Blogs as Interfaces between Several Worlds

A Case Study of the Swedish Academic Blogosphere

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The purpose of this article is to examine the use of blogs as tools in scholarly communication practice. The article is based on a case study of the Swedish academic blogosphere. It starts with an overview of earlier research about blogs which is followed by a presentation of earlier research on scholarly communication practice. Disciplinary differences regarding the use of ICTs are considered specifically. Sixty-seven Swedish academic blogs are investigated using content analysis, supplemented by a webometric study of the same material. The results indicate agreement across disciplines regarding the use of blogs as tools. One conclusion is that blogs do not replace a previous form of communication, but function as distinct interfaces between four arenas: the university, the research field, the general public, and private life.

Keywords: blogosphere, blogs, ICT, scholarly communication practice, webometrics

Today, the blog is a standard type of communication tool on the web. In addition, blogs are often written about and reported on in the media, and in studies conducted in Sweden and the rest of the world concerning Internet usage there is a clear trend towards an increase in the number of blogs. In the latest reports about Swedes and their use of the Internet, the percentage of the Swedish population that blogs varies between two and five per cent, and the percentage that reads a blog at least once a week varies between fifteen and twenty-six per cent (Bergström 2008; Findahl

2008). In spite of these varying figures concerning how great a percentage of the Swedish population has a relationship to the phenomenon of blogging, statistical studies show that blogs have become increasingly common in the last few years, both with respect to maintaining a blog and following or reading blogs. In this context, the blog is studied as a general phenomenon. There are discussions of a blogosphere, which refers to a specific part of the web consisting only of material from blogs, and there are specialised search engines, such as Technorati,[1] and the analytic tool Blogpulse,[2] to help gain an insight into this world. Generally, an increase in the use of the blog as a tool can be noted. Additionally, researchers and academics have increasingly become visible in the blogosphere, e.g. through services such as Scienceblogs[3] from *Seed Magazine*, *Nature's* blogs, that can be found in the magazine's digital edition, and specialised search engines for science-related blogs, such as Postgenomic.[4]

The general purpose of this article is to create a deeper understanding of that part of scholarly communication practice that is being conducted in the form of open digital communication represented by the blog. With the advent of computer-mediated communication, new opportunities have been created for the practice of scholarly communication and the bridging of social boundaries. The blog is well suited for making research and science available to a wider audience. Within the area of science and technology studies, there is a long tradition of studying how science and the media interact, but also, and perhaps especially, the general public's relationship to science. In recent years, scholars have increasingly problematised the model of communications that has previously prevailed in this field of study. They wished to abandon a simple linear model of diffusion, and instead approach the relationship between science and society from a socio-cultural perspective (Ekström 2004). This means that great emphasis is placed on the interaction of communication with different target groups, different forms of media, and the work of the scientists. The present article is based on a study of Swedish academic blogs from such a socio-cultural perspective.

I am interested in the part of the blogosphere written by people in the field of higher education in Sweden. This is an interesting example because Swedish university colleges and universities have a special legal duty in addition to teaching and researching, i.e., to 'co-operate with the

surrounding community and give information about their activities' as stated in the Higher Education Act (SFS 1992:1434, 2 §). As a result of this, researchers in Sweden are expected to make their research visible as well as available to a wider audience than that of their fellow scholars. Recently, the Swedish IT-User Centre (NITA) conducted a survey on Internet usage in the world of higher education in Sweden (Selg 2008). As in the surveys mentioned above, the respondents were asked whether they read blogs and if they had blogs of their own. In this survey it turned out that a larger number of people either read and/or maintained blogs than in the studies whose selection was based on the entire Swedish population. Half of all students/doctoral students read blogs, as did 25 % of the researchers/teachers. It transpired that students/doctoral students in the humanities made up the most conspicuous group of bloggers (17 % of the students in the humanities who participated in the survey), but it is also interesting to see that 10 % of all respondents from the world of higher education maintain a blog, according to the NITA project survey on blogs (Selg 2008). It is thus valuable to look closer at the issues of how and by whom blogs are used as a part of the practice of digital scholarly communication by studying the Swedish blogosphere and the presence of academic blogs. The research questions posed in this study are:

- Who writes academic blogs, which disciplines are represented, and what types of blogs can be identified in the Swedish blogo-sphere?
- How can blogs be located among the tools of scholarly communication practice?

In this article, the Swedish blogosphere provides the foundation for a case study of how blogs are used in a scholarly context. I will begin by providing a survey of earlier blog research, and then describe my theoretical point of departure relative to research about the practice of scholarly communication. Next follows an account of the methods I have used, i.e., a content analysis of sixty-seven Swedish academic blogs and a webometric study. The results and an analysis thereof can be found under two separate subheadings referring to the two research questions at issue. In

the conclusion it is established that the academic blog can be seen as an intermediary interface between four contexts: the university, the research field, the general public, and the private sphere.

Previous Research on Blogs

The advent of blogs as a part of the Web has meant that a significant amount of research has been conducted on blogs. Different types of blogs have been studied focusing on genre (Herring *et al.* 2004; Miller & Shepherd 2004), the blog as a creator of identity (van Doorn, van Zoonen & Wyatt 2007; Huffaker & Calvert 2006), and special areas of interest making an imprint on the blogosphere, such as politics (Drezner & Farrell 2008) and journalism (see e.g. Bruns & Jacobs 2006, 9–32). There are also studies that show how blog content can be used to say something about trends and important issues in debates of various kinds (Thelwall 2007). In addition to the producers of blogs, the readers have been studied as well, for instance why a reader chooses to follow and read certain blogs (Karlsson 2006).

There are, however, not a particularly large number of studies about research or science and blogs, or of studies focusing on the differences between various blog communities. In contradistinction, articles that discuss the blog as a tool for academic scholars appear in the literature about research that deals with blogs as a phenomenon in general. In this context, the blog is rather a part of the research process, and the scholars who describe the use of blogs also themselves take part in the blogging. Mortensen & Walker (2002) write of how blogs became an important part of their everyday research routine, because a significant part of their research was conducted online and their blog helped them to stay focused. Aimeur, Brassard & Paquet (2005) discuss how blogs become a part of the creation of knowledge in interdisciplinary networks. Todoroki, Konishi & Inoue (2006) write about the possibility of using the blog as a lab journal in their field. The person who has progressed the furthest is probably Lilia Efimova (2008), who not only uses the blog as a research tool but also attempts to combine the writing of her blog with the academic writing of her doctoral thesis.

Luzón (2009) has studied the function of links in academic blogs by extracting links from fifteen academic blogs. The study showed that links

can be used for several different purposes. The writer of a blog can, through hyperlinks, connect the blog to the blogs of others, either by comments in his or her own blog posts on the contributions of other bloggers, or by adding blogs of interest to a so-called blog roll.[5] Filter blogs are based on the writer's interest in relevant 'stories' within a particular field of interest. In addition, blog writers are often interested in what other people write about their blog posts, or in blogs that link to their own blogs. There is an on-going activity of linking at different levels of the blogosphere, just as on the rest of the Web. In Luzón's study, the links are brought to the forefront as strategies of, e.g., mutual creation of knowledge or identity. Link structures have also been studied from the perspective of their importance to the formation of networks or a sense of community in blogs. For example, research has been conducted where blog rolls have been studied as signs of a spirit of community among bloggers (Bachnik *et al.* 2005; Lin & Halavais 2004). The clusters that are created can be based on demographic or geographical factors. At the same time, other research has addressed the issue that many blogs are not linked at all (Kumar *et al.* 2004). Aimeur, Brassard & Paquet (2005) compared blogs to radio in their ethnographic study, wherein the writers of the blogs under investigation claimed that although they expected to be read, they did not necessarily expect comments from or interaction with their readers. In contradistinction, there are studies that have paid particular attention to how a blog is intended to create a sense of affinity with others (Chin & Chignell 2006; Efimova & de Moor 2005); and Wei (2004) used the phenomenon of the blog ring[6] as her starting point when studying norms and practices in a community of blogs on knitting.

