The rise of blogging: Articulation as a dynamic of technological stabilization

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Abstract
This article conceptualizes the emergence and stabilization of blogging as a process of articulation; that is, the establishment of a non-necessary link between a group of internet users, websites, metaphors, and practices of content creation. Data for this study come from a mixed-methods research design. Drawing on an interdisciplinary framework that combines constructionist sociology of technology, communication and media research, and cultural studies, this article analyzes three important dynamics of articulation that shaped the rise of blogging from 1997 to 1999: the constitution of patterns of similarity between certain websites; the adoption of the term ‘weblog’ to identify this group of websites and their associated metaphors and content creation practices; and the coalescence of their creators into a self-defined community of users. This case affords significant opportunities for thinking about the contemporary appropriation of blogs and the dynamics of stabilization and use of new media.

Keywords
articulation, interpretive communities, new media history, relevant social groups, social construction of technology, technological stabilization, users, weblogs

Introduction
In December 1997, Jorn Barger started Robot Wisdom, a website devoted to sharing annotated hyperlinks to other sites on the Web. This computer programmer and James Joyce aficionado referred to his new project as a ‘weblog’ or ‘a daily running log of the best webpages I visit,’ as he described it in an online forum one week after its launching (Barger, 1997b). In his first post, Barger reflected on information he had found online about gangs in Chicago and linked to another site where his readers could discover, he assured them, ‘a ton of details – names, symbols, alliances – you never see anywhere else’ (Barger, 1997a). Barger was not shy about making predictions about the impact his new online venture would have and invited other Web users to join the inescapable expansion of weblogs. As he put it, ‘I suspect that in a year there’ll be hundreds of people maintaining pages like this, and that this will allow good URLs to spread much more quickly ... so I recommend that all enthusiastic surfers take a shot at maintaining such a “weblog”’ (Barger, 1997b).

In the following months, several users would fulfill Barger’s ambitious prophecy. Throughout 1998, many ‘enthusiastic surfers’ of the Web created their own weblogs, sharing comments and hyperlinks to other online sources. By 1999, weblogs (or blogs) caught the attention of
mainstream media organizations. Scott Rosenberg (1999), a journalist writing on digital media, maintained that ‘[the] phenomenon known as the weblog is one of the fastest-growing and most fertile creative areas on the Web today.’ Similarly, James Poniewozik (1999) asserted that weblogs exemplified ‘a trend in online publishing: the increasing influence of metajournalistic referrer sites.’ These press articles are significant in two related ways. First, they illustrate the growth of this online activity in the course of a short period of time. Second, they confirm that by 1999, users and journalists recognized the weblog as a singular type of website with a specific set of features. The weblog’s process of early popularization thus raises the following questions: How did early users establish the identity of the weblog as a particular kind of website? How did blogging develop into one of the ‘most fertile creative areas on the Web’ and a major ‘trend in online publishing’ at the end of the 1990s?

To answer these questions, this article analyzes how a group of users appropriated the Web from 1997 to 1999. The study focuses on the community of users who first employed the ‘weblog’ concept to define their websites and associated it with a group of specific Web affordances, metaphors, and several practices for creating content online. Building on scholarship in science and technology studies (STS), communication research, and cultural studies, this essay conceptualizes the rise of blogging as a process of articulation, that is, as the establishment of a contingent link between different elements (Grossberg, 1986). This study uses a mixed-method approach to show that three dynamics of articulation were crucial for the emergence of blogs: the creation of patterns of similarity between websites with certain characteristics; the adoption of the weblog concept to define these sites; and the coalescence of their creators into a self-defined community of users.

This article shows that, for various reasons, a historical investigation of blogs is a relevant contribution to scholarship on new media. First, as blogs have become an increasingly popular Web format, some of their most defining features have been incorporated into the standard affordances of the new media ecology. An inquiry into the rise of blogging thus enables a better understanding of how key aspects of the new media environment are the product of singular, historical contexts rather than technological imperatives. Second, by looking at the development of blogs in a temporal perspective, historical investigation helps to illuminate the factors that have led to their popularization. This provides an alternative perspective to studies that characterize blogs as having a fully formed identity from their inception and that endow them with an intrinsic capacity to diffuse. Third, examining the history of the blog is a key for understanding the evolution of its identities over time. In particular, this research shows that the difference between early blogs and online diaries was of kind rather than degree. Finally, this inquiry into the emergence of blogs affords singular opportunities for theory development. A focus on processes of articulation reveals that the formation of groups of Web users and the ways they attach meaning to technology are mutually shaping processes.

