
Web Presence of Academic Geographers: A Generational Divide?

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The pervasiveness of the Internet in society has brought about changes in academia and shifts in the day-to-day practices of many academics. Here, the Web practices of academic geographers are specifically examined through an Internet-based survey, to better understand how these geographers both present themselves through the Internet and perceive the importance of such practices around Web presence. Situated within this increasing importance of the Internet as part of professional practice and the neoliberalization of the university, the changes in the teaching and research of academics are overviewed. We then discuss our findings, which indicate a relationship between generation and Web practices, and further reinforce the need for a more central discussion of the importance of Web presence within the context of a knowledge economy. **Key Words:** academic geographers, professionalization, social media, Web 2.0, Web presence.

互联网在社会中的盛行, 已为学术圈及诸多学者的日常生活实践带来诸多改变。本文将根据互联网的调查, 特别检视地理学者的网络行为, 以进一步瞭解这些地理学者如何透过互联网呈现自我, 及其如何理解有关实践网络呈现的重要性。大学的专业实践与新自由主义化中, 互联网具有逐渐增加的重要性, 而学术教学与研究便将置放在上述脉络中概观之。我们接着将讨论研究发现, 指出世代与网络行为的关联性, 并进一步强调必须在知识经济的脉络下, 更聚焦于网络行为的探讨。 **关键词:** 地理学者, 专业化, 社会媒介, Web 2.0 平台, 网络呈现。

La ubicuidad de Internet en la sociedad ha traído cambios en la academia y transformaciones en las prácticas cotidianas de muchos académicos. En este artículo se examina específicamente las prácticas de geógrafos académicos en la Web por medio de un estudio del quehacer en Internet, para tratar de entender mejor cómo se presentan a sí mismos estos geógrafos en la red y cómo perciben la importancia de tales prácticas en el medio de la Web. Puestos en el contexto de la creciente importancia de Internet como parte de la práctica profesional y la neoliberalización de la universidad, los cambios ocurridos en enseñanza e investigación de los académicos son examinados a grandes rasgos. Luego, discutimos nuestros hallazgos, que indican una existencia relacional entre generación y prácticas de la Web y refuerzan aún más la necesidad de una discusión más centrada de la importancia de la presencia de la Web dentro del contexto de una economía del conocimiento. **Palabras clave:** geógrafos académicos, profesionalización, medios sociales, Web 2.0, presencia de la Web.

In just three days in early March 2011, nearly eighty e-mails hit the crit-geog-forum listserv on the topic of the role of blogs in academic production within geography. Sparked by a request for recommendations of blogs by and for geographers, members quickly began to collaborate on a list. Ten replies into the thread, however, one member asked, “Why does anyone bother [blogger?] with blogs? It seems to add nothing, but gears and joys itself on self-serving romance.” Many members replied in defense of blogging, tracing the importance of this kind of Web presence for the intellectual and professional development of individual scholars as well as the vitality of the broader discipline. One member saw the blog as a place to air thoughts as they are worked out, welcoming the collaboration of other readers and bloggers. Another marked blogs as sites of global political discourse and struggle, and still another saw the blog as a hyperlocal strategy in community engagement. On the subject of research, blogging members valued the ways in which blogs allow reporting back to the communities within which

researchers conducted their work and, furthermore, some felt that their blog was the primary way in which the fruits of their academic labors were read, picked up, and enrolled.

This flurry of debate is but one illustration that might be fruitful to better understand the role of Internet practices in academic production within geography (and, more broadly, academic life and culture)—and how the norms and expectations around these practices are shifting. Although blogs were the primary concern of this online discussion forum, they are, of course, not the only ways in which academics engage on the Web. Indeed, academics across many disciplines are increasingly making use of blogs as well as other online social media as part of research and teaching activities, as reported by Faculty Focus in late 2011. In this article, we report on a survey of 454 academic geographers about their *Web presence*, a term that we use to encompass both the use of online tools and the creation of online content (either through static Web sites or through more interactive “Web 2.0” forms

such as blogs and social networking sites). Many, if not most, academic geographers have some sort of Web presence—for instance, listing recent publications and other academic credentials on personal homepages, using Twitter to share links and promote projects, or networking and organizing through online social networking Web sites like Facebook. But how might we begin to trace and classify these digital activities? Can we identify a set of professional norms around Internet use and online practices? Are we in the midst of a generational shift toward increasing engagement with the iterative patterns of content creation, re-creation, and recombination that characterizes Web 2.0? Finally, how might these shifts in practice align with broader changes in academic knowledge production?