The blogosphere is temporally dependent, and the communities that manifest themselves there are different from other online communities because they do not share a common location. For this reason, it is important to problematise the blogosphere and not see it as a homogenous and stable phenomenon. Herring *et al.* (2005) investigated the differences in the conversation in the blogosphere using social network analysis. The renown of the individual blog proved to be an important factor, as did the fact that it can be said to belong to the so-called 'A-list', i.e., a list of the most popular blogs measured in terms of the greatest number of inbound links. A-listed blogs are often central in networks, but clusters

of close-knit blog groups also exist. The conclusion of Herring *et al.* was that the connections between blogs vary relative to, among other things, subject-matter. It is clear from the study conducted by Herring *et al.* that there are many blogs that are not part of the conversation. Efimova & de Moor (2005) also studied blogs as conversation, but included other parts of the socio-technological context as well. By studying a specific conversation, different attitudes to writing, linking, and commenting emerged, and thus it became clear how the various practices of conversation differ from one another (Efimova & de Moor 2005). It is also possible to say that a blogging practice is created by the maintenance of a blog. Schmidt (2007) takes four components as his point of departure when describing how a blogging practice is generated in groups with a common understanding of the use of the blog as a tool. The four components that interact in a blogging practice are a *blog episode* that is created in a particular situation, *rules* for the use and publication of blogs, *relationships* both as a way of being seen and in terms of their social nature, and a *code* that governs technical requirements.

An account has been provided above of research that describes blogs and the practices that surround them. The blogosphere and the interacttion among blogs can be illustrated by studying the links between blogs. Academic blogs have, however, only been studied to a limited extent. I thereby take as my point of departure how the practice of blogging can be described by way of a minor selection from the blogosphere, and how this approach makes possible a study of how a particular context, i.e., the academic context, is mirrored in the use of the blog as a communication tool.

Scholarly Communication Practice

In scholarly communication practice the social and the epistemic[7] are connected. Becher & Trowler (2001) have studied the academic culture of twelve different disciplines, or perhaps rather the academic *cultures* of these disciplines. The fact that there is not merely one culture within the academic community, but several on-going and interfoliated cultures, is an important distinction to make. Becher & Trowler assume that there is an interplay between a discipline's epistemology and its culture, which is well in accordance with Knorr-Cetina's (1999) concept of *epistemic cultures*. In Becher and Trowler's terminology this can be expressed in terms

of researchers being socialised into a discipline by means of its *tribal culture* and its 'geographic' area, the *intellectual territory* within which they will be working. There are, within a discipline, social aspects: a discipline can be *convergent*, thus displaying strong agreement regarding what counts as good research, or *divergent*, with a looser unity and a lack of clear limits regarding what constitutes the discipline's research area.

Becher and Trowler also define the environment of which the discipline is a part as either *urban* or *rural*. An urban discipline takes its starting point in a carefully defined problem and limited research material. This discipline has a high competition factor and exhibits a cumulitive and close-knit operation. A rural discipline covers a wider range of material where the problems are not clearly demarcated. In such a discipline, research is overlapping and pluralistic in its expression, with few given frames. Becher and Trowler describe the intellectual or epistemic preconditions in terms of two dimensions: *soft/hard* and *basic/applied research*. Examples of these broad groupings include physics as a science with hard basic research; history as soft basic research, engineering mechanics as hard applied research, and educational science as soft applied research.

Fry (2006) problematises the fact that we use the concept 'discipline' when discussing scientific culture despite the fact that there are often significant differences even within each discipline, and points out that it may be necessary to study a speciality or its experts closely in order to obtain full understanding of the scientific culture in question. At the same time, disciplines are important in relation to economic allocation and evaluation, which makes it of continuing value to look also at the more overarching structures in the study of research praxis. Kautto & Talja (2007) have shown how Becher and Trowler's classification can be used for analysis, thereby making it possible to study variation also within individual disciplines.

Scholarly communication in a digital world cannot, in other words, be understood in only one way. The multiplicity of scientific or academic cultures is manifested in differences in social organisation, methods, techniques, and epistemic preconditions, which results in different ways of using information and communication technology (ICT) (Fry & Talja 2004; Kling & McKim 1999). Computer-mediated communication

opens up new possibilities for how science is practiced and how earlier boundaries can be bridged. In a study of *e-Science* within gender studies, Wouters & Beaulieu (2006) used Knorr-Cetina's concept of *epistemic culture* as a point of departure. Beginning with the traditional definition of e-Science, for instance in heavily computer-controlled projects, they then illuminate what e-Science may look like in a humanistic/social science framework. They thereby show how the significance conferred on e-Science and the meaning given to it are of importance to the development and use of digital media and networks in the discipline in which their usage is based. Wouters & Beaulieu's conclusion is that ICT can be said to reconfigure the practice in a discipline, but it can also be given different meanings depending on the cultural horizon from which the increased use of computers is viewed. Fry (2006) draws a similar parallel when pointing out that the norm that is valid for a certain type of e-Science, e.g. in the form of strict rules and standardisation needed in order to be able to conduct large-scale studies, can come into conflict with the scholarly character of the humanities, which Becher and Trowler describe as rural.

In the definition of scholarly communication practice I also include communication that takes place 'outside' the research community. It is to our advantage to study phenomena that could illustrate a broader view of scholarly communication in order to achieve a deeper understanding of what research practice looks like. As previously mentioned, a traditional model of scholarly communication is the *diffusion model* in a linear form, where popularised information is disseminated to a broad and uninformed general public. Models of this kind have been severely criticised (Ekström 2004; Lewenstein 1995). Several alternative models have been developed instead, where communication within the research community and popularised communication are not differentiated. From such a perspective, one can see that the same rhetorical means are available regardless of the audience (Hilgartner 1990). The possibilities for communicating with a wider audience than the one consisting of colleagues in the research community have varying degrees of legitimacy in different disciplines. For instance, the difference is significant between a field such as history, with a strong tradition of amateur involvement, and a field

like chemistry, with its pronouncedly specialised language (Becher & Trowler 2001).

A large part of scholarly communication is, however, of an informal character, such as conversations, email, or contributions to discussion lists (Becher & Trowler 2001). Often, a part of informal everyday practice in the scientific context tends to disappear in formal communication, both in communication with the general public and among research colleagues. An example of this is highlighted when Knorr-Cetina (1999) describes the writing of an article, detailing how actual work in the laboratory environment is peeled away when presented in the form expected in a scholarly article. Also when Latour (1987) discusses the black box of science, where scientific results and the work from which they have emerged are separated, it is possible to see how informal practice is lacking in formal communication. Latour believes that when something has been accepted as a fact, its inception will be concealed in the black box. As a result, scientific work will be impermeable and invisible even to other researchers.

