This paper outlines ways in which scholars build identity and connection on open networked platforms such as Twitter, and considers the risks and benefits of networked participatory engagement. The paper reports the findings of an ethnographic study examining the digitally-networked practices of scholars from a range of disciplines, identity positions, and geopolitical locations, and explores participants’ experiences of care and vulnerability within open, networked academic systems. The paper draws on White and LeCornu’s (2011) visitors and residents continuum, Veletsianos and Kimmons’ (2012) concept of Networked Participatory Scholarship (NPS), and Ong’s (1982) theories of secondary orality and secondary literacy to explore networked scholars’ practices and experiences. It examines ‘academic Twitter’ as a phenomenon in which oral and literate traditions – and audience expectations – are collapsed, creating a public that operates on very different terms from those of academia. The paper’s findings examine the risks of this collapse, yet also show that networked engagement – in which personal identity signals, humor, and expressions of commonality are found to be the dominant means by which scholars build networks ties – can result in opportunities and affinities that institutional scholarship may not offer. The substantive goal of the paper is to offer a portrait of networked scholars’ experiences and practices related to engagement, and to consider the tensions these practices raise within the contemporary academy.

**Keywords**
Networked participatory scholarship, networks, Twitter, networked identity, networked scholarship, orality, literacy

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Introduction

Growth in the academic use of online social networks (Seaman and Tinti-Kane, 2013; Van Noorden, 2014) has extended scholarly engagement outside traditional institutional channels. Many scholars now share research, build academic reputations, and connect with one another using online networks, creating a complex mesh of knowledge artifacts and communications. Yet although scholars are increasingly exhorted to go online to increase citations and impact (Mewburn and Thompson, 2013; Terras, 2012), the effects of networked scholarship are only beginning to be formally studied. This paper outlines the ways scholars build identity and connection in online scholarly networks, particularly on Twitter, and considers how Twitter as a platform may generate experiences, publics, and vulnerabilities very different from those of the academy.

The emerging literature suggests a number of benefits to networked scholarship. Hurt and Yin (2006) note that networked practices allow pre-tenured scholars to network with more established faculty in their areas of teaching, increasing visibility and reputation. Name-recognition within areas of inquiry can lead to scholars being introduced to others who share their interests, or to invitations that further increase both visibility and network connections. Gruzd, Wellman, and Takhteyev (2011) have found that social media helps scholars strengthen existing relationships and build new ones in their areas of research, while Kirkup (2010) claims that academic blogging offers an opportunity to explore questions in a public but informal atmosphere, allowing scholars to develop voice. Digital, participatory networks connect scholars to each other across disciplinary lines, create new opportunities for public engagement with ideas, and offer alternative channels for participation, leadership, and development of scholarly influence (Stewart, 2015a). All these network advantages may be increasingly valuable in the current climate of narrowing academic opportunity (Clawson, 2009) and the trend towards contingent academic labour (MacFarlane, 2011). Quan-Haase, Martin, and McCoy-Peet (2015) have shown that for scholars in the humanities and digital humanities, Twitter can serve strategically as a space within which emerging knowledge gaps can be filled.

However, while network participation and Twitter use specifically does offer potential advantages to scholars, the visible and pervasive nature of this form of academic engagement creates distinctions and pressures that demand consideration. On networked platforms such as Twitter, users can lurk without making themselves visible but cannot connect with others without signaling some form of identifiable presence. Yet visibility has drawbacks: as network platforms are increasingly recognised as sites of rampant misogyny, racism, and harassment (Duggan, 2014; Nesbitt-Golden, 2014), the opportunities and benefits of networks cannot be the sole focus of research. Drawing on
data from an ethnographic investigation of networked scholarly practices, this paper considers both the value and the vulnerabilities that participants open themselves to in the cultivation of networked identities. It focuses particularly on how Twitter’s conflation of oral and literate practices may contribute to unanticipated consequences of networked engagement.

**Conceptual Frameworks**

The study reported here focused specifically on the practices and experiences of scholars for whom networked engagement forms a central, sustained facet of their scholarly work and identity. The study drew upon Veletsianos and Kimmons’ (2012) framework of Networked Participatory Scholarship (NPS), or “scholars’ participation in online social networks to share, reflect upon, critique, improve, validate, and otherwise develop their scholarship” (Veletsianos and Kimmons, 2012, p. 766), as well as on White and LeCornu’s (2011) visitors and residents continuum of digital engagement in order to frame the practices and engagement under investigation. Since participants’ individual experiences of care and vulnerability were part of what the study aimed to explore, frameworks approaching digital engagement from a social, relational perspective as well as from a technical one were required. The tenets of NPS emphasize both the technical and the relational aspects of scholarship, while the visitors and residents model for online participation overtly examines relational engagement. White and LeCornu (2011) posit that while visitors to digital environments tend to see platforms and actions in tool-oriented or instrumental terms, what they call “residents” are users who operate from a relational sense of place and presence with others. As the selection methods section of the paper will show, study participants were chosen based on resident approaches to networked participatory scholarship. Thus, the two frameworks combined to allow investigation of highly-engaged and relational approaches to networked scholarship.

