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Developing methods to trace participation patterns across online writing



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ABSTRACT

Scholars of media literacy have described a range of ways adolescents use digital tools across spaces to conceptualize, produce, and share creative works. Research often focuses on the identities and experiences of young expert creators, even though activities like archiving, lurking, reading, liking, reviewing, and sharing original and transformative works are central. Few researchers have devised methods to analyze these common participation patterns, or how they stretch across multiple sites and spaces. Here, we begin to consider this challenge by focusing on a linguistic analysis method we developed to study feedback that fanfiction authors receive from their readers. We outline this method and then focus on how this work has helped us to (1) consider a broader range of fanfiction activities and (2) interrogate our methodological practices and reflect on our assumptions about learning, collaboration, and writing. As venues for young people's creative activities increasingly move online, researchers must develop new methods of understanding learning and literacies, and, eventually, how transliteracies move across these spaces. Even where complete accounts of participation are rare, we can glean information about readers and writers by examining a wider range of online activity.

1. Introduction

For two decades, the Internet has served as a home for young people's creative works. Access to online publishing tools has driven the creation of new venues, new genres, and new practices that participants may use alone or in collaboration with others. As online writing and sharing have grown in popularity, researchers in areas of education, communication, and writing studies have examined how such activities sponsor learning. Studies have sought to understand how young creators learn to write and edit (Black, 2008; Lammers, 2016b), code (Fields, Kafai, & Giang, 2016), make documentaries (Halverson, 2012), and use social media for marketing and community building (Curwood, 2013). Increasingly, too, research has begun to recognize the need to explore how people work across and through such spaces, bringing multiple aspects of skill, content knowledge, and literacies to their activities both in person (Leander & Boldt, 2013) and online (Buck, 2012; Hull, Stornaiuolo, & Sterponi, 2013). This recent turn towards *transliteracies* (Stornaiuolo, Smith, & Phillips, 2017) pushes scholars to focus beyond fixed skills or texts, and towards how learners combine and leverage their literacies to accomplish a variety of tasks across timespaces.

Qualitative research of online spaces — work that focuses on understanding particular literacies, as well as transliteracies — has

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primarily relied on descriptive methods rooted in spatial constructs (Gerber, Abrams, Curwood, & Magnifico, 2017). For example, studies have documented learning practices in a variety of *affinity spaces* (Hayes & Duncan, 2012; Lammers, Curwood, & Magnifico, 2012) and settings for formal and informal learning (Hull et al., 2013; Kalantzis & Cope, 2012). These methodological choices have often led researchers to focus on the most visible and accessible practices of online spaces: creating and sharing content. Thus, researchers, including us, have centered the creators in such studies—even as the field acknowledges the importance of "ancillary" practices (Gee, 2004) like archiving, lurking, reading, liking, reviewing, and sharing original and transformative works.

In our own research, which has focused on how people participate in social fanfiction spaces, these methodological choices have been pragmatic. Creators who post their writing are visible, and they are often seeking an audience and eager to talk. Further, learning researchers are interested in processes by which online content is crafted and practices are developed. Creators' insight is invaluable in these areas, and has helped us document the ways in which they draw on a variety of sources including the "canon" of fanfiction (i.e., the original work), other media sources, in-school writing, life experiences, games, and responses from fellow writers and reviewers in order to write.

Such studies extend the tradition of research on classroom-based writing and review processes (e.g. Ellis, 2011; Loretto, DeMartino, & Godley, 2016), and continue to refine understandings of how writing, response, and collaboration function online. While creative networks and classrooms are certainly similarly social, online research that highlights creators' interactions with, and paths through, a larger digital network runs the risk of obscuring the network itself. We need scholarship that sees, values, and acknowledges a wider array of contributions, and thinks towards how combinations of these varied practices facilitate participation in such networks.

Looking back over our work, we see our movement from directly importing classroom-based constructs of individual learning, individual writing, and reified notions of space and community, to questioning these ideas. Here, we outline how early attempts to trace wider participation and describe the social and intellectual contributions of fanfiction reviewers to online authors' work have helped us articulate the uneasy ways that traditional educational notions sit in online social spaces. As a worked example to anchor our discussion, we share the development of coding that helped us think differently about the reviews and social interactions that cross fanfiction affinity spaces (Magnifico, Curwood, & Lammers, 2015). While the work we highlight does not yet directly engage transliteracies frameworks or methods, it points to the need for developing these ideas — and the need for researchers to question their assumptions and methodologies.