In conclusion, the practice of scholarly communication of different disciplines varies, and the discipline in question is thus important for how scholarly communication and the use of ICT in various contexts can be understood. One important aspect with respect to scholarly communication is that a significant part of it is informal. In the analysis, I will primarily discuss how these differences are expressed in urban and rural sciences, in line with Becher and Trowler's argument.

Method

In preparation for this investigation of academic blogs in Sweden, collection of data was begun in January, 2008. The starting point was a particular search engine for Swedish blogs where one can register one's own or somebody else's blog in order to make it searchable. The search engine is run by the Swedish newspaper *Aftonbladet* and is called *Bloggportalen* (The Blog Portal);[8] it contains a short description and a classification into categories for each blog. During the first stage of the collection of data there were approximately 20,000 blogs registered. Because the idea of *Bloggportalen* is that individual bloggers register their blogs themselves, and describe them according to the requirements of the search engine, each person adds the categories they find appropriate and representative

for the content of the blog. The 401 blogs that were listed under the category heading of 'science' were scrutinised. Each blog was investigated separately, and an assessment was made as to whether it met the selection criteria that had been drawn up. According to these criteria, it should first of all be possible to determine from the information supplied in the blog that it was written by a person or persons active within the field of higher education in Sweden and involved in research or university-level teaching. Secondly, the blog should have been updated during 2007 in order for it to be selected. Out of the 401 blogs in the list, thirty-five met both of these criteria. This is partly because the registration in *Bloggportalen* is done by private individuals, and even blogs that only peripherally deal with science can be found in that category. In addition, blogs remain in the portal even if they are no longer functional or being updated.

By way of a snowball method, which was used in order to locate additional blogs, the next step was to go through the blog rolls of the thirty-five blogs and assess them using the same criteria. In this way, several more blogs that met these criteria could be identified. This procedure was repeated with the blogs that were added after the first survey of blog links until it was no longer possible to identify new blogs. A total of seventy-eight blogs were included in the first selection. The reason why there are not more than forty-three blogs in addition to the first thirty-five is because a large number of the blogs did not make use of a blog roll. Almost half of the first thirty-five blogs did not have a blog roll. Also among the new blogs that could be identified from these blog rolls were a number which did not make use of the possibility of listing blogs of interest. In addition, many blog rolls contained links to blogs outside the field of higher education and to international blogs, but from this it did not necessarily follow that they contained links to Swedish academic blogs. The number of links in the investigated blog rolls varied greatly from a few to upwards of forty. It is interesting to note that several blogs appeared in each others' blog rolls, but there were nevertheless comparatively few links visible between the Swedish academic blogs at this stage. A content analysis and a webometric study of the selected blogs were then conducted during the autumn of 2008.

Content Analysis

The content analysis is based on a quantitative textual analysis built on particular predetermined categories (Bergström & Boréus 2005, 43ff). Each blog is examined according to a particular list (code book) over these categories drawn up in order to cover aspects describing the academic blogs (see the code book, Appendix 1). During the data collection stage, an additional assessment of the blogs was made applying the criterion that it should be possible to analyse their contents by following posts from December 2007 and earlier. It then turned out that a few of the blogs were no longer online, and that some did not have enough posts from the selection period and had, in addition, not been updated during 2008. The few blogs that had only a few posts from the selection period, but were still active, were retained in the selection. This resulted in eleven blogs being discarded, and sixty-seven blogs retained (see Appendix 2), i.e., eleven blogs disappeared between January and September, 2008. These blogs constitute a snapshot of what the academic blogosphere looks like, which does not make up an exhaustive map of academic blogs in Sweden. Such a map is difficult to produce in a dynamic world where blogs cease to exist at the same time that new ones are continually created.

The categories (see the code book, Appendix 1) of the content analysis have been developed in order to describe the blogs, using both demographic data about the writers and the technical aspects and content of the blogs. Because the purpose of this investigation is to study how the blogs are used in scholarly communication practice, it was important to attempt to shed light upon as many aspects of this as possible that are connected to the blogger's role as an academic. The different categories have been arranged under a number of main headings. Under the main heading 'About the blogger' in the code book can be found, e.g., the professional position the blog writer has within the field of higher education, and under 'affiliation' can be found categories for both disciplinary and university affiliation. As far as the discipline is concerned, I use both the blogger's own description of the discipline and a category from SCB's (Statistics Sweden) classification of research subjects.[9] Here, an assessment was made regarding how the researchers described their disciplinary affiliation, but this was complemented by information from the researchers' presentations on the websites of their respective academic departments.

In order to be able to study the content of the blogs, I used, in addition to the category 'language', one category taken from Herring *et al.* (2004) with subdivisions based on the type of blog, and a second category with classifications according to themes. The different types of blogs used by Herring *et al.* are *personal journal, filter, k-log, mixed,* and *other.* The assignment of a type and a theme was dependent upon the main content of the blog. A filter is a blog that mainly reports content that lies outside the purview of the blogger, i.e., there are many outgoing links in the blog and comments on particular phenomena. The personal journal on the other hand is introspective, with a content focused on private ideas and thoughts and with fewer references in the form of links. A k-log is a blog that concentrates on a specific topic, product, or project. A mixed blog is a blog where there is no predominant type of content, and 'other' is used to denote a blog that is difficult to identify as any of the listed types.

An important category when surveying the blogs is composed of the nine themes (Table 1) that indicate the main emphasis that can be found in the content of the blog. These themes were distilled from my reading and following scholarly blogs since the beginning of my thesis project in 2005. A blog could only be assigned a single theme, resulting consequently from my assessment of the main content of that blog, in a manner similar to that in the discussion of blog types above.

1	Research and science
2	Discipline-related
3	Own research
4	Professional life
5	Private life
6	Social issues
7	Marketing
8	Humour
9	Other

Table 1. The contentual themes of blogs (see also Appendix 1).

The first theme was assigned to blogs that primarily contain posts about research and science from a general perspective, and also include research policy issues. 'Discipline-related' is used to refer to blogs in which the theme is closely tied to the writer's own discipline or subject. The third theme is 'own research', which means that the content is dominated by material that is directly connected to the writer's own research projects and discusses research issues in relation to the blogger's own research. Themes four and five are used if the content of the blog deals with the blogger's professional or private life. In both of these cases the content is primarily connected to the social environment and people, in the professional and private spheres, respectively. 'Social issues', 'marketing', 'humour', and 'other' are also available as choices of themes.

The analysis was based on ten consecutive blog posts from each blog published in December 2007 and earlier, and on the use of the blog writers' own categorising tags.[10] The blogs were also studied with respect to certain technical aspects, such as blogging software, the possibility of commenting, the number of comments, and the presence of a blog roll. Activity on the blog was noted. Initially, the survey also contained a category with diverse target groups including the primary addressee of the blogger. However, the category 'target group' proved to be too difficult to use in the content analysis and therefore had to be excluded.

Webometrics

By creating a webometric map over the blogs in the content analysis it is possible to gain further information about the Swedish academic blogosphere. Social network analysis can reveal patterns and the links that exist between the blogs. In addition to the content analysis, all links in the sixty-seven blogs were therefore harvested using the software SocScibot. The program was used to send a robot to each blog site and collect all the links within the website no matter what type of links they were. The collected links were then processed using SocScibot Tools,[11] Bibexcel,[12] and UCINET.[13] Finally, the program Pajek was used to draw a map of the links within the group of blogs investigated. A webometric map (Figure 2) could be drawn up based on which blogs were linked to each other. Four of the blogs could not be harvested because the collection robot could only manage to read the first page of each website. Therefore, these

blogs have no outgoing links on the map, but only incoming links from other blogs in the network (this refers to the blogs *sumofmyparts*, *annailund*, and *soulsphincter*; however, *svennejunker*, which also belongs among these blogs, has neither in- nor outgoing links). In addition, two blogs somehow became corrupted during the processing of the harvested links and could therefore not be included in the map. It also deserves mentioning that it is possible that some blogs may have several web addresses, a possibility I did not take into account when collecting the links.