A framework to analyze the operations of communications in networked participatory scholarship was also necessary. While one aspect of the study situated networked participatory practices as scholarship (Stewart, 2015b), it was also important to understand how Twitter engagement can generate experiences distinct from the norms of academia. Bonzo and Parchoma (2010) have shown how social media principles of active participation, collaboration and reflection conflict with the practices of conventional higher education contexts. The study aimed to identify and explore these principles at work in resident NPS practices, and to consider their effects. On this front, Ong’s (1982) foundational work in media and communications proved analytically helpful.
Ong’s (1982) theory of secondary orality focuses on the relationship between forms of human communications and characteristics of the societies they generate. His work traces the human cultural transition from orality to literacy, characterised by a move from situational, social, participatory engagement in which agonistic or conflict-based narratives dominate, to a more abstracted, distanced, and innovative discourse in which direct interpersonal struggle is no longer central. Ong identifies literacy with an interiorization of thought and the development of a more precise, extended capacity for analysis, allowing for indexical thinking and preservation across time. With the rise of electronic media and communications technologies, Ong identified the phenomenon he initially framed as “secondary orality,” in which technologies such as radio and television re-center the spoken word but not in the repetitive, redundant, agonistic style of oral cultures. Rather, secondary orality features the “participatory mystique” (Ong, 1982, p. 136) and communal, formulaic focus of oral cultures, but in post-literacy form. In secondary orality, members’ identification within the large audience group that media generates is self-conscious, because subjects are also literate and acculturated to the highly-individualised and interior sense of self that print enables. Bounegru (2008) framed Twitter early on in its existence as an audience-focused instance of Ong’s (1982) secondary orality, participatory but self-conscious in regards to the permanence of text.

Ong, however, in an interview in 1996, addressed the fact that digital text-based communications actually had no oral component, but simply made the abstract, analytic technology of the written word instantly available across space. He suggested this phenomenon should be called secondary literacy rather than secondary orality. Its hallmark, he said, was that “textualised verbal exchange registers psychologically as having the temporal immediacy of oral exchange” (Kleine and Gale, 1996, p. 81), rendering literate, individualised communications dialogic in the immediate way that oral communications are dialogic. This paper draws on both secondary orality and secondary literacy in theorising the operations of Twitter as a public, but finds that the aspects of temporal immediacy Ong attributed to secondary literacy resonate particularly with the experiences articulated by highly-resident networked scholars.

Previous research has established that networks can collapse diverse, usually-separated aspects of identity such as familial, social, and professional connections into common audiences via shared social media platforms in a phenomenon called “context collapse” (boyd, 2011; Wesch, 2009). But while context collapse is about audiences, this paper draws on Ong’s theories to go further, suggesting a collapse of communication forms and audience expectations. It posits that Twitter increasingly collapses oral and written norms of communication, creating a space wherein the immediate, dialogic exchange of orality (Ong, 1982) is meshed with what boyd (2011, p. 46) calls the persistent, replicable, scalable and searchable qualities of digital content, which – in
keeping with Ong’s 1982 framing of literate culture – are highly indexical, analytic, and unconstrained by time or space. Thus Twitter collapses publics that operate socially according to the tenets of orality, but tend to be comprised of individuals deeply acculturated to what Ong calls high literacy, who have the digital capacity to capture and circulate – even to the point of virality – the often casual contributions of others outside their intended contexts and audiences. The paper suggests this collapse may be at the root of many of the risks and benefits networked scholars experience on Twitter.

**Methodologies**

The exploration detailed in this paper was part of a larger ethnographic study into networked scholarship. Called “the premier modality of qualitative research” (Boellstorff, Nardi, Pearce and Taylor, 2012, p. xiii), ethnography emphasizes the “valuable knowledge of participants as meaning-making actors...and commitment to understanding the ways larger social considerations or forms of social order shape everyday lifeworlds” (Boellstorff et al, 2012, p. 19-20). The broader study’s investigation of the knowledge and lifeworlds of networked scholars enabled specific examination of participants’ meaning-making in regards to resident use of academic Twitter and related risks and benefits. Geertz’s (1973) classic ethnographic description of cultural practices as “suspended in webs of significance” (p. 2) also guided the approach to examining the collapse of oral and literate practices and expectations within Twitter, as resident participants’ understandings and enactments of this collapse were treated as acculturated reflections of academic Twitter and NPS more broadly.

**Methods**

The study from which this paper is drawn utilised participant observation, semi-structured interviews, and document analysis as primary ethnographic methods.