‘Relevant social groups’ and the social construction of technology
The role of users in shaping technology is a central topic of investigation in STS (Oudshoorn and Pinch, 2003). Scholars in the social construction of technology (SCOT) tradition have conceptualized users as a ‘relevant social group,’ that is, an ‘organized or unorganized [group] of individuals [who] share the same set of meanings, attached to a specific artifact’ (Pinch and Bijker, 1987: 30). In this framework, the description of relevant social groups consists of a three-
fold process that includes: (a) the identification of sets of individuals attributing different meanings to a technology; (b) a detailed description of their members and the problems and solutions they associate with the artifact; and (c) the delineation of the boundaries of each group (Bijker, 1995; Pinch and Bijker, 1987).

Scholars have identified two aspects of the social construction of technology process involving relevant groups of actors. First, researchers have defined as ‘closure’ the negotiation dynamics between various social groups by which the multiplicity of the meanings of an artifact (i.e., its ‘interpretive flexibility’) diminishes (Kline and Pinch, 1996). In addition, Bijker (1995) argues that the interactions within a relevant social group play an important role in defining the degree of ‘stabilization’ of a technology. Thus, ‘Stabilization can most easily be introduced by analyzing intragroup development of artifacts, while closure is primarily relevant to an intergroup analysis’ (Bijker, 1995: 85). The two processes of closure and stabilization, Bijker (1995: 264) concludes, result in the ‘fixity’ of meaning to technologies.

Drawing on the principles of SCOT, scholars have applied the concepts of closure and relevant social groups in a variety of contexts. Yet, comparatively little research has assessed how the attribution of meaning to technologies rests on interactions within social groups – that is, in Bijker’s terms, on the process of stabilization. Researchers have often examined the interactions between already consolidated groups that agree on a homogeneous interpretation of technology, rather than individuals in the process of coalescing. In this sense, the case of early bloggers affords a significant opportunity to rethink the concept of relevant social groups. By looking at the practices of Web appropriation of early bloggers and their constitution into a relevant social group, this study aims to understand how interactions within these groups play an important role in shaping how users attach meaning to technology.

Some scholars have challenged the sense of finality implied by the concepts of closure and stabilization. According to Law, ‘there are often practical closures. ... But what there aren’t are closures in general. ... [N]o objects are ever routinised into a reified solidity’ (2004: 56, emphasis in original). In response, SCOT proponents have argued that closure and stabilization ‘need not be final’ and that the problems and solutions associated with technology ‘can emerge and interpretative flexibility may reappear’ (Kline and Pinch, 1996: 766). The notion of stabilization is thus meant to describe a process rather than a final stage of technological development. Therefore, by employing the notion of stabilization I seek to investigate the process through which blogs acquired an early form and identity that subsequently became the object of new transformations and enactments. To this end, I turn to the notion of articulation and to research on how audiences interpret the content of media.

Articulation and interpretive communities
Research in communication and cultural studies has resorted to the concept of articulation to define two, related processes. First, articulation refers to the establishment of a connection between elements with no necessary relation, such as ‘values, feelings, beliefs, practices, structures, organizations, [and] ideologies’ (Slack, 2006: 225), that leads to the constitution of a unity in a particular context. The practice of linking these elements modifies their identity and results in the partial fixity of meaning to their articulation (Hall, 1980). Second, once established, the articulation of elements plays an important part in giving power to certain ‘ways of thinking,
being, and acting in the world as possible or not,’ while sanctioning others (Slack, 2006: 225).

The notion of articulation offers a productive means to understand how technologies and practices of technological appropriation acquire partial meaning. From this perspective, as Slack (1989: 336) argues, ‘What technology is, its definition and identity, is a nonnecessary set of specific connections formed in the conjuncture of other social forces, practices, identities, and ideologies.’ Du Gay et al. (1997), for instance, show how the Sony Walkman acquired cultural meaning through the articulation of several processes (i.e., representation, identity, production, consumption, and regulation).

Media research has shown that the appropriation of websites also involves the active interpretation of their content (Livingstone, 2007). Some scholars in this field thus define media users as ‘interpretive communities,’’ that is, groups of individuals linked by a common reading of the content of media and a shared orientation toward social reality. According to Jensen (1990: 130), ‘The interpretation of media content [by interpretive communities] may be defined as a form of social practice through which audiences express and exercise interests of a broadly political and cultural nature.’ Thus, the notion of interpretive communities offers an important complementary perspective to the analysis of early bloggers as a relevant social group. Whereas the SCOT approach helps the understanding of how a group of Web users shaped the development of blogging by attributing meaning to blogs as artifacts, media scholarship invites an analysis of content creation and interpretation practices as a key dimension in the emergence of these sites.