Qualitative Elements

The two quantitative methods, content analysis and webometrics, are complemented by the close reading of the blogs that is necessary in order to assess the categories in the content analysis and to deal with the blog during the collection of its links. Certain aspects of blogging can be difficult to capture by these methods, such as, for instance, the reason for choosing the blog as a tool. Interviews with the people behind the blogs may provide additional understanding of why the blog is used as a means of communication. However, the large number of blogs in this study makes interviewing the bloggers impossible in practice. The number of individual blogs is, however, not so great that a good understanding of each blog cannot be used as a qualitative element in the analysis.

Swedish Academics and the Blog as a Communication Tool

The results of the content analysis will be presented here in shorter sections that are connected to the areas covered by the analysis categories. The results provide a description of the Swedish academic blogosphere in 2007, and show which Swedish academics use blogs and how. The chapter will conclude with a section on how Swedish academic blogs mirror the blogging practice described earlier in the section on previous blog research.

About the Blogger

Eight of the blogs are based on posts written by more than one person, i.e., they are group blogs of various kinds. These will be excluded from the description of the blog writers below. Out of the remaining fifty-nine blogs, fifty-two provide the full names of their writers in the blogs. Only

four blogs are written under a pseudonym, while the remaining three only use either their first or last names. However, it is in these cases possible to identify the blogger from peripheral information in the blog. Concerning the blog writer's professional position or role within higher education, it turns out that more than half of the bloggers are doctoral students (thirty-one out of fifty-nine), twelve of the blogs are written by senior lecturers, and a total of seven people have leading positions within the university or are professors. Of the fifty-nine bloggers, one-third are women (nineteen) and two-thirds men (forty). Of the women who blog, half are doctoral students, four senior lecturers, and three postdoctoral research fellows/postdocs (Figure 1). There is only one man in the category postdoctoral research fellow/postdoc, but on the other hand there are two men who belong to the category 'other', which in this case is made up of two people who describe themselves as 'researchers'.
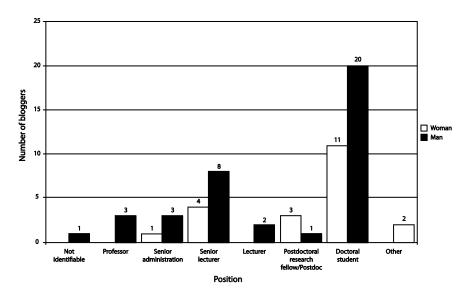

Figure 1. Table over professional positions held by the blog writers, by sex. The eight group blogs are not included in the table.

Affiliation

All blogs except for two contain information about which discipline the person who blogs is affiliated with. In order to group the bloggers into different disciplines, Statistics Sweden's national catalogue of research subjects was used (Table 2).

11	The humanities and religious studies
12	Jurisprudence/law
13	Social sciences
14	Mathematics
15	Natural sciences
16	Technological sciences
17	Forestry and agricultural sciences including landscape planning
18	Medicine
19	Odontology
21	Pharmaceutics
22	Veterinary medicine
23	Other research subjects

Table 2. Subject areas according to Statistics Sweden.

The main subject headings from Statistics Sweden were used, and based on this twenty-eight blogs can be classified as belonging to the social sciences, twelve blogs are written by researchers in the humanities and religious studies, twelve blogs originate in the natural sciences, four in jurisprudence/law, four in medicine, four in technological sciences, one in forestry and agricultural sciences including landscape planning, and two of the blogs written under a pseudonym could not be connected with any discipline (Table 3).

	Research and science	Discipline-related	Professional life	Private life	Social issues	Marketing	Other	Total
Not identifiable				2				2
Humanities and religious studies	1	6	2		1		2	12
Jurisprudence/ law		2		1	1			4
Social sciences		17	2	1	5	1	2	28
Natural sciences	2	5		2	2		1	12
Technological sciences	1	2		1				4
Forestry and agricultural sciences including landscape planning		1						1
Medicine	2	2						4
Total	6	35	4	7	9	1	5	67

Table 3. Number of blogs from each subject area as defined by Statistics Sweden, by theme. Two themes, 'own research' and 'humour', could not be identified in the blogs under study and were therefore excluded from the table.

Only eight of the blogs can be found on the websites of their respective universities, but thirty of the sixty-seven blogs include a link to the writer's own department, either to the top level on the department's website or to the writer's own presentation on the university website. However, thirty-five of the blogs do not contain any direct link to the universities of their bloggers. As far as the two group blogs are concerned, such a link is not possible because they are written by people coming from different environments. Out of Sweden's forty-nine institutions of higher education[14] with degree-awarding powers in first-cycle (undergraduate) programmes, sixteen are represented among the blogs under study. Lund University, the University of Gothenburg, and Umeå University stand out by having around ten blogs each, i.e., almost half of the blogs originate in three higher education institutions. These institutions also have connections to five of the group blogs.

Blog Content and Type
The majority of the blogs are written in Swedish, but fifteen are written in English, and an additional five in both Swedish and English, i.e., almost a total of one-third of the blogs use English. As far as the main purpose or type of blog is concerned, there is a clear predominance of filter blogs, which are fifty-four in number. Only six blogs are mainly personal journals, and there are three k-logs, two mixed, and two that belong to the category 'other'. The main content with respect to theme is that the blogs are discipline-related in one way or another. There is a comparatively even distribution of blogs that primarily contain material about research and science, professional life, private life, and social issues. Out of the filter blogs, thirty-two are discipline-related, and blogs of the type 'personal journal' mainly contain (five out of six) the theme 'private life', although one of these blogs is principally about the professional life of the writer. Among the group blogs, five are discipline-related, while one to a greater extent deals more generally with science and research, and two end up in the category 'other'. The two group blogs that have the theme 'other' are run by groups of scientists using the blog as a tool for the activities of their research group, one intended mainly to be used internally, the other as a kind of notice board for events related to the group's activities. It proved to be tremendously difficult to deduce infor-

mation regarding the target group or target groups for which the bloggers chiefly write.

Technical Aspects

Out of the sixty-seven blogs, eighteen lack a blog roll, and it is worth mentioning that several of the remaining forty-nine that do have a list of links to other blogs have very few links in their lists. Only one blog does not allow comments, and the blog writer clarifies that this was an active choice because the function allowing comments had been misused. Instead, it is possible to contact her via email. Eight blogs did not have any comments at all during the period under investigation, and twenty had fewer than five comments, so a little more than half (thirty-eight) had more comments than five. Out of the fifty-eight that did receive comments, the writers in forty-five of these blogs responded in some way.

There was a clear predominance of the best-known blogging tools, Blogger[15] and Wordpress,[16] and approximately as many bloggers use Blogger (twenty-eight) as Wordpress (twenty-six). In seven of the blogs it was impossible to identify which software was used, and almost as many, six blogs, utilise another platform than the ones just mentioned.