2. Theorizing and studying online affinity spaces

Our process of employing and developing methods for understanding and tracing wider participation patterns in online environments is rooted in conceptualizing them as "affinity spaces" – a theory we were introduced to during our training as researchers. Gee (2004) coined this term to describe interconnected places of learning that form when people gather in physical, online, or blended spaces to pursue a "common endeavor." His theorizing explicitly reconceptualized learning in *spaces* in order to pull focus from individuals — an important shift towards understanding necessarily dispersed, collaborative networks.

After more than a decade of working with this concept, we find ourselves still employing methods that privilege particular aspects of affinity spaces — readily visible content creation —while obscuring other aspects — namely, more difficult-to-trace practices of network traversal like reading, beta-reading, sharing on social media, and trading art and reviews. In other words, a transliteracies frame reveals that a reliance on spatial constructs (affinity *spaces*) can also conceal the movement and interconnectedness in literacy practices across networks. We are concerned that research methods in this area continue to emphasize the practices of "exceptional cases" (Black, 2008, p. 101) and "high achievers" (Deng, Connelly, & Lau, 2016, p. 53), which seems problematic when quantitative analyses of online participation show that such content creators represent a minority in some spaces (Fields et al., 2016). We now realize how a focus on creators constrains our ability to understand broader patterns of participation. Here we highlight a few key features of online affinity spaces, paying particular attention to how they allow for "ancillary" practices, and discuss how extant research has studied these features.

A primary distinction between affinity spaces and other frameworks for theorizing learning systems, including Lave and Wenger's (1991) communities of practice, lies in the idea that practices and shared interests create the space. Consequently, we should be less concerned with membership and more concerned with how these environments are organized and networked, and what they value. The notion of membership and belonging in affinity spaces remains debated by us and others (see Abrams & Lammers, 2017; Bommarito, 2014; DeVane, 2012), and Gee (2017) acknowledged how "squishy" it is to determine one's "fellow travelers" in affinity spaces (p. 113). Transliteracies research similarly tends to be more interested in values, actions, and collective activities than membership: "collaborative, collective dimensions of meaning making as the relationships among people and things emerg[ing] in connection to people's intentions and goals, which themselves are dynamic, collective, and shaped across complex networks" (Stornaiuolo, et al., 2017, p. 74).

Another key feature of online affinity spaces is that their flexible structures allow for "self-directed, multifaceted, dynamic participation" (Lammers, Curwood, & Magnifico, 2012). This feature sets online affinity spaces apart from most formal learning environments, which tend towards more standardized goals and measurements of achievement. Choosing individualized paths of participation motivates youth to create and share content in online affinity spaces (Curwood, Magnifico, & Lammers, 2013). While, in many cases, ethnographic methods have kept us embedded long enough to capture how a participant's practices change over time (e.g., Lammers, 2016b), or to begin understanding how a space honors multiple forms of participation (e.g., Lammers, 2016a), we recognize that these methods obscure the myriad ways people participate within and across spaces.

It is difficult to capture a "representative" sample of participants in large fanfiction archives like fanfiction.net (FFN) or

archiveofourown.org (AO3), partly because these sites are large and partly because activities like fanfiction reading and sharing are difficult to quantify through online fieldwork. The information available about who participates in these online spaces is largely generated by the sites and users themselves. For example, the *AO3 Census*, a survey conducted of 10,005 users, found that 77% of respondents reported ages between 15 and 29, and that 80% of users reported female gender identity (Lulu, 2013). The *FFN Research blog* (Sendlor, 2011) reported that FFN contained 6.6 million titles and added 443,400 accounts in the year 2011 alone. This study found that FFN users are largely teenage women (78%) from English-speaking countries, especially the United States (57%), though the study author cautions that — as we have found in our own work — this information derives from user profiles. Thus, researchers only know what fic writers report about who they are. When studying commercial or personal sites such as AO3 and FFN, it is difficult to gain back-end access to user data; thus, we recognize that it may never be easy to fully understand practices like reading that can occur without leaving visible, accessible online traces.

The distribution of collective knowledge across multiple, interconnected *portals* (Lammers et al., 2012)—"anything that gives access to the content and to ways of interacting with that content, by oneself or with other people" (Gee, 2004, p. 81)—is the final key feature most relevant to our focus on "ancillary" practices. Such a broad definition of portals recognizes the many different entry points people find to explore and support their affinity-related learning. Research from Buck (2012), for example, explores how one undergraduate builds his interests and identity across multiple social networks. In practice, portals in the *Hunger Games* affinity space include the original media texts (books and movies), fan-created and corporate-sponsored paratexts (Gray, 2010), *Hunger Games* fan forums, and social networking accounts— all of which serve as gathering spaces for fans. Valuing the distributed nature of knowledge and the networked portals that make up online affinity spaces demands that researchers attend to the multiple timespaces and trajectories of learning that these environments afford.