**Methods**

Four methods were employed in this study: archival research, interviews, and content and artifact analyses of websites. SCOT’s tenets for identifying relevant social groups guided the sampling of the websites that I analyzed and the users that I interviewed. Researchers in this tradition have recognized relevant social groups by looking for ‘citations of [an] artefact by a variety of actors’ (Bijker, 2010: 69). Recent research indicates that weblogs acquired a singular identity from 1997 to 1999 (Blood, 2002; Rosenberg, 2009). Thus, by employing ‘mentions to the weblog artifact’ as a criterion for sampling them, I identified a group of users who labeled their sites as weblogs during this period. A close textual analysis of the archives of these sites was conducted. Most of these websites are still available online for consultation. Others were accessed by using the Internet Archive’s ‘Way Back Machine.’ I also examined websites that were not defined as weblogs during this period (particularly online diaries and personal publishing sites).

Furthermore, between August 2009 and August 2011 I conducted thirty-two semi-structured interviews with early weblog users, online diarists, and blogging software developers. I conducted most interviews in person, although some were completed by email or telephone. The conversations lasted for an average of 55 minutes and were recorded and transcribed in their entirety. The length of email interviews varied from three to eleven pages.

Finally, I performed both content and artifact analyses of a sample of 10 early weblogs. I coded a total of 1145 posts written in January and July of each year between 1997 and 2000 according to their most important types of topics, modes of address, images, content meta-data (such as date, title, and time), information about the creator of the site, and frequency of content publication. I
conducted an artifact analysis by coding the structural elements exhibited by each website during this period: the source code, hosting infrastructure, automated functions (such as search mechanisms), sidebars, hyperlinks, navigation structure, and overall layout of the site. In addition, I performed content and artifact analyses of a sample of 1742 posts from seventeen online diaries and journals created from 1995 to 2000. These analyses helped to ascertain the patterns of similarity and difference between blogs and other types of sites during the period under study.

I examined the data drawing on the main principles of grounded theory (Corbin and Strauss, 2008). I identified major concepts and categories after three rounds of coding the data. Using these concepts and categories, I recognized three main dynamics that led to the formation of the weblog’s early identity. The theoretical scheme of articulation was then developed to account for these dynamics. I ascertained the validity of the analysis through data and methodological triangulations (Denzin, 1978). That is, the strengths of different research techniques were constantly combined. This helped to corroborate the material gathered from various data sources, to confirm the results provided by different sources, and to account for possible biases.

The dynamics of articulation of early weblog users
In what follows, I analyze the key dynamics of articulation that turned an emerging group of users, websites, practices, and metaphors into a coherent unity defined by the notion of blogging.

’Sites like mine’
A chief dynamic in the stabilization of weblogs was the creation of patterns of similarity between certain websites. Throughout 1997 and 1998, several Web users identified websites that shared various characteristics. This period was marked by the excitement that surrounded the commercialization of the internet in the midst of the dot-com era. Male individuals related to the technology development field, such as software producers, computer programmers, and Web designers, created most of these websites with ‘similar’ features. This provided an important condition of possibility for the process of articulation that soon linked these users and their sites. The content of these websites largely reflected the professional interests of these individuals. Most sites were characterized by relatively short comments on recent news about technology, the internet, and Web design. According to the content analysis, an average of almost 79 percent of the posts in the sample of weblogs from 1997 to 1999 dealt with these topics. Another important characteristic of these websites was the frequent use of hyperlinks to point to other sources of information online. Bill Humphries, a programmer and early user, recalls, ‘The early mindset of [users] was to find interesting things and link to them. It was description or comment and link’ (2009, personal communication). Steven Bogart (1998), who created one of these sites in 1997, thus referred to those who used the hyperlink as a key element in their websites as the ‘merry band of linkers.’