Activity

Already during the collection of the blogs, the dynamic quality of the Web, and especially the blogosphere, became apparent. Several blogs had to be excluded from the selection because they were no longer available, or because they had, for example, been restarted using new software. A couple of bloggers chose to end their blogs after December 2007, among them the author of *Klimatbloggen* (The climate blog), which is nevertheless part of the selection, and 'Dr Vlachos', who now writes for *Ekonomistas*. Also, in one case a researcher, who, at the time the selection was made, held a temporary research position in Umeå, has subsequently moved home to Norway, and is no longer affiliated with a Swedish institution of higher education. Four of the investigated blogs contain fewer than ten posts from the selection period because the blogs had been recently started up at that time. These have nevertheless been included in the selection because they are still active. Twenty blogs were started during 2007, sixteen during 2006, sixteen during 2005, and a total of fif-

teen between 2000 and 2005, the number of newly started blogs rising during each of those five years. It is possible to discern a sharp increase in recent years, especially with respect to women who start blogs (Table 4).

Start-up year	Woman	Man	Group blog	Total
2000		1		1
2001	1			1
2002		2		2
2003	1	3	1	5
2004	1	5		6
2005	5	10	1	16
2006	6	8	2	16
2007	5	11	4	20
Total	19	40	8	67

Table 4. The number of newly started blogs, by sex.

Swedish Academic Blogs as Part of a Blogging Practice

In summary, the typical blog can be said to be written by one person (fifty-nine out of sixty-seven), who is a male (40/59) doctoral student (31/59) in a social studies discipline (28/67). The blogger provides his full name (52/59), writes in Swedish (45/67) in a filter blog (54/67) about discipline-related matters (35/67), use Wordpress or Blogger (54/67) as a publication tool, and does not have a URL within the domain of his own university or university college (57/67). The blog writers in the Swedish academic blogosphere thus resemble other bloggers (see Herring *et al.* 2004): most of the blogs have a single writer, a larger percentage of whom are men than women, and the use of readily available tools, such as Blogger and Wordpress, dominates. The percentage of doctoral students is also high among the blog writers, which is in accordance with the fact that blogs are used more frequently by people of younger generations (Bergström 2008; Findahl 2008).

There is, however, a difference between the results of this study and those of Herring *et al.*, in which the predominant blog category was per-

sonal journals. In the present selection, more bloggers use their blogs as filter blogs. It is, however, unclear if the filter blogs are used as straightforward notebooks or as some other type of tool that is part of the writers' research practices. There is a more personal form of address in these blogs than is possible in other contexts within the research community; at the same time the blogs are not used merely as personal journals either, with stories from the private spheres of the writers. This result may, to some extent, be due to the blogs selected for analysis, because a personal journal written by someone in higher education would not automatically be identified as such using the principles of selection that I have used. There is, however, also a group of blogs that more closely resemble personal journals, and these are written by people from various disciplines. Even if the variation between different blog types is small, there are nevertheless differences, and this is evident also among the academics mentioned above and what they have said regarding their use of the blog as a tool (Aimeur, Brassard & Paquet 2005; Efimova 2008; Mortensen & Walker 2002; Todoroki, Konishi & Inoue 2006).

A way of positioning oneself in the blogosphere is by linking to other blogs, both in a blog roll and in blog posts (Luzón 2009; Schmidt 2007). Almost a third of the bloggers lacked a blog roll, and several blog rolls contained very few contacts. During the snowball procedure it also became apparent that many of the blogs linked to were not academic blogs but well-known Swedish blogs, blogs with interesting themes, or the blogs of friends, and thus also to those of other friends within the blogosphere as such. Networking has been stressed as an important part of blogging practice (Schmidt 2007). In the Swedish academic blog it is the role of blogger that is foregrounded when deciding whom to link to, rather than the role of Swedish or international academic. In addition, half of the blogs had very few comments in comparison to the results of Herring *et al.* (2005), which showed that many blogs are only sporadically or not at all interactive in character. Another thing worth mentioning is that in a majority of the blogs with comments the blogger will answer the comments or enter into a dialogue with the author of these comments.

Even if the impression gained from the collection of the blogs is that there is little interaction among academic blogs, the webometric map illustrates that there is interaction in the form of links between the blogs,

something to which I will return below. The mere existence of the sixty-seven blogs I have identified indicates that there are academics who wish to become visible in a context outside the scientific one and that these blog writers desire to be part of a dialogue with others. What we have here may be described as an academic blogosphere in a manner similar to how Miller & Shepherd (2004) have described the blog as a phenomenon which has developed into several genres for different purposes depending on the group to which the blog writer belongs. What is problematic with academic blogs, however, is that it is very unclear which target group is the primary one. In none of the blogs investigated was this clearly stated. In some it was possible to understand that their main purpose was to explain research and science to an interested general public, and in others the discussion was obviously directed to colleagues, but in most cases the blog as such seemed to function as a means of reaching a mixture of target groups. It was also clear from the choice of language that the bloggers primarily direct themselves to a Swedish readership, because a majority of the blogs are written in Swedish.

Even if the blogs contain reports on the writers' own research, this does not appear to be the strongest motivation for maintaining a blog. Many times when research and science are discussed in the blogs, this is done by commenting on ongoing research, either within the writer's own domain or within science and research in a wider perspective. There are, among others, three blogs that deal more generally with science and research, but their respective focus is somewhat different. *Vetenskapsnytt* (Science news) is an example of a blog that has been created for the purpose of making research more generally available. The blog is run by a doctoral student in computer science, but her blog posts deal with everything from space to research issues relating to food. Another blog of this type is *Under lagerbladet* (Under the laurel leaf), which is maintained by four researchers who are postdocs in their respective disciplines in the natural sciences. In their policy statement about the blog, they observe that they think there is a lack of broadly-based science blogs in Sweden and that their ambition is to:

> *fill this blog with well-founded information about research, and science. But we don't just want to report, we also want to comment, and, when*

we find it necessary, to criticise. [...] We run this blogging project in our spare time and for that reason we cannot always promise to be exhaustive. Nor can we promise never to miss an important piece of science news. On the other hand, we can guarantee that we will do our best to describe and explain, in a committed manner, what we find important and interesting, in a way that will make it understandable also to interested readers without a PhD in the natural sciences.

At the Swedish University of Agricultural Sciences (SLU) a mutual blog has been started called *Forskarbloggen* (The researchers' blog) for all the researchers in the disciplines represented there. *Vetenskapsnytt*, *Under lagerbladet*, and *Forskarbloggen* closely resemble science journalism. The researchers who write in these blogs try to express themselves in a way that will be easy to read even for non-experts. *Forskarbloggen* and *Under lager-bladet* are also examples of group blogs. These two blogs often deal with broader themes that are more directly relevant to a scientific context.

The identity of the writers of a majority of the blogs is clear, and in the anonymous blogs the writers still position themselves within the academy, either in the title of the blog or in some other prominent place, for instance, *Latinbloggen – En doktorand i latin [...]* (The Latin blog – A doctoral student in Latin), or *Mamakademiker – Mitt liv med vetenskapen – och barn* (Mamacademic – My life with science – and kids). At the same time, the blog writers can identify themselves as so much more. In one of the anonymous blogs, which is also a personal journal, the writer, for example, identifies herself as 'interested in cooking, someone who grows things, addicted to chocolate, a fiancée, pet owner, daughter, sister, friend, maternal aunt, paternal aunt, and live-in partner'. In the blog there is opportunity for including various parts of a writer's life in order to create an identity online (van Doorn, van Zoonen & Wyatt 2007).

