might partly be caused by differences between the scientific cultures, the numbers do seem to suggest that there is considerably more going on in the natural sciences than in the social sciences. The empirical observations and the conversations with other scientists suggest something similar: The activity on the platform, at least within the social sciences, appears to be rather minimal, as many registered users don't seem to visit or use the platform at all. What works best, however, are the topics, around which people tend to cluster. The platform's developers have identified this beacon of user participation as well, as they have started to issue email status updates regarding the topics one has decided to follow.

With regards to potential workflow benefits, two remarks can be made: The first one is that *ResearchGate* exclusively functions as a web-based platform and is hence not accompanied by any offline, desktop-based software. Consequently, everything that is done

on the Web constitutes an additional effort and real chances for synergies seem nominal. The only convenience, and this shall be point number two, is that the platform is capable of interfacing with *Endnote* or *BibTex* databases. However, compared to the desktop client of *Mendeley*, these functionalities seem rather rudimentary.

In conclusion, it can be argued that while *ResearchGate* might entail certain benefits for natural scientists, it just doesn't do the trick when it comes to the social sciences. Nevertheless, there are a few features that make *ResearchGate* an intriguing contender. The topics section works great and follows on a path that is currently being spearheaded by a *Quora*, a platform that adheres to the philosophy that worthwhile debates revolve around issues and questions rather than people.¹⁸ Furthermore, the workgroup area is well thought-out and provides users with a lot of possibilities. Lastly, functions such as the conference calendar and the job section certainly could have certain a value, albeit, with regard to the social sciences, at least the job section is still in need of far-reaching improvements.

2.2 Academia.edu

Academia.edu was launched in September 2008, thus only a few months after *ResearchGate*. According to Nentwich and König (2011), the portal initially started out as a directory for universities and scholars and only over time incorporated Facebook-resembling communication functions. Today, *Academia.edu* is home to some 800,000 researchers¹⁹, presents itself in a very sleek and minimal design, and, in contrast to its competitors, mostly concentrates on a few very basic functionalities. For instance, as opposed to *ResearchGate*, there is no workgroup section, no convenient import of articles from other databases, no literature matching service, and no conference calendar. So why then does *Academia.edu* lead the field ahead of its rivals?²⁰ Following, I shall try to work out potential answer to this question, thereby outlining the most pivotal characteristics of the science-prone social network.

For starters, *Academia.edu* has something that *ResearchGate* seems to lack, at least with regards to the social sciences, and that is people. On no other portal could I find as many scholars that are essential to my field (STS), and by that I mean not only students but also

¹⁸ see <http://www.quora.com/>

¹⁹ Number obtained from <http://www.academia.edu/>. You have to be logged out to see the members count.

²⁰ At least in terms of data traffic and prominence, see stats above.

distinguished professors. It would be intriguing to investigate how this state of affairs came into being, however, at this point one can only assume that it had something to do with the platform's transition from academic directory to social network. Furthermore, *Academia.edu* has not only succeeded in attracting a considerable number of scholars but has also proven quite adept in keeping them active after registration. And while the level of participation and interchange can by no means be described as staggering, it sure seems that people are just more willing to engage and interact than on the other two platforms. At least three characteristics seem responsible for this somewhat surprising state of affairs:

First, while *Academia.edu* is certainly not the most advanced platform in terms of technical sophistication or feature implementation, it arguably does provide the most focused user experience. On the one hand, there is the sleek and trimmed-down visual appearance that seems noticeably less cluttered than the design concepts of *ResearchGate* and *Mendeley*. On the other hand, *Academia.edu* also isn't packed with an abundance of features or gimmickry but concentrates on a few core functionalities only. This clear acknowledgment of simplicity over a more feature-rich experience seems to have paid off as it has bundled the users' activities into a few tasks, thereby making the platform seem livelier than its counterparts.

Second, while *ResearchGate* and *Mendeley* both try to be more than just a networking platform, e.g. a group work and personal research tool (*ResearchGate*) or a full-fledged knowledge-management solution (*Mendeley*), *Academia.edu* seems to content itself with being a science-prone social network, with a strong emphasis on the social. And indeed, when using the platform for a while it becomes quite obvious that the aspect of the social is much more present than on the other science networks. In that sense, *Academia.edu* can perhaps best be described as the *Facebook* of science, an analogy that has been made before.²¹ This orientation towards the social gets explicit in at least a number of instances: To begin with, there is the wide news feed section that takes up considerably more space than on *ResearchGate* or *Mendeley*. As the news feed stream is the location where scholarly interaction is most likely to take place, the prominence of this section can be taken as a clear commitment to the significance of the social. Furthermore, *Academia.edu* bases on the idea that scholars should affiliate themselves with their universities and departments, thereby strengthening ties with colleagues and eventually rebuilding the scholarly genealogies. Supposedly, this iteration of real-world academic structures is meant to increase the density of the network even further, thereby bolstering again the incentive to interact. Finally, while

²¹ Tim De Chant (Ars Technica). *Academia.edu traces scholarly family tree, Facebook style*, online available at: <http://goo.gl/sVist> (s.l.).