To make content easier to read, users posted the most recent information in reverse chronological order. Most users turned to a scripting software named Frontier and employed various programming scripts to create this singular format. The majority of users owned a domain to host their site. The artifact analysis indicates that, for the most part, these sites also included a menu that linked the most recent entries to other sections of the website, options for allowing readers to configure the site’s color scheme, automated search functions of keywords, archives of older
posts, and mechanisms for sharing a link with the creator of the site. Frontier was designed by Dave Winer, a well-known software developer in the Bay Area, and his company, Userland. In February 1997, Winer transformed his own site – devoted thus far to discussing Frontier’s news – into what he referred to as a ‘news page’ and called it Scripting News. Winer played a crucial role in gathering what Chris Gulker, a programmer working in new media development at the San Francisco Examiner, describes as a ‘group of users that grew organically’ around this kind of website and Frontier (2009, personal communication). Another instance of this type of websites was CamWorld, produced by Web developer Cameron Barrett in 1997, ‘as a site where my students could keep up with their weekly readings back when I was teaching new media design’ (Barrett, 2001). Barrett typically posted links to news about Web design and internet development, accompanied by short sentences interpreting their content. He also wrote longer essays with fewer links that he called ‘CamRants.’

Users employed certain metaphors to conceptualize what they considered ‘similar’ kinds of websites. Jorn Barger, for example, characterized these sites with a metaphor that evoked their role in the distillation of the Web’s content: ‘We vacuum the Net for stories that the major outlets haven’t noticed yet, and pass along our sources so we can all get more and more efficient at this vacuuming’ (Barger, 1998a). Users also employed the metaphor of ‘pre-surfing’ the Web for their readers (Graham, 1998). Similarly, in 1997, Michael Sippey, a Web developer with a background in American literature, created a section on his website called The Filter (later named Filtered for Purity) devoted to sharing links and comments on news related to technology. According to Sippey, content centered mostly on ‘what it was actually to use technology as opposed to the technology itself and what it mean[t] to use technology as opposed to the actual bits and bytes’ (2009, personal communication). The notion of filtering the Web would prove to be a resilient one.

Throughout 1998, the number of websites sharing these traits increased. The establishment of patterns of similarity between these sites functioned as a dynamic of articulation in multiple ways. Once they had identified a similar type of website, users usually exchanged hyperlinks with their creators (Ammann, 2010). In addition, users constantly wrote meta-commentaries in which they reflected upon the nature of the shared features of their sites. Conversations about this type of website also took place on existing mailing lists devoted to discussing Web development issues, such as Steve Champeon’s ‘webdesign-L’ (Blood, 2005).

The formation of patterns of similarity also led to the constitution of lists of sites with common characteristics. For example, Chris Gulker identified twelve similar pages throughout 1997, which he listed on his site, calling it the ‘News Page Network.’ Similarly, in January 1999, Cameron Barrett posted a list of sites that another user, Jesse James Garrett, had compiled when looking for what he judged were ‘sites like mine’ (Blood, 2002; Rosenberg, 2009). Expanding Garrett’s original inventory, Barrett placed a list of twenty websites in a column located on the right of his site and classified them as ‘other weblogs.’ (The significance of the terms ‘news page’ and ‘weblog’ will be discussed below.) These lists allowed users to discover new websites, assess their resemblances, and exchange links and emails with their creators. Lists thus functioned as what Web developer Matt Haughey called ‘hubs to daily bookmarks’ (2011, personal communication).
The creation of patterns of similarity between sites involved a parallel definition of criteria for determining difference. Users commonly distinguished between this nascent group of ‘similar’ sites and other types of websites, particularly online diaries. A group of early Web users began creating online diaries at least as early as 1995 (Siles, 2011). Most online diaries consisted of narrations of events in the daily life of the user and descriptions of what users referred to as their ‘inner self.’ Online diaries were usually hand-coded in HTML and hosted on free services, and often presented the most recent writing on a new page of the site. The artifact analysis indicates that early weblog users barely linked to online diaries. Besides issues of website design, users pointed to divergences in content as a key indicator of difference between these sites. My content analysis of weblogs and diaries largely confirms this observation. Almost 90% of the content of online diaries from 1997 to 1999 dealt with descriptions of daily life events or introspective reflections. In contrast, less than 10.5% of the posts on the sample of weblogs referred to these topics during the same period.