On the one hand, academic geographers should not necessarily be considered unique among a growing interest in the Web practices of faculty (see Faculty Focus 2011), but we feel that a concerted discussion within our discipline about these Web practices might better support a diversity of issues with regard to training and pedagogy, impact and outreach, as well as resistances to shifts in institutional governance. Web 2.0, as an indicator for phenomena that include blogging and social media, has been both heralded as a more democratic Internet that blurs the divisions between producers and consumers (Ritzer and Jurgenson 2010) and as a blunt moniker that perhaps masks the real shifts in “what a person can be” (Lanier 2010, 4) as well as potentially undercuts the capacity for human attention (Hayles 2007; Jackson 2008; Stiegler 2010). Indeed, it becomes particularly important to interrogate the labor practices of the university as impacted by these shifts toward Web 2.0, a yet underexamined set of practices in the discussion of the neoliberalization of the university within the rise of the knowledge economy (Olssen and Peters 2005; Meyerhoff, Johnson, and Braun 2011).

Web Practices and the Academy

The everyday practices of academics are shifting, and academic geographers are not immune to these changes. Of course, these Web practices are reflected in the general American population; the Pew Research Center (2010) reported that 77 percent of adult Internet users in the United States use the Internet on a typical day. The highest rate of use, at 90 percent, is for adults ages eighteen to twenty-nine, a figure that declines steadily to a low of 46 percent for age sixty-five and over. Educational attainment is also associated with higher rates of use: 93 percent of adults with at least a college degree use the Internet daily, compared to 40 percent of adults with less than a high school degree. Regarding the use of online social networking, Pew reported a 61 percent use rate among adult Internet users in the United States, with 24 percent using Twitter or other status-updating services. Furthermore, the digital divide continues to drive popular imaginations of information and communication technologies particularly at national and global scales

and has more recently been expanded beyond physical access to the technological infrastructure (compare Servon 2002; Graham 2011). Although research has not specifically examined Internet use by academic geographers, perhaps a privileged group with regard to such divides, a number of studies have considered the role of the Internet in university research and teaching.

Academic geographers are not exceptional here, but this article means to place their Web practices more squarely within ongoing discussions of shifting everyday practices in the academy. Campbell (2010) drew attention to a new media ecology, where the separation of knowledge production and distribution is more pronounced, not unlike the shifts that have occurred in traditional newspaper journalism. Here, he argued that universities will need to adapt to the challenges and opportunities of this new ecology, from “mass production to the link economy” and from “broadcasting to engagement” (2010, 196). Campbell’s response was to encourage academics to support the production of knowledge outside of commercial journals and the use of open-access publishing.

Central to these shifts toward a knowledge economy is an increasing attention to the metrics and standards of academic performance (Meyerhoff, Johnson, and Braun 2011). *Webometrics*, the quantitative study of Web-based behaviors, has explicated the ways in which academics use hyperlink technologies (see Thelwall, Vaughan, and Björneborn 2005). Within the sciences, for instance, Barjak, Li, and Thelwall (2007) noted the gender and age biases of linking practices, with fewer links to the academic homepages of female and older scientists. Furthermore, the online activities of students—so-called millennials or digital natives (Pal-frey and Gasser 2008)—have been studied to identify how best to engage with these new proficiencies. For instance, in relation to library use, Burhanna, Seeholzer, and Salem (2009) found that younger scholars were not as informed about Web 2.0 technologies as proponents of the millennial demarcation suggest. Gray et al. (2008) argued that the uptake of these technologies by academics necessitates a reform of integrity standards, whereas Bono et al. (2012) advocated a more constitutive recognition of such practices.