Academia.edu does not exhibit as many features and functions as *ResearchGate* or *Mendeley*, the features that have been implemented all appear to have been built around the idea of fostering interaction amongst users. Arguably, the most pivotal of these features are the research interests, and they are so crucial to the way *Academia.edu* functions that it seems appropriate to discuss them as a separate point. The research interests are then the third and final piece in our effort to fathom the science network's current success.

Third, even though *Academia.edu* does not feature a topics list as such, the research interest section in combination with the question and answer module fulfills a similar function. In essence, when registering with *Academia.edu*, one is asked to specify one's research interests. In doing so the user automatically starts to follow these interests and henceforth receives all corresponding posts (i.e. posts that have been tagged as belonging to the same research interest) via the news feed stream. A quite simple mechanism but one that appears to be working remarkably well, for even though if one has not yet found a lot of scholarly contacts, the research interest-informed news feed stream will enhance one's integration into the network significantly. The question and answer module ties into that setup smoothly: When posing a question, one can determine as to which research interest one would like to attribute the question to, multiple tags being possible. In consequence, all other users that have chosen to follow that specific topic will see the question in their news stream and are hence able to provide answers. All in all, the research interests feature works quite similar to *ResearchGate*'s topics section and it was already stressed above how important that service seems to be to the activity level on *ResearchGate*. Yet, while the topics section on the *ResearchGate* platform is only one function amongst many, the research interests feature appears to be the most crucial feature on *Academia.edu* since almost all communication and interaction revolves around those topics of interest. It remains to be seen whether this strong orientation towards a single feature will eventually turn out to be a benefit or a disadvantage.

The previous deliberations were meant to point out potential reasons for the current success of *Academia.edu*. Overall, three explanations have been provided, arguing that *Academia.edu* benefits from a straightforward visual appearance as well as from a well thought-out arsenal of powerful features and functions (1); from a strong orientation towards social interaction, enforced by the prominent news feed stream, the interlinking of people and institutions, and the implementation of communication triggering mechanisms (2); as well as from a focus on issues and topics of interest (3). However, anticipating the

future development of the platform seems difficult: In terms of technical sophistication there is certainly more that could be done without endangering the platform's clear-cut appearance. Unfortunately, several bugs and inconveniences (some buttons don't work, the search engine exhibits certain flaws) might point towards shortages in the engineering department. Without further development it seems quite dubious whether *Academia.edu* will be able to outperform its rivals lastingly in terms of popularity, especially considering the current growth rates of *Mendeley*.

2.3 Mendeley

Mendeley was initially founded in November 2007 and went public in summer 2008. In contrast to *ResearchGate* and *Academia.edu*, *Mendeley* is not primarily a social network but rather a reference management solution and collaboration platform that has incorporated social networking capabilities only to a certain extent. Thus, the core of platform is not so much social networking as it is reference management and group work. *Mendeley* features a web interface, a desktop application, as well as applications for smartphones and tablets, a combination that is meant to allow for a smooth workflow, offline as well as online. Let's take a brief look at some of the most pivotal features of the service:

When logging on to *Mendeley*, there is the 'My Library' folder where the user can see all the references and papers that she has uploaded to *Mendeley* so far. These documents can be categorized and shared by allocating them to specific folders or groups. A user's library can be accessed via the browser or via the desktop application. Thereby, the desktop application and the web account are interlinked and continuously synchronized. Hence, if a user adds a paper to her online library, it will automatically get synchronized into her desktop client. Likewise, if a user imports a citation or document into her desktop application, the literature will sync with the user's online account. This combination of desktop and web-based knowledge management constitutes the basis of the *Mendeley* approach and goes well beyond the capabilities of both *ResearchGate* and *Academia.edu*.

Moreover, *Mendeley* is fairly adept in importing sources from various locations, for instance it allows the user to import *Endnote*, *BibTeX*, or *Zotero* databases; entries from *CiteULike* accounts; it can synchronize with folders on the user's computer automatically and import new content as soon as it becomes available; and it features a browser plugin, the so

called 'Web Importer', that can take snapshots of web content. Insofar, the storing and retrieving of various knowledge resources clearly belongs to the strengths of *Mendeley*.

Furthermore, a *Mendeley* plugin can be implemented into some of the most popular writing applications (e.g. *Microsoft Office* and *Open Office*), therewith allowing users to import references directly into their currently worked-on documents.

Another feature is the implemented annotation tool that does not only allow users to read, highlight, and annotate a text document, but let's users also share these annotations with other users via a convenient synchronization function, again reaching a level of collaboration that is not reached within the frameworks of *ResearchGate* or *Academia.edu*.