**Selection**

As noted in the Conceptual Frameworks section, Veletsianos and Kimmons’ (2012) concept of networked participatory scholarship (NPS) and White and LeCornu’s (2011) visitors and residents typology for online engagement were used to help determine appropriate participants for the research questions at hand. Additionally, Lupton’s (2014) study of 711 academics active on social media found that 90% reported using Twitter for professional purposes (pg. 14); a significantly higher number than on other networked platforms. As the study aimed to explore scholars’ reflective long-form writing on NPS as well as their day-to-day engagement and their responses to interview questions, the call
for participants asked for institutionally-affiliated scholars who blogged and had used Twitter for at least two years.

Recruitment occurred through an open, public call for participants that was blogged and tweeted by the researcher. From 33 expressions of interest, 14 participants were chosen; 13 remained active throughout the study. Participants were selected for maximal diversity across geographic locations, academic status positions, and identity markers; 10 were female; four male. Six identified with an ethnic heritage that was in some way marked or non-dominant in their location; four identified as gay or queer.

All participants had institutional academic roles as well as networked scholarly identities. Three were senior scholars, four early career researchers, and seven – including some of the older participants in the study – were PhD students or candidates. Participants’ status within networks varied as well. Two had more than 10,000 followers on Twitter and were relatively well-known even beyond the boundaries of their own disciplines; three had fewer than 500 followers. All opted to be openly identified by their public Twitter handles in dissemination of the research.

**Participant Observation**
From November 2013 through February 2014, participants were observed daily on Twitter, as well as on other NPS platforms that participants indicated were central to their networked scholarship. The Twitter account created for daily observation purposes followed only participants and the eight volunteers who allowed their profiles to be assessed by participants during the research process. Participants’ conversations and whether and how they interacted with other users were analysed, particularly across geographic and status differentials. Extensive offline ethnographic notes were kept. Twitter was the principal site of observation, though participants’ NPS practices were analysed across all platforms they identified as relevant.

**24-hour Reflections**
Participants were asked to choose a 24-hour period of “regular” networked engagement for them, during which their public communications and exchanges were examined in particular detail. Participants also created and submitted short reflections of the 24-hour time frame from their own perspectives, and their impressions of how and with whom they engaged were assessed against their actual traces of engagement during that 24 hours.

**Interviews**
Recorded Skype interviews were conducted with 10 participants, as well as one follow-up interview some months after the initial conversation. Interview questions were semi-
structured; most were based in part on the 24-hour reflection documents. Interview conversations were encouraged to diverge from the script of questions.

**Coding and Analysis**
Interview transcripts were combined with any 24-hour reflections submitted, and any relevant participant blog posts were also added to these documents. All 13 active participants completed either an interview or the 24-hour reflection, so data for the study was comprised of 13 documents plus notes, favorites, and screen captures from participant observation.

Key emergent themes were identified in the participant documents, the 334 screen captures of tweets and other interactions, the favorites, and the notes, and were hand-coded and themed in order to try to trace relationships and patterns related to practices of connection, care and vulnerability. Open coding was used first to create categories that might suggest webs of significance, and then a form of axial coding was used in which the data was re-read against themes, codes, and subcodes.

**Rigor**
Rigor within this research was taken to mean accountability, credibility and confirmability to participants and the broader networks within which they engaged, as well as to the research's epistemological and ethical tenets (Guba and Lincoln, 2005). Believability, based on coherence, insight, and instrumental utility (Eisner, 1991), and trustworthiness (Lincoln and Guba, 1985), based in processes of pattern identification and verification, were both central premises of the validity structure of the study. The verification process involved sharing themes and preliminary conclusions with participants and via the author’s public blog. Discussion, input, and critique were all sought. As the study up was written up for formal publication, participants saw findings first, and had the opportunity to suggest alterations that better reflected their experiences.

At the same time, participants’ written and interview narratives were also triangulated against screen captures of their conversations and participation. For example, if a participant claimed to follow an ethnically diverse group of scholars, that information was checked against the scholar’s Following list, just as if a participant suggested s/he believed in sharing the work of others, examples of this behavior were searched for an noted.
Findings and Discussion

Identity Practices
Kozinets (2010) suggests participants in online interactions engage in “various strategies of visibility and identity expression” (p. 24) in order to establish relationships and status. All participants’ communications involved building identity and connections with peers through the public sharing of signals and artifacts of academic identity. During the observation period, all participants shared at least one blog post, podcast, report, slide deck, or formal publication of their own via Twitter. Some shared significantly more, depending on individual volume of output. This scholarly content predominantly related to research areas or to current issues in popular culture or higher education. Much of the work shared was iterative or in-process, exploring thoughts that might later be formalised into a peer-reviewed format or a formal presentation.