Beyond more general studies of interaction and performance, the instructional work of an academic has been subject to change with the increasing use of electronic classroom management systems. Due to the rapid changes in classroom information technologies, what Schuster and Finkelstein (2006, 14) described as “technological shocks,” the work of teaching has become “unbundled” into distinct activities: “material preparation, presentation or delivery of the material, assessment of student learning, and interaction with students about course content” (108). These changes certainly impact faculty workloads, as new technologies must be learned and relearned as updated versions are developed. In a survey of academic geographers, Schuurman (2009) revealed the pressure of perhaps more pervasive technologies like e-mail (see also Curtis et al. 2010). Instructional communication in the classroom, beyond Web 1.0 technologies like

e-mail, is beginning to involve blogs, microblogs, and social networking, alongside a growing interest in and fiscal necessity of online distance education, the faculty response to which is largely unknown.

Negotiating one's academic presence online through these Web 2.0 technologies is quickly becoming a subject of conversation, however, not only in the faculty corridors of universities but across the academy in publications like *The Chronicle* and *Inside Higher Ed* (see Croxall 2010; Fearn 2010; Kolowich 2010; Bessette 2011; Howard 2011; Posner, Varner, and Croxall 2011). These discussions point to the hazards of professional missteps in social media interactions (Berrett 2010). Questions such as "When should I accept friend requests from students on Facebook?" and "Should I have a separate Twitter account for professional tweets?" have somewhat eclipsed questions about using a blog for advancing research and teaching. Indeed, Web 2.0 practices increasingly include sharing and reposting links to academic and nonacademic sources; building a following on Twitter, Facebook, Academia.edu, and LinkedIn; as well as incorporating user-generated content (e.g., photos, tweets, videos, and map data) in research and teaching. Still, illustrated by the discussion on crit-geog-forum referenced earlier, the use of these tools in academia has sparked an important discussion about public geographies and the internalized preferences and priorities of academic (re)production (Drezner 2009; Luzón 2009; Fuller and Askins 2010; see also Batts, Anthis, and Smith 2008).

The sharing of ideas is central to such academic (re)production. Traditionally, an academic shares ideas through scholarly presentation and publication, a practice that becomes complicated with increasing pressures to publish in "good" journals. The professionalization of academic geography, such as changes in research assessment methods, has captured the attention of critical geographers, who have marked the neoliberalization of the university and its increasing use of market discourses, replacement of permanent academic posts with temporary ones, and decline in work-life balance (Dowling 2008; see also Castree and Sparke 2000; Paasi 2005; Castree et al. 2006; Loftus 2006; ACME Editorial Collective 2007; Bauder and Engel-Di Mauro 2008). Geographers have thus responded with a diversity of strategies and reflections that might resist this corporatization and neoliberalization, in recognizing the classroom as one site of its reproduction (Heyman 2000; Roberts 2000; Kaserman and Wilson 2009) as well as in redefining relevance in research (Demeritt 2000; Staeheli and Mitchell 2005; Kitchin and Sidaway 2006; Fuller 2008).

Therefore, we draw attention to Web presence as an increasingly important aspect of academic networking given the internationalization of higher education, the push to develop transnational collaborations, and the increased attention to academic impact (compare Barjak [2006] for a discussion of the role of Internet communication in the sciences). Following Hayles (2007), we also recognize that these kinds of Web 2.0 technologies engage different capacities for paying at-

ention: from a deep to a hyperattentiveness. This demands a response on the part of academic instructors to either "change the students to fit the educational environment or change that environment to fit the students" (195, but compare Jackson [2008] for a perhaps less optimistic assessment). We suggest, then, that the development of a Web presence—understood here as the set of practices that might produce a scholar's identifiability over the Internet—is certainly a skill (one that corporations have commoditized, in the form of search engine optimization), but this skill is not typically taught in graduate programs or in faculty development seminars.