As noted above, male individuals created the majority of these sites. According to Rebecca Blood (n.d.), only five women had created sites like these before April 1999, when she designed her own website. Most of these women were involved in the Web development field, a condition that helped them identify this type of site and acquire the knowledge necessary to produce them. For instance, Brigitte Eaton, who discovered these sites in 1998, was an experienced Web designer. Similarly, Meg Hourihan, creator of Megnut, had been involved in Web development since the mid-1990s. Although no major difference in content was identified between websites designed by men and those produced by women, gender relations seem to have played a prominent role in constructing the identities of these sites. For instance, the production of difference around issues of content between weblogs and diaries can be read as an extension of common assumptions about gendered spheres of activity (Wajcman, 1991). Whereas many weblog users characterized these sites with metaphors of ‘male’ exploration and mastery of the Web, the online diary was linked to the ‘feminine’ realms of domesticity and everyday life. Thus, various male online diarists opted for naming their sites ‘journals’ to avoid being associated with the feminine notion of ‘diary’ and at least one female weblog user created an online diary to post content that did not ‘fit’ in her weblog.

The establishment of patterns of similarity and difference between certain sites helped define the criteria according to which a website could be considered an instance of this emerging type of site. For instance, most websites listed in catalogs were published in reverse chronological order. As Brigitte Eaton, creator of the popular weblog directory Eatonweb, recognizes, ‘My criteria for inclusion [in the catalog] was that it was a site that was updated regularly and organized in reverse chronological order’ (2009, personal communication). Thus, through the definition of these similarities, users established a particular link between a singular artifact (the website coded in reverse chronological order), certain types of content (briefly annotated hyperlinks and comments about technology and the internet), and metaphors to define their practices (filtering the web).

The name of the game
Another dynamic of articulation that shaped the stabilization of weblogs was the adoption of a name to identify websites that shared this common set of traits. Throughout 1998, a set of competing names circulated among users to refer to what they considered similar websites. A
small group of users had adopted Barger’s weblog concept. By mid-1998, Barger had elaborated various ‘design suggestions’ for the creation of weblogs and tried to convince other users to embrace them (Ammann, 2009). Among these suggestions were updating information constantly, using the reverse chronological order, providing a summary of the content of hyperlinks, and ‘crediting links borrowed from other weblogs’ (Barger, 1998b). Following Barger’s suggestions, another user, Raphael Carter, registered the ‘web log’ category on the Netscape Public Directory in November 1998, an event that some interpreted as a key moment in the stabilization of weblogs. Bill Humphries, for example, celebrated the occasion with enthusiasm. ‘It’s official,’ he wrote, ‘Web logs are a movement’ (1998).

Yet the weblog term was only one among other possibilities. Following Winer, many users associated with the Frontier community had been naming these sites ‘news pages’ since at least 1997. This term described websites created through the Frontier software, organized in reverse chronological order, and devoted to sharing news, comments, and hyperlinks to other Web sources mostly related to technology issues. In keeping with the popularization of Web ‘portals’ in the late 1990s, another common name at the time was ‘microportals,’ defined by one of its advocates as ‘indy [sic] sites that change all the time [usually] run by one person, or a small group. Most of them belong to presurfers, or people who find links and share the best with others. Other sites are newsfeeds’ (Wallace, 1998, emphasis in original). Finally, other names included ‘filters’ – which evoked Sippey’s metaphor – or, for lack of a better name, simply ‘personal websites’ or ‘homepages.’

The weblog became the standard name mostly as a result of its use by influential users (such as Barger and others) as an articulatory concept to link existing approaches to Web publishing. A key instance of the use of this term as an articulatory concept occurs in the essay ‘Anatomy of a Weblog,’ posted by Cameron Barrett in January 1999, and is worth quoting in some length:

> Typically, a weblog is a small web site, usually maintained by one person that is updated on a regular basis ... It’s got a nice, clean easy-to-use design and user interface. ... It has a theme .... It has a way for the users to interact with each other .... It even has somewhat of a community, maintained by repeat visitors and list members who contribute many of the links ... Most weblog editors/owners work full-time in the Internet industry. Most have many years of proven Internet research skills that they utilize every day. Michael Sippey ... calls this process filtering ... [A high] percentage of them [is] being maintained by a software package called Userland Frontier. (Barrett, 1999)

Barrett’s dissection of weblogs illustrates the process of articulation that started in 1998 by which diverse practices and approaches to the classification of the Web’s content, conceived independently from each other, were linked by a single concept: the weblog. Barrett associated this term with a specific set of material and symbolic features: size of the website and its content; specific subject matter; frequency of updates; aspects of design; modes of address to users; a self-conscious community; conventions for using the website; type of user; a metaphor to define the practice of finding and annotating interesting links (filtering); and a technical platform for producing them (Frontier). This essay also restated the problem of alternative names – a process that scholars in STS have called ‘closure by redefinition’ (Pinch and Bijker, 1987). Instead of using different names to label what users considered as similar websites, the weblog concept encompassed them all. The influence of Barger’s weblog apologia and essays such as Barrett’s...
thus stems from the ways in which they helped users of ‘similar’ kinds of websites to relate their online publishing practices with a more encompassing and unified framework, in which technologies, metaphors, and practices of content creation converged.