The Blog as a Tool in Scholarly Communication Practice

In the following section an analysis will be provided of how the blog can be situated in scholarly communication practice, using the results gained from the webometric study.

An Academic Blogosphere

At first sight the blogs did not appear to be connected to one another to a great extent, but in the webometric map (Figure 2) clusters of blogs that possess a higher degree of connectedness become visible. In addition, there is no cluster that lies outside the map with no link into the denser part of the map, with the exception of those blogs situated like satellites outside the entire map.

The harvested links are not classified in the same way as they are in Luzón (2009), and all links have been harvested no matter where in the blog they are found. In other words, the map displays connections among the blogs no matter whether the links are in a blog roll, in a blog post with a comment, in a comment, or somewhere else in the blog. A few interesting observations can be made using the map. A few blogs are situated more centrally in the network than others. These blogs have the most numerous connections to other blogs, both in the form of in- and outbound links. In total, there are only sixty-five nodes, i.e., two of the sixty-seven blogs in the selection are missing because they became corrupted during the link harvesting. Four blogs do not have any connections into the network. One of these (*svennejunker*) belonged to the above-mentioned group of four blogs where a complete harvesting of links could not be effected. Two of the other blogs can be characterised as more personal projects (*malmberg* and *elcas-egna*). The fourth satellite (*ferada-noli*) does not contain a blog roll and the writer in many cases writes his blog posts as a complement to debate articles that concern his research area.

There is a tight concentration of links in the middle of the map, containing a number of important blogs (*gustavholmberg, digitalrights.net, loci, mothugg, 99our68,* and *Berghsbetraktelser*). The network is not symmetric, i.e., there are blogs (nodes) in the network that have only in- or outbound links. For example, one of the important blogs is written by the Vice-Chancellor of Stockholm University, Kåre Bremer (*blogs.su.se/kbrem*). His blog holds a central position, since many other blogs link to him, but his blog does not have any outbound links (see Figure 3). On the map we also find the head of department at the School of Education at Malmö University, which did not have any outbound links either (*mahbloggen.se/maria*), but which is of importance in a pedagogical context
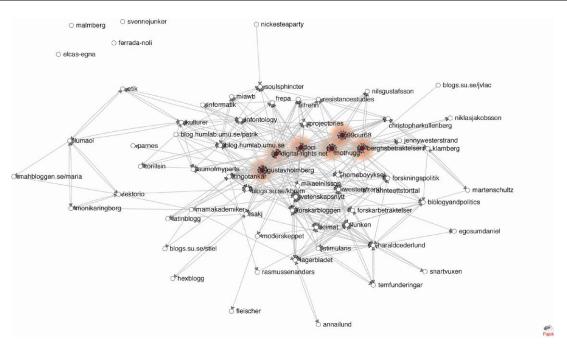
Figure 2. Webometric map over sixty-five Swedish academic blogs. At the top left can be seen the four unlinked blogs, and in the middle the central blogs have been highlighted.

to neighbouring blogs. As vice-chancellor and head of department, re-spectively, the writers of these blogs have used the blog as a tool for situating their institutions of higher education, and to some extent this manner of blogging shows certain similarities to the patterns found in a more traditional model of dispersion, even if the bloggers allow comments and are open to discussion regarding their own opinions concerning the various issues about which they write (Ekström 2004; Luzón 2009).
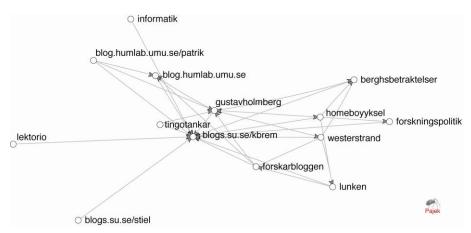

Figure 3. Webometric map with Kåre Bremer's blog, blogs.su.se/kbrem, *as the point of origin. The names of the blogs are their shortened URLs, which are not always identical to the actual titles of the blogs.*

The group of academics that blog in Sweden is a heterogeneous one, and the spectrum of disciplines represented is broad. In spite of this one can in the map (Figure 4) find clusters of blogs, e.g. the pedagogic blogs mentioned above, that are in close proximity to one another in terms of discipline, as has been the case in previous studies (see e.g. Bachnik *et al.* 2005; Herring *et al.* 2005; Lin & Halavais 2004). Another group of blogs that are connected by way of discipline are those that deal with the digital humanities. For these blogs, the blog run by HUMlab at Umeå University has a central and interconnecting function. The blogs in a subset of the cluster associated with the digital humanities (the blogs *torillsin, kulturer, blog.humlab.umu.se, blog.humlab.umu.se/patrik,* and

sumofmyparts) are, in addition, in physical proximity to one another because they are all based at Umeå University. Thus, geography is a factor that affects linking: there is, for instance, also a cluster of blogs based at the University of Gothenburg.

Rural and Urban Disciplines

The disciplines that often find favour outside the research community are the urban hard sciences that deal with basic research (Becher & Trowler 2001, 192). This is also true in Sweden, which has a research policy that makes visible these disciplines, which, e.g., leads to a particular allocation of resources. Researchers in these fields are not, however, especially visible in the webometric map. Instead, several of the centrally positioned blogs in the map come from the humanities or from social science disciplines, which are characterised by a broad epistemic approach (cf. also Table 2 and the distribution of blogs among different disciplines). This accords well with the results of NITA's study (Selg 2008), where a significantly greater number of the humanists ran their own blogs. In addition, several of the blog writers in the central part of the map write about socially relevant phenomena. At the same time this is discipline-related, because these blogs are written by researchers in the humanities and social sciences. Moreover, the central blogs in the network all belong to a group of bloggers that are active, who frequently update their blogs, and who are highly aware of the blog as a tool. This is in spite of the fact that an additional factor suggesting that urban disciplines should be prominent in this kind of academic blogosphere is that informal communication becomes more and more important the more hectic or temporally dependent a discipline is (Becher & Trowler 2001, 108ff). The most central blog is *digitalrights.net*, which has the greatest number of incoming links. The predominant content of this blog concerns legal issues and IT, i.e., a subject that is topical and rapidly changing and that, in addition, can be of interest to everyone who is active in the blogosphere, even outside the investigated group.
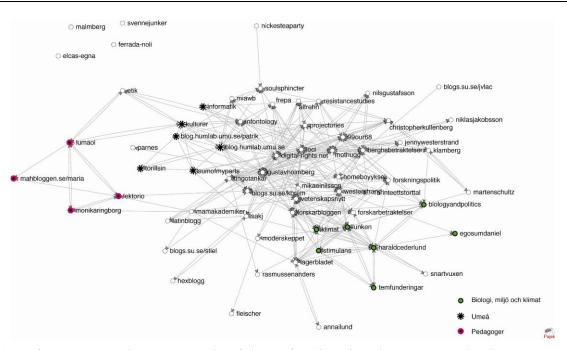
Figure 4. Webometric map showing examples of clusters based on discipline or geographical proximity. Sixty-five of the sixty-seven blogs can be found in the map.

Conclusions

The differences that have attracted notice in earlier research on the use of ICT in various disciplines are not discernable in the present material (Fry & Talja 2004; Kling & McKim 1999). The number of blogs is not sufficiently large to give indications as to whether there are differences in the blog usage among disciplines. The distribution among the disciplines is rather uneven, and it is not possible to discern within the largest category, the social sciences, a particular theme or type of blog that predominates in comparison to the other disciplines.