Graduate students of the social sciences and humanities, once demanded to develop an academic presence through conferencing and publication, now are presented with the opportunity (or ultimatum?) to not only publish but also post. Perhaps a "post or perish" ethic has emerged, as more PhD candidates move toward the academic blog as a micropublishing strategy for broadcasting one's ideas and building a following in the interstitial moments between and before traditional publications. Social media tools, such as Twitter, Facebook, LinkedIn, and Academia.edu, are presented as opportunities to build professional networks and bring attention to one's scholarship in more immediate ways than an annual conference or journal publication. Socialization in graduate school, and even undergraduate studies, serves to reproduce these pressures to become known (Bauder 2006; Kaserman and Wilson 2009). Still, navigating the various online resources for developing a Web presence is time consuming, not to mention potentially rife with the possibility of disastrous interactions and consequences.

What, then, are the implications for the Web presence of academic geographers as new generations of Web-based tools of communication, sharing, and interaction permeate throughout academe? In other words, how might we begin to understand the Web practices of academic geographers in the shift from Web 1.0 to Web 2.0 technologies? Furthermore, what connections might we draw between the increasing prevalence of Web practices by academics to broader shifts in institutions of higher education? To address these questions, we begin with our own academic community—geographers—to ask with what frequencies do academic geographers engage in Web practices, including those that are Web 2.0?

Methods

To best explore the diversity of perspectives and behaviors surrounding the Web presence of a wide range of academic geographers, we created an Internet-based questionnaire, the limitations of which are notable, yet present the contours of an evolving phenomenon. In what follows, we briefly describe our recruitment strategy in this nonrandom sample, as well as the limitations of such a strategy. The intent is not to statistically represent the community of geographers but to examine those who do engage in Web practices, to gain a sense of their labor in this particular knowledge

economy. This questionnaire was open to anyone currently working as an academic geographer (including graduate students, postdocs, and all classifications of faculty). The questionnaire was divided into five subcategories of questions: general Internet use, active Web presence and online content creation, using Internet for teaching, attitudes toward Internet use, and general information about the respondent. Results were tabulated and analyzed using standard descriptive statistics and a series of chi-square tests for independence for selected variable pairs (see Appendix).

Participants were contacted in the first half of 2010 via e-mail distribution lists for academic geographers, including listservs for climate, urban geography, geomorphology, Canadian and Australian geographers, critical geography, GIScience, and feminist geography, among other human and physical distribution lists. Although our attempts were to gather a diversity of opinion from a range of academic geographers, this nonrandom sample no doubt reflects a particular bias toward those academics who already participate in online discussions via e-mail. What constitutes Web practices for academic geographers who do not participate in these online forums is certainly more difficult to explore within this recruitment strategy. Respondents who are more interested and active around Web presence were potentially more likely to self-select in completing the survey. For instance, 43 percent of respondents said that they thought they were one of the more “tech-savvy” members of their respective departments, and 41 percent said that they tended to be early adopters of new technology. It is also likely that our own networks and affiliation influenced the response to our online survey, perhaps causing the sample to lean more toward human geography.

Results

In total, 454 academic geographers participated in the online survey. This group was roughly evenly split by gender (48.7 percent male, 46.7 percent female, and 4.6 percent other or no answer) but skewed in terms of age distribution: The oldest respondent was born in 1931 and the youngest in 1987, with a median year of birth of 1974. The median year of highest degree earned or expected was 2007, with a full three quarters of participants completing their education in the twenty-first century. Although respondents living in thirty-eight different countries participated, the questionnaire was presented only in English, so the results should be read as primarily pertaining to Anglophone geography. The largest number of respondents by far lived and worked in the United States (40.1 percent); 15 percent lived in each of Canada and the United Kingdom and almost 6 percent in Australia.