Resident Identities
This public sharing of signals and artifacts of academic identity correlated highly, within the small sample of this study, with the relational and highly-social approach to Twitter that White and LeCornu’s (2011) visitors and residents spectrum characterises as resident behaviour. Participants who regularly engaged in sharing and responding to social signals also tended to invite commentary on their ideas and respond to discussions and retweets of their work, and left myriad traces of their social and scholarly engagement on the web. White and LeCornu (2011) suggest that there is a sense of social presence experienced by “those who spend time on social media platforms...to a high level, with the effect of foregrounding a broad sense of digital identity” (Section III.1, para 2). In effect, resident participants built digital identities through the accumulation of visible, searchable traces of resident, relational engagement, and were recognized by others for doing so. Participants who looked at the Twitter profiles of volunteer exemplar identities as part of the study almost universally indicated that they were more likely to judge a scholar’s account credible and potentially valuable if the Twitter profile showed signs of ongoing engagement with others or offered link(s) to additional sites showcasing the person’s identity and work, whether a blog or another profile such as LinkedIn or Academia.edu (Stewart, 2015a).

Resident Practices
However, the study also found that NPS – particularly as practiced by the more resident scholars in the study – enables scholars to build visibility and identity through others’ work as well as their own. Participants regularly tweeted links to peers’ posts and to media
content, sometimes adding commentary or endorsements. This practice signaled participants’ identities and areas of interest just as sharing their own scholarly artifacts did, yet enabled them to engage more frequently and more broadly. Most curated links from a wider range of topics than they tended to write on. Some noted in interviews that they found it powerful to be able to draw attention to broad issues of concern, and to address publics beyond their discipline or accustomed academic public.

@14prinsp: I made a conscious decision to establish a scholarly identity on Facebook and that I would use my profile only for scholarly and human rights issues. At first I limited my “friends” on Facebook to people in the field of education, but it soon became apparent that by accepting friend requests of people I have met, I can actually use my Facebook page as an activist space foregrounding issues regarding gender, human rights and learning.

Participants also frequently included the Twitter handles of the authors of linked posts or articles in their tweets, thus making themselves visible to those authors and gradually building ties of collegiality. This means of building ties through targeted communications expands not only scholars’ networks but their identity and presence in conversations within their field.

@wishcrys: Since I started using [Twitter] more actively, I’ve had more visibility up the hierarchy, professors or people whose books I use follow me because I’ve happened to mention them or their work…and also more PhD students from outside my geographical area.

Public Practices
Across the study, sharing the work of others was found to be a dominant commonality among participant accounts, and a way for scholars to build emergent public identities and become known within a particular field or conversation. The extent of this practice of sharing is indicated by the fact that in the course of one 12-hour period of observation during the study, the research Twitter feed had tweets from 74 different accounts, while during another 12-hour span later in the observation period, 90 separate accounts were counted in the research feed. The feed only followed 22 individuals, so in both cases, all the rest were retweets circulated by those 22. Perceived breaches of this sharing norm even drew overt critical commentary during the period of observation.

@raulpacheco:
Scholarly content was not the focus of all communications observed in the study, however. Again, there was a visible trend among the more resident participants in the study to engage more than other participants with pop culture and with public narratives, particularly during breaking news events or in response to controversial articles that appeared in major publications such as The Atlantic, The New York Times, or in higher education venues. Statements of opinion and serial tweets explicating a participant’s thoughts on a timely public issue were practices observed during the course of participant observation, especially—though not exclusively—among accounts with larger followings. In some cases, smaller accounts and less resident participants also weighed in on these articles and issues, but were more likely to do so at a relative delay compared to more resident peers. In this pre-algorithmic, pre-“Moments” version of the Twitter platform, habitual timeliness of engagement appeared to correlate highly with increased visibility and audience, or, in effect, with public reach. Within 48 hours of a popular or controversial public outcry or discussion, the most-followed and the most-active accounts in the study (separate groups, though with overlap) had almost invariably moved on to other topics.

Other common practices and visibility strategies noted were more personal, and centered on the public narration of daily routines and related milestones, wherein scholars shared often-mundane aspects of identity. Even when related to work or scholarship, these signals operated to personalize engagement and invite attention by foregrounding individuals and their circumstances, cultivating publics invested in those identities and their ongoing performance, as well as their thoughts and scholarly contributions.

Some tweets invited celebration, by articulating life and scholarship milestones and making them visible within the network. These signals tended to receive significant positive attention and engagement.

@readywriting:

Some shared lessons learned, particularly those that might prove valuable for a community of fellow scholars, graduate students, or educators.
Some tweets lamented challenges or invited commiseration. These often triggered reciprocal expressions of attention, through “favorite” or “like” signals, retweets, or responses, thus expanding the original speaker’s visibility in wider publics. Self-deprecation or humor was regularly used to mitigate the invitation to pay attention. Dayter’s (2014) attenuation strategies, including disclaimers, shifts in focus, self-denigration, references to hard work, and third-party complaints, were all visible within the research data, and were employed most often by resident scholars with highly relational and wryly humorous approaches to NPS.