In conclusion of *Mendeley's* knowledge management functions – of which only some of the most crucial ones have been presented and outlined above –, it can be argued that these tools, if incorporated into an scientist's daily routines, certainly hold the potential to facilitate certain procedures and benefit to the overall smoothness of a scholar's workflow. The desktop client as well as the website are convenient to use and seemingly free of any grievous bugs or errors. Furthermore, switching to *Mendeley* shouldn't be all too strenuous as the platform interfaces with a lot of existing databases. In several conversations with (social) scientists, *Mendeley* was mentioned as the solution of choice concerning knowledge management. However, in order to obtain a more comprehensive impression of the platform's potential, we shall take another brief look at the social networking capabilities that have been implemented into *Mendeley's* web portal.

In essence, *Mendeley* works quite similar to other science networks like *ResearchGate* or *Academia.edu*. When clicking on the 'people' tab, users can see all the contacts they have made. In order to find new contacts, one can use the search function and search the platform for existing users; or one can give the *Mendeley* access to one's mail account and search for familiar addresses there; or one can invite colleagues and friends manually to join the platform. Via the 'dashboard' tab, users can access a news feed stream that is supposed to keep them up to date with the activities of their peers.

While these basic options won't win the platform any prizes and clearly fall behind the more elaborate social networking capabilities of *Academia.edu* and especially *ResearchGate*, *Mendeley* builds its social networking experience around the group feature, which, to a certain extend, is comparable to the 'circles' on *Google+* or *Facebook's* novel 'list' feature. In short, the concept entails that one can create public or private groups and

communicate and share documents within those groups. In general, collaboration within those groups takes place in three different ways: Communication via the news stream or private messages, sharing of documents and citations within specific group arrangements, and annotation syncing as described above.

Finally, what is quite convenient is that users can follow up of their group communications not only on the website but also within the desktop application. The advantage of this possibility is threefold: First, the user does not have to use a browser and log on to Mendeley.com only to switch back to the desktop client eventually, for example when looking for documents. Second, the user can remain in the immediate vicinity of her database which makes the sharing of files via drag and drop much more convenient. Finally, the desktop application just feels a lot more robust and responsive, a clear advantage when working and collaborating with others on a regular basis.

Last but not least, a few words with regard to the community. As it was the case with *ResearchGate* and, to a lesser degree, *Academia.edu*, I wasn't able to find a great many of social scientists I knew. In fact, would it not be for my department colleagues, my contact possibilities would have drifted towards zero. Yet, what can always be done in terms of networking is to search for certain research interests in hopes of finding public groups that can be joined. Unfortunately, even though I joined a number of larger groups consisting of several hundred participants, interaction remained minimal. In most groups, only the group administrators would sometimes upload articles while the rest of the community would remain inactive.

With regard to potential future developments it would be intriguing to interview the developers and ask where they imagine their product to be a few years from now. If *Mendeley* maintains its course it may become a frequently used knowledge management solution or even a popular collaboration tool for departments, research groups or businesses, but it most likely won't ever develop into a flourishing, interaction-rich social network, for currently the platform's networking capabilities are just too rudimentary.

3. Outlook

This paper has sought to assess the current status of a number of selected science-related social network sites in order to fathom potential future developments. All in all, it boils down to the following: All three networks that have been considered, i.e. *ResearchGate*,

Academia.edu, and *Mendeley*, follow different paths leading in different directions. At this point in time it seems difficult to determine which platform is going to attract a considerable audience and which platform will become irrelevant in the long run. *ResearchGate* is with regard to its social networking functions the most advanced of the three competitors. Nevertheless, the platform seems bloodless and vacated as social interactions have been reduced to a minimum, at least in the vicinity of the social sciences. *Academia.edu* on the other hand still seems to show some signs of life however rare they might be. But even though the general setup of the portal appears to be quite promising, the technical infrastructure already calls for a general overhaul, some bug fixing, and number of badly needed improvements. In terms of technical sophistication, *Mendeley* appears to be on top of its game. However, the platform still seems to be more of a knowledge management tool than a social network. The question is whether the developers intend to change this or whether they prefer to remain on their current course.

The conclusion of the foregoing investigation seems clear: There might indeed be room for a new science-specific social network that builds on the strengths of each of the networks outlined above. Hearsay has it that Google might currently be working on something that aims in that direction.²²

Regardless whoever builds the science-related social network of the future, the deliberations above suggest the following propositions:

- an iconic design that is straightforward and focuses on social interactions (see *Academia.edu*)
- concentration on a few powerful features (see *Academia.edu*)
- a capable search function that ties into all the different data pools of the network (see *ResearchGate*)
- a convenient way to manage documents offline and online (see *Mendeley*)

and finally:

- novel ways of attracting an audience (in that regard, none of the outlined networks should be taken as a role model)

²² Wauters, Robin (Techcrunch). *Google Invests In Stealth Startup That Aims To 'Accelerate Science'*, online available at: <http://goo.gl/GSeMD> (s.l.).

4. Literature

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Nentwich, Michael and König, René (2011): *Wissenschaft und Social Networking Sites: Steckbrief 5 im Rahmen des Projekts Interactive Science*, online available at: <http://goo.gl/McJ66> (s.l.).