In terms of professional roles, 36.3 percent of respondents were students at the master’s or doctoral level, 8.8 percent were postdoctoral research or teaching fellows, 6.4 percent were temporary or adjunct instructors, 22.5 percent were earlier-career permanent faculty (this includes those who identified as tenure-

track professors, lecturers, or senior lecturers), 18.9 percent were advanced-career permanent faculty (including those who identified as tenured faculty, readers, and professors), and 7 percent had some other job title. Most respondents (71.6 percent) reported working in a doctoral degree-granting institution with high or very high research activity. The vast majority (78.9 percent) were human geographers, along with 15.5 percent GIScientists and 14.2 percent physical geographers (9.1 percent did not claim any of these labels).

General Attitudes About Internet Use and Web Presence

Almost a third of respondents believed that, in general, academics tend to spend too much time online (25 percent disagreed, 41 percent were neutral) and over half said that they did themselves (22 percent disagreed, 24 percent neutral). Still, making use of online tools was typically seen as a worthwhile aspect of academic life: Over half said that they had used Internet tools to build and strengthen professional networks, and only about 2 percent said that it is not professionally useful to manage one’s Web presence. This is the case even though only a minority of respondents reported being encouraged to develop their Web presence by administrators at their institution (41 percent agreed, 27 percent disagreed, 32 percent neutral) or that the people who assess their performance value a polished and prominent Web presence (20 percent agreed, 31 percent disagreed, 39 percent neutral).

On the whole, our respondents had excellent access to—and make extensive use of—online resources. Less than 1 percent lacked access to high-speed Internet, and over 90 percent had high-speed access both at work and at home. Only six respondents (1 percent) reported spending less than one hour per day online; meanwhile, about a third of respondents were online for more than five hours per day (including 7.5 percent who were typically online for more than eight hours daily). The most frequently used online resources were search sites (Google, Yahoo!, Bing, etc.), which 95 percent of respondents reported using at least once per day. Journal and academic sites (Informa, ProQuest, Elsevier, etc.) and traditional media sites (CNN, *New York Times*, etc.) were also well used; for each of these, over half of our respondents reported at least one visit per day.

Smaller, but still significant, proportions of respondents reported accessing Web 2.0 content, with 40 percent using sites devoted to social networking (Facebook, Academia.edu, etc.) and 20 percent visiting blogs, microblogs, or both (Blogger, Wordpress, Tumblr, Twitter, etc.) at least once per day.

The Use of Online Tools in Professional Contexts

In their professional lives, academic geographers engage with and use online tools for a variety of purposes; here, we focus on two key and interrelated aspects of Web presence: self-promotion and networking (teaching is another important arena of online activity for

many contemporary academics but one that we are unable to address; see Hayles [2007] for a discussion of the impacts of Web practices on pedagogy). Our respondents tend to feel highly visible online: Only 8 percent did not think that they would be easily found via Google search. The most common form of online engagement for academics appears to be the maintenance of Web sites: A little over half (53 percent) maintain one or more. Of these respondents, 97 percent have professional sites focusing on academic activities and accomplishments, 41 percent have personal Web sites, 30 percent have personal blogs, and 27.5 percent have blogs focusing primarily on professional concerns. Most of the professional and academic Web sites maintained by our respondents were hosted on institutional domains, with just 20 percent on domains owned by respondents and 10 percent on free hosting services. In contrast, of the sixty-six respondents who maintain academic blogs, only four have set them up on their institution's servers.

The content of academics' professional Web sites can tell us something about the types of knowledge and information that are valued for this form of communication. Our findings suggest a clear separation of work and personal life, reinforcing the idea that developing one's Web presence is seen as an aspect of professional development. Of the Web sites described by our respondents, about 80 percent provide information about past or current research projects, and a little over 60 percent discuss teaching activities. Two thirds provide curricula vitae (CVs), and 48 percent make available papers for download. Personal information (e.g., about hobbies, travel, or family) is relatively rare, appearing on 16.7 percent of academics' professional Web sites.

Of course, in the Web 2.0 era, traditional static Web sites are no longer the only or even the main spaces within which we craft our online presence: Content is also created and managed within an ever-expanding set of (often interconnected) social networking tools. Of our 454 respondents, 65 percent are active on Facebook, 24 percent on LinkedIn, 18 percent on Academia.edu, and 15 percent on Twitter. Furthermore, about 20 percent of respondents have a blog that they write under their own name.