Some contributions invited others to work with them in formal or informal ways, creating visibility between the two parties but also extending public respect to the invitee.
Finally, a common practice that enabled participants to cultivate publics was the expression of thanks or of giving credit where due. Networked displays of public recognition drive attention to the credited individual(s) in visible and replicable text form. In the study, credited parties consistently retweeted credit-giving tweets more often than other forms of attention directed at them, indicating that sharing the praise of others may, like humor and self-deprecation, constitute a socially-acceptable means of cultivating attention with academic Twitter.

@wishcrys: Shout-outs are becoming very popular, so this is about people recognising that social currency on the web. The attempt to make information circulate is more valuable than rank; it’s really valuable in helping the hierarchy of academia reverse. It’s difficult for people who didn’t get it from the start, so shout-outs are one of the more “high-priced commodities” per se in my circles.

**Orality and Literacy Collapsed**
The ways in which scholars communicated using Twitter were also found to play a key role in participants’ development of identity, visibility, and ties. The concepts of secondary orality and secondary literacy emphasize the immediacy and dialogic nature of digital communications, even though they may occur in replicable, searchable text formats and thus operate in highly literate registers as well. Thus, academic Twitter enables a collapsed space of engagement, wherein the analytic, text-based content of scholarship is shared via often-casual, participatory, and dialogic forms of exchange.

Within this collapsed space, dialogic intimacy is regularly on display. In participant observation, the study noted a number of instances wherein Twitter’s asynchronous and profile-based nature enabled participants to zero in on shared attributes or outlooks for the purpose of establishing ties. Often these conversations centered around points of commonality in profile information or recent shared blog posts, enabling individuals to make themselves visible to each other, and creating opportunities for the explicit establishment of ties. These expressions tend to deliberately move to a personal register in spite of the fact that the users’ engagement is generally focused around scholarly conversations, and represent a form of what Walther (1996) called hypersonal
communications, wherein self-presentation is optimized for the intended audience. In hypersonal communications, computer-mediated intimacy and group- or dyad-relationships may be stronger than those established face-to-face, as irrelevant or distracting information is minimized.

@SusannaDW (non-participant, with permission) to @catherinecronin:

Additionally, the collapsed space of Twitter and NPS more broadly enables a performative register that academia does not; a personal/professional voice that is distinct from more formal, depersonalized scholarly communications. In the study, it was noted that agonistic, informal, and playful speech forms tended to generate by far the most signals of attention in terms of likes and retweets. The hallmarks of orality, in Ong’s (1982) words, are found in “heavily rhythmic, balanced patterns, in repetitions or antithesis, in alliterations or assonances, in epithetic and other formulary expressions” (p. 34). In secondary orality or literacy, these rhetorical, repetitive uses of language are evident in phenomena such as internet memes, wherein oral, visual, and textual forms of humor are repeated and circulated in part as a means of establishing central objects (Baym, 1995) around which online communities can create shared meaning and belonging. Interestingly, memic language and rhetorical registers were found in the study to be deployed most often and most consistently by the participants who had the largest and arguably most-active accounts on Twitter. For example, the repetition in the tweet below – one in a series about adjunct exclusion – draws on orality and secondary orality to demand audience attention, centering the speaking subject and all those who might identify with her in an agonistic, conflict-based narrative using a deliberate mix of formal and highly informal language.
Likewise, the following tweet deploys the familiar LOL meme to dismiss and resist negativity, bringing the Twitter audience onside in a rhetorical style that draws deeply from secondary orality, using “rapid communication with large groups of people in a speed that would resemble oral storytelling, without having to share the same physical space with your audience” (Bounegru, 2008, Section Microblogging, Twitter, and Secondary Orality, para. 3).

Ong (1982) frames the performative skills of high orality as “fluency, fulsomeness, volubility” (p. 40) and asserts that in an oral cultural environment, “…it is better to repeat something, artfully if possible, rather than to simply stop speaking while fishing for the next idea” (p. 40). These oral cultural norms of artful, fluent volubility marked the study accounts that appeared to have the largest and most active audiences.

This study’s measure of audience engagement was based primarily on numbers of followers combined with visible @ replies to and from the participant, and with participant accounts of how Twitter operated for them as a relational space. Since most of the study’s data collection took place before the 2014 embedding of visible, granular metrics into Twitter’s platform, the number of favorites and retweets a given tweet received from other users was not visible in most of the screen captures collected during the research process. However, notes from participant observation and the 24-hour reflections indicate that effective performative use of secondary orality and secondary literacy registers to assert identity increased visibility and circulation in academic Twitter, at least for resident users during the 2013-2014 window of study. While the study did not set out to assess causality between adept use of oral, rhetorical language strategies and
academic Twitter influence, participant assessments of exemplar identities also suggest that informal and orally-adept language use can be an important aspect of creating an identity that other users perceive as having potential to contribute to their own experience of the platform (Stewart, 2015a).