By the end of 1998 and beginning of 1999, users who had not explicitly identified their websites as weblogs began referring to them as such. For instance, in February 1999, Pete Prodoehl (1999b), an early Frontier user, wrote: ‘I didn’t even know this site was a “weblog,” but now I do ....’ Similarly, in May 1999, John SJ Anderson, a molecular biologist who created a site in 1998, announced: ‘I’ve decided: GeneHack is now a weblog, as opposed to the mess o’ links that I previously thought of it as’ (1999). In addition to a common set of traits, this ‘similar’ group of websites were now also linked by a common name.

From ‘merry linkers’ to the ‘weblog community’
Throughout 1999, users acknowledged an increasingly important popularization of the type of website they associated with the weblog concept. As Jesse James Garrett (1999) wrote, ‘Barely a year has passed since I forwarded to Cameron [Barrett] a dozen URLs of sites similar to ours. I don’t think either of us expected that list ... to kick off the tempest-in-a-teapot known as Weblog Mania’99.’ Inspired by pioneers such as Barger, Barrett and Winer, some new practitioners adopted the features and format of the weblog as a model for their websites. According to Rafe Colburn, who started his site in 1998, ‘My website was created because I looked at the people who were [publishing online] before me, and wanted to do what they were doing’ (2009, personal communication). Similarly, for Brigitte Eaton, ‘I realized that I wanted to bookmark a lot of the new sites I was seeing and a weblog seemed to be an appropriate format for that’ (2009, personal communication). The weblog thus gained popularity among new users in part as a means for building a record of annotated links to other websites and obtaining feedback on their writing.

Early users associated the popularization of weblogs with the constitution of a community of practitioners. In this sense, a third dynamic of articulation in the emergence of blogging linked weblogs to a particular group of users. Early references to a small set of ‘sites like mine’ or a ‘merry band of linkers’ evolved into recurrent invocations of a ‘weblog community.’ For instance, Dave Winer asserted: ‘Thanks to the weblog community for embracing the Weblogs.Com site ... Hey, now that I think of it, thanks to the weblog community for existing!’ (1999, emphasis in original). Users employed different terms to refer to this nascent community. Web developer Peter Merholz (1999) described it as the ‘WebLog Generation.’ Other users, inspired by Jesse James Garrett’s (2000) portal, called it the ‘Weblog Nation.’ In September 1999, Brad Graham (1999), discussing the rapid expansion of the weblog’s short name ‘blog,’1 introduced a concept that later became a standard in the definition of these groups of users: the blogosphere.

Throughout 1999, users implemented different means to communicate with other members of this community, nation, and generation of early weblog users. Online forums were a key dynamic of community building. In July 1999, Matt Haughey launched MetaFilter, a ‘community weblog,’ that is, a blog updated by multiple users. (The website’s name once again evoked the founding metaphor of filtering.) According to Haughey, MetaFilter sought to crystallize the sense of community arising from interactions between early weblog users (2011,
personal communication). By early 2000, this site was becoming a central site of discussion for many users. For Paul Bausch, a developer of the Blogger software,

A lot of the early members of Metafilter were also early bloggers, and it became sort of a central ‘hang out’ for people interested in weblogs. Often it was one of the only sources covering and discussing what was happening with blog-related topics. (2007)

In August 1999, Jorn Barger created a mailing list for weblog users that became an important mechanism to build a sense of community between them (Ammann, 2009). The Weblogs eGroup functioned as a popular forum on different topics related to weblogs until April 2000, when a dispute between Barger and Winer put an end to the discussions. Users also created exclusive mailing lists to communicate with smaller groups and to engage specifically in what Pete Prodoehl describes as ‘meta-discussions about blogging’ (2009, personal communication).