Are There Generational Differences in Attitudes and Online Practices?

To better understand variations among respondents, we paid particular attention to whether any generational differences were apparent in terms of how this group of academic geographers uses online tools day-to-day and how they view the role of Web presence in their professional lives. To provide a more useful perspective on a complex concept, the questionnaire captured three different dimensions of generation: year of birth, year of highest degree earned or expected (typically the PhD), and job status (student, postdoc, assistant professor, etc.).

Contingency table analysis (see Appendix) revealed that, across these three dimensions of generational dif-

ference, there was no significant difference (χ^2 , $p = 0.05$) in general attitudes about the professional utility of a polished Web presence or in beliefs about the extent to which it is valued by administrators. Furthermore, there was no significant generational difference in many standard online practices—for instance, the maintenance of a Web site or the use of online tools to strengthen professional networks. Interestingly, generation likewise did not have a significant effect on respondents' self-assessed HTML ability or on their likelihood to describe themselves as tech-savvy or as early adopters of new technology. This latter finding, in particular, seems to contradict expectations that younger scholars are naturally more interested or proficient in the use of Internet technology in professional life. Across our measures of generation, then, respondents expressed quite similar views on the significance of maintaining a Web presence and a similar mastery of the necessary basic skills.

At the same time, however, there were strong indications of generational differences in *how* and *how often* respondents use online tools. In other words, we find little evidence of a generation gap in acceptance that Web presence is a key aspect of day-to-day academic life, but there are clear differences in how an acceptable degree of Web presence is defined. See the Appendix for a summary of findings, but to illustrate, let us consider some of the similarities and differences within our sample based on year of terminal degree,

Table 1 Web presence and online practices by year of terminal degree

	Before 2000 (%)	2000 and after (%)
Agreed or strongly agreed with the following statements		
Maintaining a Web presence is professionally valuable.	71.3	83.3
Assessors value a prominent Web presence.	19.8	20.3
I use online tools to strengthen professional networks.	47.0	54.8
I am one of the more tech-savvy in my department.	44.9	42.8
I am an early adopter of new technology.	38.6	42.0
Online social networking (Facebook) is a waste of time.	39.0	26.7
Online professional networking (LinkedIn) is a waste of time.	28.0	17.8
Visited the following types of sites at least once a day		
Search engines	91.6	93.6
Online mapping	9.0	25.9
Journal or academic sites	38.8	58.4
Traditional media sites	49.5	66.7
Social media sites	7.0	20.3
Social networking sites	8.0	51.2
Blogs	14.0	23.1
Self-rated HTML ability: Moderate to high	39.0	43.0
Typical hours spent online per day		
0-3	45.4	28.0
3-5	27.8	37.5
5-8	20.6	26.8
8+	6.2	7.7

as illustrated in Table 1. Comparing those whose PhD was awarded before 2000 to those who finished (or will finish) in 2000 or later, we see that for both groups about three quarters of respondents agreed that it is professionally valuable to manage one's Web presence (but only about 20 percent think that it is valued by those who assess their job performance), and around 40 percent described themselves as tech-savvy or as early adopters of new technology and rated their HTML skills as moderate to high. It seems, however, that scholars whose terminal degree was earned prior to 2000 tend to spend less time online (45 percent spend less than three hours online per day, compared to just 28 percent) and are more likely to view social and professional networking sites as a waste of time. They also tend to make much less frequent visits to various types of Web sites—not only for Web 2.0 categories like blogs, social networking, and social media but also for more traditional resources like online mapping or journal and academic sites. In all categories, scholars with more recent degrees are significantly more likely to visit online resources at least once a day. There is, of course, no simple binary difference between younger and older; we do not claim that generation has a determinative effect. Our findings do suggest, though, a shift over time in online practices that could shape the norms of academic work.