Experiences of Care
The collapse of orality and literacy on Twitter and the resultant hyperpersonal communications and slippage between personal and professional identities all serve as backdrop to participants’ accounts of care within the study. All participants explicitly indicated that they and others in their circles were attended to and cared for as a part of their NPS engagement. Networks were constructed as valuable sites of belonging and meaning; participants regularly demonstrated and testified to care and belonging experienced in NPS. These testaments were not only evidenced in the interviews but in the public data generated by participants.

@wishcrys:

@KateMfD, countering the way cyberbullying is framed for her teen daughter with the assertion that networks are also sites of care:

The capacity to build relationships with others interested in similar ideas – both scholarly and more broad-based – across geographic isolation was central to many participants’ accounts of the value they found in NPS. Ultimately, participant narratives indicated that the collapse of oral and literate practices within academic Twitter may allow them to feel
that the platform has professional use for them while still benefiting from the sociality and care that its hyperpersonal and casual register enable.

Participants also valued the opportunities that hyperpersonal communications offer them to be, in effect, a person who offers care to others. A number of participants expressly noted that their networked practice involved looking for opportunities to pay attention and ensure that people are cared for, particularly across status and power differentials.

@exhaust_fumes: I’m a sympathizer and take the opportunity to step in and be the good internet’...I try to look for ways to let people know they’re not by themselves. I generally don’t jump in otherwise, though. If somebody’s cat is sick I will reach out across scale because that will make my heart melt and break but overall I probably read from less enfranchised groups.

Care was also experienced in the growth of offline opportunities facilitated or fostered by network connections. Particularly among the junior scholars and graduate students in the study, opportunities including media appearances, plenary addresses, and even academic positions were credited to longterm NPS investment and residency, and to resultant online visibility. These opportunities often pointed out gaps between participants’ experiences in networks and institutions.

@tressiemcphd: My position in the prestige structure didn’t always match my ambitions and what I felt I could do, compelled to do. So these networks allowed me to exist without permission...[B]ut my institutional power is zero. I’m doing research, doing what everyone else does as a PhD candidate, teaching: when these come into conflict with each other, it is an odd, odd moment for me to live in.

@catherinecronin: In performance reviews and mentoring conversations I’ve been asked about things I might like to get involved in, whether I was interested in exploring particular areas. But I have those conversations all the time in my networks. It made me realize, again, that these two tracks are very distinct... people at my institution have little or no idea of anyone’s influence outside institutional identity.”

Others experienced carry-over from their network positions to their institutional roles.

@14prinsp: I can say “Here are my citations, here is an alternative footprint in an academic community” and if however many people read my blog in the UK and US surely I have a voice – so in my institution I offer a new way of looking at research footprints.

@thesiswhisperer: My boss is scared of my social media presence because it’s a form of soft power. They’re scared to lose me because it would be so visible and that’s the marketing sensibility coming out.
A theme running through participant contributions was that the benefits of networked participation and Twitter use increase with – and to an extent, correlate to – the development of relationships that mark increasingly resident-type behavior in networked spaces. Those who engage more instrumentally, as visitors, may not experience those benefits or have networks of care around them to weigh against the potential risks that will be detailed in the following section.

**Beyond Context Collapse: Experiences of Vulnerability**

Not all identity practices on academic Twitter result in experiences of care or value. As noted, networked participation challenges individuals’ capacity to direct self-presentation to a single context as well as to a single register of communications, and can open scholars to unanticipated audiences and attention. A key site of perceived risk and vulnerability in the study was context collapse, which is framed as the need for an individual to anticipate the “nearly infinite possible contexts he or she might be entering” (Wesch, 2009, p. 23) before engaging in communications. Context collapse minimizes the individual’s capacity to segment audiences from diverse locales, identity positions, and life roles as s/he builds an identity on a participatory network. The risk of communications being seen by unintended audiences can create challenges and tensions.

@exhaust_fumes: It can be touchy to discuss these things – people sometimes respond to you as a position rather than a person, rather than factoring in what you’re actually saying. A couple of times...I’ve responded to things and been understood differently than I intended. I didn’t much enjoy that.

@socworkpodcast: On Facebook, I had an incredibly active and mostly hostile series of interactions after the Trayvon Martin verdict. I posted in solidarity with Trayvon’s family thinking of their loss and all families who’ve lost children to violence, and how in the criminal justice system in the US young black men generally get the short shrift. Within 30 minutes I had over 100 likes and 30 comments – most of which were critical. Two people hid the post as ‘negative.’ I lost the most number of followers ever as a result...And I felt like I’d possibly done some damage to the image of the podcast – the brand – as a place where anybody could go to learn something.