In addition, users turned to other practices as a means to signal their membership in this community. For instance, sharing the name ‘weblog’ on their sites was an important sign of belonging to this group. According to Dan Lyke, a programmer and early user, ‘[There was a] sense of community with other sites, so I’d have adopted the name as kind of a sense of “we’re all X” where X was weblog’ (2009, personal communication). For users, knowing and reading the sites of others were important symbols of belonging to this community. Robert Occhialini, a webmaster at a company who created his site in November 1997, thus wrote: ‘It’s funny to me how much I have come to depend on the Weblog circuit every day to keep myself informed and entertained’ (Occhialini, 1999). In a similar manner, John SJ Anderson recalls, ‘A big part of [this community] was checking the log and seeing who had linked to you or where was the traffic coming from’ (2009, personal communication). These observations resonate with Carey’s (1992) ritual view of communication. The habit of visiting other weblogs daily helped users to organize their practices of Web appropriation and build a sense of community with others.

Casual conversations via e-mail between members of this community usually followed the publication of new content on a weblog. Through these conversations, users exchanged comments and opinions about their most recent posts. They also motivated each other to produce new content on their sites. For example, Robert Occhialini and Pete Prodoehl agreed to become their respective ‘motivational partner,’ that is, ‘a person who also does a WebLog ... and has the job of making you feel guilty if you don’t update it at *least* once a day’ (Prodoehl, 1999a).

The constitution of this community involved a parallel process of identity formation by which members of this group conceived of themselves as representative figures of a particular type of internet user, expressed by concepts such as the Web’s ‘pre-surfer’ or the ‘weblogger’ (Siles, forthcoming). Scholarship on identity formation suggests that building a sense of identity and community usually implies an exclusion of those who are considered different. In the case of early blogs, establishing a distinction between bloggers and online diarists allowed the former to further define themselves as a community. As participants of the technology and internet development fields, early bloggers knew a variety of programming languages and technical skills. Bill Humphries laconically summarizes, ‘Webloggers knew how to program’ (2009, personal communication). Users envisioned these skills as a marker of identity and a source of differentiation with respect to online diarists, most of whom coded their sites in HTML.
The sense of community developed by early users through the communicative mechanisms and practices discussed above led to various efforts to meet in person. A notorious gathering of early bloggers took place in March 2000, at the South by Southwest conference. During this event, many users met each other in person for the first time and discussed in roundtables and informal conversations the possibilities and limitations of weblogs for communication (Powazek, 2000). As its identity further stabilized and it gained increasing attention from the mainstream media, the weblog soon became a key factor in the development of the contemporary new media environment.

**Early weblogs as paradigmatic technology**
This article has conceptualized the emergence of blogging as a process of articulation between a group of users, websites, metaphors, and practices for creating content online. Although writing about and linking to interesting sources of information on the Web were common practices since the early days of this technology, the parallel configuration of the three dynamics explored in this article shaped those practices in particular ways. As a result, weblogs emerged from 1997 to 1999 as a singular type of website defined by a certain purpose (filtering the Web), a particular format (the reverse chronological order), specific forms of content (briefly annotated hyperlinks), and a certain type of user (the ‘weblogger’).

This inquiry into the early days of blogging has important implications for thinking about the contemporary appropriation of these sites and opens new avenues for their study. To begin with, this case invites a reassessment of common analytical categories employed in the investigation of blogs. Research has often considered ‘online diaries’ and ‘filters’ as instances of the same technology (Herring et al., 2005). From that perspective, the difference between these websites is one of degree rather than kind. However, this study shows that the distinction between diaries and filter blogs was key in the emergence of the latter. In this sense, future research must investigate how the blog concept came to define forms of Web appropriation originally thought of as mutually exclusive, rather than to assume their common ancestry (Siles, 2011). How and why did early users accept diaries as legitimate expressions of weblogs? How did the identities of these sites partially ‘merge?’ Research must investigate these questions to avoid the perils of anachronism. Given their importance in the original differentiation between filters and diaries, further studies should also investigate how gender relations might have shaped the merging of these sites or the resistance to their conflation.

Furthermore, the early history of blogs helps to better understand important characteristics of the current new media environment. Recent research shows that the use of software has become the norm for creating and updating blogs (Lenhart and Fox, 2006). Yet it has seldom been noted that these programs largely standardized most of the features developed by the group of users explored in this article. Early programs, such as Manila, Pitas, and Blogger, crystallized the practices of publishing posts, linking to other weblogs, and responding to their content through affordances such as the reverse chronological order, blogrolls, comment systems, archives, and search functions. Blogging software may thus be envisioned as a materialization of various content and website creation practices, as well as community dynamics, that characterized the early appropriation of weblogs. Tom Coates (2003), a Web developer in London who began blogging in 1999, makes a similar argument when he analyzes ‘permalink’ – a feature introduced by Blogger in March 2000 to create permanent hyperlinks to specific posts on a site –
as a device that resulted from conversations between ‘overlapping communities’ of early users and that helped them coalesce. Through this process of standardization, early bloggers thus provided a template for using the blog as a singular means to share a variety of content on the Web and communicate with others.