It rather seems as though there is a relatively strong agreement across disciplinary boundaries regarding how blogs are used. Even if the general public could not be identified as a specific target group, it is evident that filter blogs dominate in all disciplines, which points to the blog's importance as a news distributor. The awareness of other blogs illustrated in the webometric map can be attributed to a blogging practice and an interest in the blog as a tool (Schmidt 2007). Even if an evaluation of the predominant themes was made in the content analysis, it is clear that in most cases the blog writer varies the content and focus of the blog, making the result of the analysis of a blog's predominant theme dependant on the time at which that analysis was made, something that has also been noted in earlier research about the tendency of blogs to change over time (Thelwall 2007). There is, in other words, a lack of clarity regarding the target group and the theme of each individual blog. However, the analysis shows that the content of the blogs can be described mainly in terms of the themes of research, social issues, or questions of a private nature.

The webometric map gives an indication of an intra-institutional target group when considering how the institution of higher education or geographical location can affect how much attention is paid to an individual blog in the academic blogosphere. Research policy issues about higher education and the activities of universities and university colleges are topics that exist as clearly interconnecting interests, and they are also made visible in the webometric map through the central position of Kåre Bremer's blog. In this way, blogs differ from other ways of communication in scholarly practice, where there are clearly defined

target groups and a well-structured content, as in, e.g., the scholarly article. In the present study it is apparent that the blog, for this reason, does not replace an earlier form of communication, but functions as an interface between four arenas: *the research field, the general public, private life* and *the university*. Most of the blogs contain elements that represent all these arenas, and the blog is thereby positioned as an intermediary between these different contexts. It would be interesting to conduct a follow-up study with interviews of researchers who blog in order to highlight further how bloggers view the range of application of the blog, at whom the blog is aimed, and how the blog is situated in relation to other communication tools.

Even if the use of the blogs in this study was not clearly different in various disciplines, there is reason to explore further how the blog can manifest itself in diverse ways in different disciplines. Disciplines that are highly computer intensive or highly dependent on co-operation – urban and convergent, in Becher and Trowler's terms – may be expected to use blogs in another way than disciplines that are less dependent on technological development and where research is clearly individual in nature, i.e., belonging to a discipline that can be described as rural and divergent. At the same time that there may be a reluctance to invest in infrastructural solutions that often imply a normative practice that is inconsistent with a rural discipline, an individual emphasis on using ICT could mean that, e.g., e-Science in the humanities and social sciences would manifest itself in an expression that is small-scale, just as the blog is. The fact that both urban and rural disciplines are represented in the Swedish blogosphere indicates that it is not exclusively the one field or the other that manifests itself in this segment of digital scholarly communication practice.

Acknowledgments

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Notes

1. <http://technorati.com/> [2009-10-16].
2. <http://www.blogpulse.com/> [2009-10-16].
3. <http://scienceblogs.com/> [2009-10-16].
4. <http://www.postgenomic.com/> [2009-10-16].
5. A blog roll is a list of blogs that blog writers follow, and for this reason link to, from their own blogs, often in a conspicuous location in the left- or right-hand sidebar.
6. A blog ring is a method of connecting blogs with a common theme. A link is added in the writer's own blog to the blog ring it belongs to, which links to a page with a list of other blogs that belong to the same blog ring.
7. 'Epistemic' pertains to knowledge. The word is related to 'epistemology', which means the study of human knowledge and theories about its nature and construction.
8. <http://bloggportalen.aftonbladet.se/BlogPortal/view/Home> [2009-10-16].
9. <www.scb.se/statistik/UF/UF0204/UF0204_blanvforsk_forteck1.pdf> [2009-10-16].
10. In a blog the posts can be marked by key words or so-called tags. These tags can be used for searching within the blog in order to, e.g., identify all posts written about a given theme.
11. <http://socscibot.wlv.ac.uk/> [2009-10-16].
12. <http://www8.umu.se/inforsk/Bibexcel/> [2009-10-16].
13. <http://www.analytictech.com/downloaduc6.htm> [2009-10-16].
14. Information taken from the statistical database of the Swedish National Agency for Higher Education <http://www.hsv.se/statistik/> [2009-10-16].
15. <https://www.blogger.com/start> [2009-10-16].
16. <http://wordpress.com/> [2009-10-16].

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Appendix A: Codebook for the Collection of Swedish Academic Blogs

ID	Heading	Value	Comment/Note or clarification
1. Identification			
1a	Blog #	indicate number	Assign a number to blog when coded
1b	Date of collection	indicate date	
1c	URL of blog	indicate URL	
1d	Title of blog	none (0) full title	Indicate title from blog homepage with subheadings
2. About the blogger			
2a	Blogger's name	none (0) pseudonym (1) first name (2) full name (3) last name (4) other (5)	Indicate the name in the form in which it occurs. Use cat. 5 for multiple names.
2b	Number of writers in the blog	not identifiable (0) one (1) more than one (2)	Use cat. 2 if there is more than one writer and a group blog is indicated. If it is possible to establish how many, indicate this under comment.
2c	Blogger's position within higher education	not identifiable (0) professor (1) senior administration (2)	If cat. 7, indicate which type of designation is used. Use 99 if it is a group blog.

		senior lecturer (3)	
		lecturer (4)	
		postdoctoral research fellow or postdoc (5)	
		doctoral student (6)	
		other (7)	
		n/a (99)	
2d	Sex	not identifiable (0)	Use 99 if it is a group blog.
		woman (1)	
		man (2)	
		n/a (99)	

3. Affiliation

3a	Discipline according to the blogger	not identifiable (0) indicate discipline	The discipline may sometimes be identified from the "about" text or else from blog posts or a visit to the department's homepage. The discipline can be more precise in this category than in the categorisation according to Statistics Sweden (SCB), see 3b.
3b	Discipline according to SCB-classification	not identifiable (0) indicate discipline according to SCB	Indicate discipline according to template from Statistics Sweden (SCB) over research subjects: http://www.scb.se/templates/Standard____24458.asp
3c	Link from the blog to home department/employer/higher education institution	no (0) yes (1) n/a (99)	99 e.g. about a group blog where the bloggers come from different departments.
3d	URL within the domain of the higher education institution	no (0) yes (1)	Does the blog have a domain address located within the higher education institution? 99 e.g. to indicate a group blog where the bloggers come from different departments.

3e	Higher education institution	n/a (99) not identifiable (0) indicate name n/a 99	99 e.g. to indicate a group blog where the bloggers come from different departments.
4. Blog content			
4a	Language	English (1) Swedish (2) mixed (3) other(4)	If several languages use cat. 3 and indicate which ones. If another language is used, cat. 4, e.g. a Scandinavian language, indicate which one.
4b	Purpose (main)	not identifiable (0) personal journal (1) filter (2) k-log (3) mixed (4) other (5)	This is what blog type can be identified using the classification of Herring *et al.* (2005). Determined on the basis of predominant content in 10 posts from December 2007 and earlier. Quote about operationalisation from Herring *et al.* (2005, 147): "Filter blogs were operationalized as primarily containing observations and evaluations of external, typically public events [...] Personal journals were defined as primarily reporting events in the blogger's life and the blogger's internal states and/or reflections [...] We coded a blog as a k-log in cases where its primary content was information and observations focused around a(n external) topic, project or product[...]"
4c	Theme (main)	not identifiable (0) research and science (1) discipline-related (2) own research (3) professional life (4) private life (5) social issues (6)	Theme refers to content and is a clarification of 4b. Cat. 1 includes research policy while other political issues are placed in cat. 6. Cat. 2 contains disciplinary news while cat. 3 contains blogger's own results, analyses, discussion. Cat. 4. includes the working environment and processes while private life refers to life outside the work place. Proceeds from the content in analysed blog posts and assigned categories/tags.