3. The myth of the individual (fanfiction) writer

Because early affinity space research has primarily examined what writers do, and valued their practices as expert and central, it has been easy to overlook the more distributed acts and practices of fanfiction readers, reviewers, beta readers, role-playing gamers, fanmail writers, artists, and social media aggregators. Such contributors to the broader networks of fanfiction affinity spaces provide readers for writers as well as a range of necessary services (e.g., beta-reading, sharing, and the like). Many authors that we and others have interviewed over the years have discussed these contributors as vital to their writing, sharing, and motivation (Black, 2008; Ito et al., 2010; Jamison, 2013).

A standpoint that specifically highlights these "ancillary" contributions may be particularly fraught in the field of education, which commonly values individual progress towards standardized content and skill markers. Standardized curricula and assessment are constructed to imply that all learners should follow the same pathways and progressions. In other words, learning outcomes should, ideally, be similar for all students. As such, teachers and scholars might take on the uncritical assumption that fanfiction newbies would begin with reading, liking, and reviewing; move on to sharing; and eventually become expert writers in their own right.

Assuming such linear progressions does not honor a central idea of affinity spaces, though, because multiple kinds of participation that contribute to the affinity are often valid and valued within the network. These diverse pathways of participation exist in virtual and physical spaces, as Shivers-McNair (this issue) points out, drawing our attention to how boundaries shape practices within a makerspace. Our work has shown us examples like Angela, whose technology issues and interests did not allow her to create *Sims* fanfiction of the caliber expected in the online affinity space without seeking the support of others (Lammers, 2016b), and Pamela, who never published a story of her own but became the head moderator of a popular *Sims* fanfiction forum (Lammers, 2016a). Through these and other examples, we see that affinity spaces have always been networks where transliteracies were welcomed and expected.

In addition, research that focuses on young, prolific writers may reify creators as "representative" participants when analyses of back-end data reveal that they are a distinct minority in some spaces, as in MIT's *Scratch* network for code-writing and sharing (Fields et al., 2016). In reality, it seems likely that interactions where fans read and write across several creations, technologies, and fandoms are not only more typical, but vital to the social ecosystem of creatively-focused affinity spaces (cf. "UGC affinity spaces" in Magnifico, Lammers, & Fields, 2018). This work echoes earlier arguments about the co-authorship inherent in writing—even in settings like graduate seminars (Prior, 1998) and schools (Magnifico, Woodard, & McCarthey, 2019) that envision learning as individual.

Creators themselves have helped us see the importance of supportive readers and associates (e.g., Black, 2008; Lammers & Marsh, 2015; Magnifico, 2012; Padgett & Curwood, 2016). Interactions including critical reviews, fanmail, shares, hearts, and the like motivate writers to continue working, and they can provide ideas about potential revisions, extensions, and new directions (Curwood et al., 2013). For example, in early work on writing in *Neopets*, two writers discussed their appreciation of the fanmail they received and how they drew inspiration from their readers' love of their stories, even when this feedback did not include critique (Magnifico, 2012). In Padgett and Curwood's (2016) study of poetry writing on Figment.com, some writers appreciated how feedback symbols (like hearts) provided encouragement from their readers; however, others found symbols akin to "popularity contests" that offered readers "an excuse not to comment" (p. 403).

Although similarly general praise is often downplayed as "cheerleading" in formal environments (e.g., Simmons, 2003), these findings mirror existing research that shows writers believe that giving and receiving feedback is useful both online (e.g., Loretto et al., 2016) and in face-to-face settings (e.g., Halverson, 2012; Lundstrom & Baker, 2009). While research that examines the language and dynamics of peer review and feedback in online formal learning environments is growing (e.g., Ellis, 2011; Kline, Letofsky, &



Fig. 1. Spiderweb "pathway" image.

Woodard, 2013; Loretto et al., 2016), little work applies such methods to informal settings. Extant research largely examines online peer writing, response, and collaboration through a theoretical new literacies lens (e.g., Alvermann, 2008; Kalantzis & Cope, 2012) or through case studies of writers and creators (e.g., Black, 2008; Buck, 2012; Lam, 2009; Lammers, 2016b; Magnifico, 2012). In short, feedback is complex. Investigating how fanfiction writers and readers engage with, interpret, and value it is the next step in the work of examining "ancillary" practices.