Discussion and Conclusion

Although our sampling strategy does not permit general claims about the Web practices of all academic geographers, the results of this survey of 454 colleagues in the academy point to some interesting patterns that can help us better understand the role of Web presence in our professional lives. In particular, it appears that a certain degree of online engagement is widely accepted and practiced—relatively frequent Internet use, consumption of online information, and the maintenance of personal Web sites are all part of the new normal in academic life. Yet at the same time, there appear to be distinct generational differences in certain aspects of Web presence; as technological frontiers shift, new practices are taken up at differential rates that seem to depend, at least in part, on generation.

Although more research is needed as to how academics interpret these shifts in academic labor toward Web practices (some of which was hinted at by Schuurman 2009), we can begin to see how the Web practices of academic geographers reflect broader shifts in the academy, as new cohorts of graduate students emerge with greater exposure to and participation in Web practices as part of their everyday teaching and research activities. Indeed, it is not unreasonable to imagine how the metrics that currently assess faculty performance (citation counts, article downloads, journal impact factors, etc.) can be influenced by using blogs and social media to build followers and draw attention to scholarly production. In this sense, perhaps the push toward being present on the Web is precisely bound up in the backward march of metric mentalities.

We agree, then, with Meyerhoff, Johnson, and Braun (2011), that

These metrics—including those used to determine tenure—do not only subsume the creative potential of faculty within a market logic, but backform themselves into the experience of graduate school. If, in the years preceding tenure, academic labor is made to conform to a set of external measures—with serious consequences for the kinds of research and teaching that can be done—the same is true for the experience of graduate students, who from the day they begin their programs are asked to fashion themselves according to the metrics by which tenure will be decided far in the future. (493)

If external measures continue to structure the everyday practices of academic geographers and as these external measures reflect shifts toward the knowledge economy in academe (see Castree et al. 2006; Lave, Mirowski, and Randalls 2010), then academic geographers must be mindful of how even the most mundane activity of making a CV available online sets into motion a series of automated software events—building an online digital dossier that renders calculable an individual academic's impact. Therefore, this research has suggested further attention to the Web practices of academics.

Anecdotally, we note that the day-to-day knowledge production of academic geographers is often mediated through the Internet, in following up on research leads in online scholarly resources, in e-mail correspondence with collaborators and research participants, in coordination of teaching and advising responsibilities, and in the administrative service of the university. The Internet is, as our respondents indicate, a considerably important site of academic production. It is also, in keeping with Schuurman (2009), one that many of our respondents felt occupies more time than it perhaps should. Still, that academic geographers will have some sort of Web presence is rather commonplace. Our respondents are more active online than the population at large (as measured by Pew Research Center 2010), and many use online tools for professional networking. A number of factors might contribute to this, such as education level and class position, conduciveness of working environments, access to computing resources and support, professional networks that can span long distances, and universities' increasing attention to their online presence.

Where there is variation—and, potentially, disagreement about professional norms—is in the particular forms and frequencies of the day-to-day practices that structure that Web presence. Web 2.0 technologies (blogging, microblogging such as Tweeting, and online social networking) were a significant part of the Web practices of many of our respondents. These practices are becoming an integral aspect of academic production for some within geography, as the proliferation of independent blogs by geographers and geographers who use Twitter makes evident. As the debate on crit-geog-forum discussed earlier highlights, though, there is disagreement within academic geography about whether these particular dimensions of Web

presence are productive. Our results, which show that younger and early-career academic geographers tend to spend more time online and to be more engaged with Web 2.0 practices and tools, suggest that there is a generational difference here.

In short, our findings suggest that although academic geographers might tend to agree that Web presence is a significant aspect of their day-to-day professional practice, this assertion means different things to different people. For some, crafting a useful Web presence means posting an online CV, maintaining professional networks via e-mail, and being able to find useful information online. For others, Web presence is an amalgam of these standard Web 1.0 practices, overlain by a complex Web of interactive Web 2.0 content production via social networking, blogging, microblogging, and media uploading sites. Although we do not believe that age has a deterministic relationship with the adoption of Web 2.0 practices, our findings do suggest a relationship. The explanation of these differences is beyond the scope of this project but does lend support to the idea that professional norms pertaining to Web presence and online practices will continue to shift over time.