		marketing (7)	
		humour (8)	
		other (9)	
4d (was omitted because of difficulties in assessing this feature)	Target group (main)	not identifiable (0)	Attempt to determine main target group from analysed blog posts and e.g. "about" text. "Friends" includes friends in the blogo-sphere.
		other researchers (1)	
		general public (2)	
		friends (3)	
		politicians (4)	
		mixed (5)	
		other (6)	
5. Technical aspects			
5a	Blog roll	no (0)	
		yes (1)	
5b	Comments	not allowed (0)	Apply to the ten posts that are included in the selection.
		allowed (1)	
5c	Number of comments	none (0)	Apply to the comments in the ten posts that are included in the selection.
		<5 (1)	
		>5 (2)	
		n/a (99)	
5d	Blogger has replied to comments	no (0)	Apply to the comments in the ten posts that are included in the selection.
		yes (1)	
		n/a (99)	
5e	Blogging software	not identifiable (0)	Apply to the comments in the ten posts that are included in the selection.
		Blogger (1)	

		Wordpress (2)	
		other (3)	
6. Activity			
6a	Latest blog post	year-month-day	
6b	First blog post	year-month-day	
6c	First blog post in analysis selection	year-month-day	Out of ten selected posts from December 2007 and earlier. Indicate if there are fewer than ten posts during the selection period.
6d	Last blog post in analysis selection	year-month-day	Out of ten selected posts from December 2007 and earlier.
7. Link information			
7a	Crawled using SocSciBot	no (0)	Cat. 0 used when technical problems made crawling impossible.
		yes (1)	
7b	Inbound links from Yahoo Siteexplorer	indicate number	Search for URL in http://siteexplorer.search.yahoo.com/new/ Preferences: Inlinks Except from this domain Entire site (instruction downloaded from http://cybermetrics.wlv.ac.uk/QueriesForWebometrics.htm)
7c (omitted because of technical problems)	Outbound links from Live Search NB this category proved impossible to use	indicate number	Search for URL in http://search.live.com/ with prefix (linkfromdomain:D -site: D) (instruction downloaded from http://cybermetrics.wlv.ac.uk/QueriesForWebometrics.htm)
8. Other comments			

9. Archived posts	Archived in Local Website Archive	no (0) yes (1)	If possible download the pages in the blog that contain the ten posts in question from Local Website Archive. Otherwise print on paper for documentation.

Appendix B: List of Blogs in the Study*

Title	URL
©lektorio	http://lektorio.wordpress.com/
1 är inte ett stort tal	http://1arinteettstorttal.wordpress.com/
99, our 68	http://www.isk-gbg.org/99our68/
ABRAMS .SE	http://abrams.se/
Anders Rasmussen Blog	http://rasmussenanders.blogspot.com/
Anna i Lund	http://www.annailund.blogspot.com/
Berghs betraktelser	http://berghsbetraktelser.squarespace.com/
BIOLOGY & POLITICS	http://www.biologyandpolitics.blogspot.com/
Det perfekta tomrummet	http://www.gustavholmberg.com/tomrum/
Dr Vlachos medicin	http://blogs.su.se/jvlac
DrPeppar, The Mad Scientist	http://www.parnes.com/blog/
Ego sum daniel	http://egosumdaniel.blogspot.com/
En forskares betraktelser	http://forskarbetraktelser.blogspot.com/
forskarbloggen.slu.se	http://forskarbloggen.typepad.com/forskarbloggen/
Forskningspolitik	http://forskningspolitik.blogspot.com/
frepa.blog	http://www.frepa.org/wp/
HEX blogg	http://hexblogg.wordpress.com/
I huvudet på Håkan Fleischer	http://www.fleischer.se/blogg/
Industrial IT Group	http://www.informatik.umu.se/iit/
Infontology	http://infontology.typepad.com/
Intensifier	http://christopherkullenberg.se/
Interopérabilité	http://mikaelnilsson.blogspot.com/
IT & Etik	http://etik.blogspot.com/
Jenny W:s webblogg	http://www.jennywesterstrand.blogspot.com/
Katrins Biologgeria	http://blogg.aftonbladet.se/597
Klimatbloggen	http://klimat.wordpress.com/
Latinbloggen	http://latinblogg.blogspot.com/
Livet enligt Elca	http://elcas-egna.blogspot.com

Loci.se, Stefan Rimms blogg	http://loci.se/
Lunkens blogg	http://lunken.wordpress.com/
MAH-bloggen med Maria Sundqvist	http://www.mahbloggen.se/maria/
Malmbergs blogg	http://malmberg.nu/
Mamakademiker	http://mamakademiker.blogspot.com/
Mark Klamberg	http://klamberg.blogspot.com/
mia++	http://miawb.blogspot.com/
Moderskeppet.se	http://www.moderskeppet.se/live/
Mothugg	http://www.mothugg.se/
Mårten Schultz	http://martenschultz.wordpress.com/
Nicke's Tea Party	http://nickesteaparty.blogspot.com/
Niklas Jakobsson	http://niklasjakobsson.blogspot.com/
Nils Gustafsson	http://nilsgustafsson.blogspot.com/
Nätkulturer	http://www.kulturer.net/blog/
Oväsentligheter… Μη σημαντικός	http://monikaringborg.wordpress.com/
Patrik's sprawl	http://blog.humlab.umu.se/patrik/
Professors blogg	http://ferrada-noli.blogspot.com/
Projectories	http://projectories.net/
Resistance Studies	http://resistancestudies.org/
Röda Nejlikan	http://homeboyyksel.blogsome.com/
SAKJ	http://blogg.fpi.lu.se/bloggar/sakj/
Sannas jobb- och allt-möjligt-blogg	http://blogs.su.se/stiel/
Skor längtar ut	http://haraldcederlund.blogspot.com/
Soul Sphincter	http://www.soulsphincter.blogspot.com/
Stimulansbloggen	http://www.stimulans.se/
Stockholms universitet, Rektor Kåre Bremers kommentarer till aktuella händelser	http://blogs.su.se/kbrem
svennejunker.EU	http://svennejunker.blogspot.com/
TEM-funderingar	http://temfunderingar.wordpress.com/
Text Sushi by Alf Rehn	http://www.alfrehn.com/blog/

the HUMlab blog	http://blog.humlab.umu.se/
the sum of my parts	http://sumofmyparts.org/blog/
*thinking with my fingers***	http://torillsin.blogspot.com/
Ting och tankar	http://tingotankar.blogspot.com/
Tjejen killen katterna	http://snartvuxen.blogspot.com/
Tysta tankar	http://lumaol.wordpress.com/
Under lagerbladet	http://lagerbladet.blogspot.com/
Westerstrand	http://westerstrand.blogspot.com/
Vetenskapsnytt	http://vetenskapsnytt.blogspot.com/
Sound and Fury. Signifying Nothing	http://www.digital-rights.net/

* The web addresses in the list are from the time of collecting the data in the autumn of 2008. Some blogs might have been subjected to address and title changes, accessibility limitations, or even been taken away from the web since then.
** At the time of data collection Torill Mortensen was based at Umeå University but is now working in Norway.