By foregrounding the significance of this process of early stabilization, I do not mean to imply that weblogs have not changed after this period. Stabilization, as noted above, is a process rather than a final stage of technological development. Thus, further research might explore how and why users have reopened the interpretive flexibility of the blog over the past decade and redefined its meaning in singular contexts. Studies should examine how blogs and the content creation practices of their producers have evolved over time, and how the metaphors associated with their initial popularization have changed as users appropriated these sites in new circumstances.

This study takes on greater significance in light of the increasingly important role of blogs in helping to conceptualize the emergence and development of new media. Rettberg (2008: 156), for instance, argues that blogs have ‘spread’ into social network sites. Similarly, the term ‘microblogging’ suggests that the relationship between blogs and more recently developed technologies, such as Tumblr and Twitter, is of continuity and refinement. In this sense, blogs have become a ‘paradigmatic’ technology, the case that makes intelligible singular aspects of a whole set of artifacts (Agamben, 2009). I argue that a consideration of the early days of blogs is key for understanding their paradigmatic character. Many users interviewed for this study contended that, beyond a semantic connection, the shift from blogs to forms of online publishing usually described as ‘microblogging’ signals a return to the dynamics of Web use examined in this article. In a similar manner, early blogger Jason Kottke (2005) noted:

A tumblelog is a quick and dirty stream of consciousness, a bit like a remaindered links style linklog but with more than just links. They remind me of an older style of blogging, back when people did sites by hand ... and posts belonged to a conversation distributed throughout the entire blogosphere.

Making sense of the present in terms of the past is a common strategy among analysts of media and technology (Bolter and Grusin, 1999). Yet the implications of defining these media as a return to the initial appropriation of weblogs are profound. The link put forth by users between pioneer blogs and microblogs calls into question taken-for-granted assumptions about the progressive nature of the internet (illustrated by concepts such as ‘Web 2.0’). It also suggests that a look at the early days of blogging might shed new light on the factors shaping the recent uptake of microblogs. This opens various avenues for further research. How did blogging shape the emergence of technologies associated with microblogging? How have blogging and other forms of online publishing been articulated both at the level of software design and of user appropriation? By answering these questions, research might be able to broaden our understanding of media transition issues.

The process of articulation outlined in this article also affords opportunities for theory development. Scholars in the SCOT tradition have turned to the concept of relevant social group primarily to identify users who share a common interpretation of the meaning of an artifact. As a complementary perspective, this study suggests that the attribution of meaning to technology and
the constitution of its users as a group are mutually defining processes. As this essay shows, the adoption of the weblog concept played an important part in the self-identification of its users as a community. In parallel, this process of coalescence allowed users to establish a link between a variety of meanings (e.g., ‘news pages,’ ‘microportals,’ and ‘filters’) and the weblog term. Thus, when looking for ‘references to an artifact’ as a criterion for defining a relevant social group, as scholars associated with SCOT suggest, researchers might also consider how these references are the product of processes of articulation. A focus on articulation shifts the analysis from already constituted groups sharing a common interpretation of the meaning of an artifact to the work of individuals in achieving such conditions of relative and temporary unity.

A key aspect of the articulation of blogging was the formation of a link between an artifact (the website) and the types of content articulated with that artifact. Envisioning early users as an interpretive community helped to tease out the significance of content creation practices in the partial stabilization of weblogs. Identifying certain types of content was crucial in establishing the criteria by which a set of websites was considered to be similar and, therefore, in defining early weblogs. Reading content posted by other users was an important ritual practice in the constitution of the so-called ‘weblog community.’ The linkage of artifact and content thus lay at the heart of the formation of weblog users as a community. In this sense, the investigation of user communities can benefit from an analytical approach that combines the analysis of the processes of attributing meaning to artifacts (as relevant social groups), the dynamics of producing and interpreting the content that these artifacts enable (as interpretive communities), and the interdependence of these activities. Articulation thus offers an important lens to investigate how the identities of both users and technologies are mutually defined.

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Note
1 In May 1999, Peter Merholz announced on his website his decision to pronounce the weblog concept as ‘wee-blog’ or ‘blog.’ Despite initial resistance by some users, the term blog quickly became a popular short name for weblogs.
References