The Web presence of academic geographers can no longer necessarily be described as a static online listing of the accomplishments of an individual scholar. Instead, the Web practices of academic geographers are increasingly marked by Web 2.0 and a focus on online interaction and engagement, despite the lack of professionalization along these lines. Early-career geographers are likely not trained in this aspect of academic reproduction and might be flatly discouraged from “wasting their time” by producing online content. Given the continually shifting norms of online practices in society, and in academia itself, however, perhaps serious debate about strategies for using Web 2.0 tools should enter into the training and professionalization of young scholars. The fact that academics would best avoid directing all of their writing energies into their Twitter account is all the more reason for explicit discussions about how to productively manage one’s Web presence.

We do not believe that it is wise to dismiss blogging, microblogging, and online social networking as nothing more than a distraction from the serious work of academic life. Not only are these new patterns of online engagement seemingly here to stay and are likely bound up in broader shifts in performance pressures but they also offer some notable potential scholarly benefits if used with intention. First, pressures to publish and promote have spilled out into Web practices like blogging and microblogging. The blog can act as a way to claim intellectual territory, just as it can provide a space to share nascent ideas and work out scholarly thought in conversation with far-flung peers. Second, and relatedly, online social networks and other informal venues for sharing scholarly productions have become important amidst the uncertainty of secure employment alongside the neoliberalization of the university. Junior academics, perhaps more than their senior colleagues, might

rely on these Web practices to remain visible and viable among a growing body of recently minted PhDs. Third, many junior scholars likely completed the bulk of their advanced degree post-Facebook. These online social networks provide the avenue for keeping informed of others’ engagements (scholarly and otherwise) and nurture the local and translocal collectives that are so important in the professional development of early-career academic geographers.

Regardless of whether the production of a Web presence is seen as an opportunity for scholarly development or as a distraction from deep, synergistic learning and engagement, this survey has demonstrated a need to better understand how academic geographers interpret their own Web practices. Carr (2010, 6) wrote that online media “supply the stuff of thought, but they also shape the process of thought.” Indeed, perhaps what we study can become less important than our abilities to make known our studies. As institutions of higher education grapple with new pressures in a knowledge economy, academic geographers should incorporate everyday Web practices alongside the more observed and investigated techniques of a neoliberalizing academe. ■

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Appendix χ^2 values: Analysis of responses by three different measures of generation

	By decade born	By decade of terminal degree	By professional status
It is professionally valuable to manage one's Web presence.	31.98**	15.09	7.97
Administrators encourage faculty to develop a Web presence.	8.13	6.05	3.83
People who assess my performance value a polished and prominent Web presence.	1.02	4.79	7.54
I use online tools to strengthen professional networks.	11.66	9.98	10.37
Academics spend too much time online.	11.59	9.01	10.38
Social networking tools like Facebook are a waste of time.	31.27**	40.87**	45.92**
Microblogging tools are a waste of time.	13.62*	12.39	19.66**
Professional networking tools are a waste of time.	13.07*	21.60**	18.73**
I spend too much time online.	27.02**	24.57**	13.51*
I am an early adopter of new technology.	16.40*	7.67	10.25
I am one of the more tech-savvy individuals in my department.	3.45	12.15	1.98
I maintain a Web site.	6.72	9.48	9.09*
I read blogs.	12.21*	15.77**	11.51**
Hours spent online per day	23.12**	25.78*	
HTML ability	14.74	11.76	6.14
Frequency of visiting			
Blogs	58.69**	39.31**	34.53**
Facebook and other social networking sites	81.86**	102.16**	68.39**
Journal and academic sites	18.60**	28.03**	30.09**
Search engines	19.42**	34.09**	2.83
Mapping sites	43.15**	34.65**	22.01**
Traditional media sites	7.67	20.70**	6.78
Social media sites	59.34**	58.04**	42.76**

* $p < 0.05$.

** $p < 0.01$.