Perhaps the most prevalent site of context collapse in participant responses in the study was the tension between networked and institutional audiences. As Costa (2014) observes, digital scholarship can be perceived within the academy as a deviant trajectory for scholarship, challenging the conventions of the academic profession. Participants noted that strategies of visibility that drew attention to the personal or mundane created a sense of risk for them, especially when they were new to networks. Institutional concepts of professionalism and academic identity tend to exclude oral registers and hyper-personal communications. Additionally, networks devolve responsibility for promotions.
and attention for work from the institutional hierarchy and system to the individual scholar, thus successful forms of overt attention-seeking in NPS can sometimes be more commercial in tone than academic, raising tensions for participants about how to communicate effectively yet appropriately.

@tressiemcphd:

But context collapse did not seem to suffice as an explanation for some of the risks and vulnerabilities that became visible during the study. These were evident not just in participants’ narratives, but in the general rise of what is sometimes called “call-out culture,” which coincided with the period during which the study occurred (Stewart, 2015c). The call-out culture phenomenon, in which tweets are amplified and circulated through large-scale networks to shame – or even unmask or “doxx” – identities whose speech is deemed unacceptable, has become a widely-reported feature of Twitter culture (Ronson, 2015). Twitter is increasingly used as a tactical platform, as evidenced by the huge reach of hashtags which enable widely-distributed individuals to organize and galvanize around issues of common interest, political advocacy, or defense of what may be culturally perceived as threatened territory. Call-out culture and tactical Twitter embody Ong’s “secondary literacy” by collapsing orality and literacy and asserting the dominance of literate norms. As Ong (1982) wrote regarding how the two traditions assign meaning, “Olson (1977) has shown how orality relegates meaning largely to context whereas writing concentrates meaning in language itself” (p. 104). In the rise of call-out culture, we see the ascendancy of Twitter as a secondarily literate culture that offers audience and engagement primarily to users who can juggle the volubility and agonistic play of oral discourse with the extraordinarily careful, conscious consideration of all possible meanings that marks textual literacy. This collapse raises both expectations and stakes significantly for all Twitter users.

Call-out culture and resulting Twitter outrage can generate swift offline effects, in academia as well as in the general public, illustrated by the University of Illinois’ rescinding of Steven Salaita’s job offer after donors protested tweets about Palestine (Jaschik, 2014). Though the Salaita case only occurred just after the conclusion of the study, tactical uses of academic Twitter did generate controversy and responses from participants during the participant observation period, particularly in an extended, amplified, and very public debate around adjunct issues. Participants contributed from
different positions and in different registers; discussions afterwards indicated that the public nature of the controversy was difficult for all to navigate.

@readywriting:

The collapse not only of contexts but registers means that the common visibility strategies and identity practices of resident NPS scholars – at least those identified in this study –
are increasingly fraught. Some participants noted that they deal with these risks by actively avoiding growing their networks any larger, as large-scale accounts were generally asserted as key risk factors for commodification and defamation. As one participant with a sizeable number of followers acknowledged:

@tressiemcphd: You live with the effects. You’re very much a thing...I’ve had a whole group of people who are hard-core dedicated haters who follow me from platform to platform, and none of them have ever met me. They think the person in the machine is the person, they think what I’m doing online is a performance, an affect, and they want to be the ones to prove it to people. I usually quietly unfollow people they go to and let that tie go...I have the right to hold the space.

Identity’s Relationship to Vulnerability in Networks

Scale is not the only risk factor; it is important to note that those who identify outside dominant power structures face greater likelihood of being targeted or treated reductively due to one facet of their identity on Twitter and in networks more generally.

@wishcrys: I’ve had a handful of trolling comments on my blog. Sometimes people see my pictures and my friends and alignments and they make assumptions, “Oh you went to this school and you’re thinking this way, you have this skin color therefore you’re thinking this”...it does upset me when people don’t understand the diversity of Asia and are surprised I speak English and I tell them my country uses English.

Participants’ experiences and Twitter observation both indicate that systemic societal biases such as racism, sexism, heterosexism, classism, and able-ism intersect and shape human perceptions of others in networks, just as they do in embodied spheres. As one participant noted:

@catherinecronin: White male voices, offline as well as online, signal authority in a culture steeped in sexism and racism. The online very often reproduces and amplifies what occurs offline.

That said, it should be noted that, while not a central focus of the data collection for this study, the widespread tactical uses of Twitter that emerged during the same time frame were often generated by women, people of colour, and especially women of colour. Both the hashtags #solidarityisforwhitewomen, started by @karnythia, and #notyourasiansidekick, started by @sueypark, emerged in 2013 and quickly gained visibility and traction. Hashtags can be a way to galvanize widely-distributed communities around issues of shared advocacy, and to address exclusion, racism, sexism, and other structural inequalities. They can also, as with #gamergate, be widely used to target and silence women, people of colour, and allies who push back against societal power structures.
The re-inscription of bias or forms of dominance often invisible to those who benefit from them is not limited to identity factors such as race or gender. Reyes, Rosso, and Veale (2010) note that irony is pervasive in many online texts and contexts, and that Twitter circulates non-literal social texts as a common connective device, just as was reinforced by this study’s finding on resident scholars’ identity practices. Neuro-diverse scholars, such as those with autism, may be disadvantaged in terms of engaging with the extensive and subtle social cues of these social texts, as are those who do not speak or write English with facility. Many scholars are excluded by these dominant norms of engagement on Twitter, or encouraged to assimilate to dominant cultural practices in order to maximize visibility.

@raulpacheco: I deliberately tweet in English. I have confronted complaints from other academics in Mexico about this, but a lot of Mexican students and Mexican scholars follow me even though they know I tweet in English. I’d choose to begin again in English even now. The size of the network is higher – the drawback, of course, is criticism for reinforcing the hegemony of English...it’s sad, but that’s where the power relations are. English privilege is seldom discussed.

Implications of Resident Networked Scholarly Identities for Academia

Overall, resident networked scholars face an array of risks and vulnerabilities in their visibility and identity practices. Public Twitter use forces them to address collapsed audiences who belong to varying and sometimes incompatible contexts regarding registers of speech, and their tweets can be captured, replicated, and amplified by tactical users if they are deemed problematic or advantageous to seize upon. Communications intended as playful or ironic, in the oral tradition, can be taken out of context and read as the equivalent of scholarly assertions, while tweets meant to express a more personal perspective on the world can be catapulted to the attention of institutional decision-makers and donors and deemed unprofessional or deviant. Risks are unevenly distributed across identity categories, with women and people of color facing particular targeting and dismissal. Twitter as a platform is also implicitly biased towards dominant language uses and forms of sociality.

What all this means for academia and scholarship is uncertain at this juncture. The oral forms of sociality that dominate Twitter engagement do not necessarily align well with those of academia. Scholarly traditions of abstract, analytic, precise thought are the cultural epitome of Ong’s high literacy, and Twitter’s stream of contextual, often-mundane expressions can be alienating to those accustomed to more itemized terrain, and to more professionalized performances of academic identity. The distributed, networked nature of communications on Twitter challenges the hierarchical defaults of the academy, and the capacity to generate audiences for work that may be blogged rather
than peer-reviewed challenges the gatekeeping practices deeply embedded in scholarly publishing structures. But overall, the dominance of oral-style interaction as the perceived price of admission may be the key factor in keeping academic Twitter a relatively minimal threat to academia's structures and tenets, among a professional population deeply conditioned to the internalized, distanced register of what Ong (1982) frames as high literacy.

**Conclusion**

That said, this study indicates that those scholars who do venture into the collapsed publics of NPS still find value, care, and opportunity in their networked engagement, even on a platform as fraught as Twitter. Part of this value comes from Twitter’s relatively open and public sociality, which allows scholars to connect with potential peers across areas of shared interest in spite of vast geographic gaps. Particularly for (English-speaking, neurotypical) scholars who are isolated, disillusioned, marginalized, or junior in their institutional scholarship, Twitter participation and NPS more broadly can be paths to connection, mentorship, care, and even status and offline opportunity as they develop resident identity and visibility practices on the platform. Personal identity signals, humor and self-deprecation, and expressions of commonality with others were found to be the dominant means by which identity and visibility were established. Ultimately, the study showed that these sustained visibility and identity practices create complex webs of engagement and significance wherein scholarly knowledge artifacts and expressions of personal caring assemble with the risks of scale, bias, institutional misunderstanding, and context and register collapse to form new and powerful spheres within contemporary scholarship.

However, growth in tactical uses of Twitter raises the stakes for scholars. The rise of call-out culture thrusts academic Twitter into the messy business of being truly open to multiple publics at once, and forces scholars to navigate the cognitive dissonance between orality-based expectations of sociality and print-based interpretations of speech. This dissonant space may not be exactly aligned with Ong’s (1982) secondary orality or literacy, since it appears to collapse oral expectations of ephemeral group-based sociality with literate approaches to print media as finite, reasoned artifacts, yet without the broadcast premises of Ong’s media analysis. There is significant work yet to be done exploring this collapse and scholars’ responses to and navigation of it; this study served simply to begin to identify it and the challenges it raises for resident scholars using Twitter at this juncture.
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References

http://dx.doi.org/10.1111/j.1083-6101.1995.tb00327.x


Stewart, B. (2015b). In abundance: Networked participatory practices as scholarship. International Review of Research in Open and Distributed Learning, 16(3).