Early on, we drew on our understanding of how writers across settings think about reviews, fanmail, and feedback to conceptualize affinity spaces as webs of creators. We used a spiderweb image in talks (e.g. Fig. 1, which we used at 2014's Writing Research Across Borders) to think about how participants traverse online portals, following a variety of paths and learning local practices. This visual metaphor suggests that the connected portals form linear paths. In presentations, we discussed our need to better understand learning in affinity spaces, using this image to suggest that highlighted paths represent individual learning, and that paths are important. For instance, we might draw on the example of Angela (Lammers, 2016b) to describe her path as a *Sims* fanfiction writer unfolding from her reading on one site, to joining and posting her writing on another forum, to moving away from organized forums to hosting her writing on her own blog.

Looking back, this metaphor misrepresents a spiderweb's architecture. All of the silk matters to a spider; it feels tremors across the web and responds. Spiders do not take one path, and neither do internet users. Our interpretation of the web suggested that, despite a surrounding network, an individual's interaction with the "affinity space web" is a linear progression. We minimized loops, connections, other people, and the ways in which practices and interactions stretch and change across of the network. In Angela's case, her affinity space web included the support of others who provided her with visual content and reviewer feedback to shape her *Sims* fanfiction (Lammers, 2016b). Her decision to move her writing to her own blog responded to the changing expectations of one forum. When members began to heavily privilege the visual component of *Sims* fanfiction, she resisted, choosing instead to write with less sophisticated visuals in her own space, according to her own expectations. In short, Angela's practices and movement across the space partly reflected her own learning about writing and fanfiction, but her fanfiction network strongly influenced her choices, as well.

The repetition of findings around the importance of writers' social connections suggest that accessing, analyzing, and understanding "ancillary" literate practices across networks—that building a better metaphor for how they spread and stretch—is a vital, difficult task. Methodological challenges arise when these practices are not immediately visible or readily accessible; without backend access, for instance, it is often nearly impossible to tell when readers are visiting or liking pages. While our own work began with a focus on creators, we have developed strong interests in these supportive practices. As we have widened our research to examine these interactions (many of which seemed mysterious to us when we first tried to apply our classroom-based schematics for peer learning), we have begun to see how education- and learning-driven frameworks can both reveal and obscure complex social writing and networking.

In short, beginning to notice and account for the productive participation of a much wider literacy network leads us to interrogate our own assumptions and reveals a deep need for innovative methods and representations that better respond to the theoretical constructs of affinity spaces and transliteracies. The following worked example describes a small slice of this journey, demonstrating how our own observations of writers' movements across the "web" pushed us to begin thinking about alternative frames for understanding online participation over a range of activities.

4. Worked example: developing theory-based methods to understand the "ancillary practice" of fanfiction reviewing

As demonstrated above, existing work on writing and feedback across settings, both formal and informal, reveals similarities among understandings of authors' attitudes towards feedback. This documentation, as well as our own background as English teacher educators and literacy and writing researchers, led us to initially apply a coding scheme developed for use in formal classroom environments to our research in online fanfiction spaces. As reported in our initial study using this method:

"We began our analysis using Kline et al. (2013) existing coding scheme from classroom writing to reflect our interest in the ways that collaborative writing and peer review in fanfiction spaces are similar to and different from similar tasks in school spaces... it makes sense to investigate the characteristics of actual formative feedback available to online writers" (Magnifico, et al., 2015, p. 162).

This coding scheme was written to account for a variety of aspects of peer response and review, and its theoretical and practical roots in formal educational environments are strong. The functions chosen by Sinclair and Coulthard (1975) —"inform, direct, and elicit"—were developed to analyze classroom language, and as such, this coding scheme is strongly influenced by student-teacher interactions in formal settings. We made this choice because few other studies have directly examined the language that students use in peer review and formative assessment, and it seemed that learning to write by engaging in writing and reviewing online and in classrooms could be seen as generally similar processes.

We completed our linguistic analysis by examining all of the reviews and author notes of one Fanfiction.net story and one Figment.com story (Magnifico et al., 2015). We divided all of the reviews into idea units, using Chafe's (1980) description of an idea unit, a discourse element in which the speaker or writer introduces a single concept. Because idea unit boundaries are usually marked by punctuation or clauses in written texts, one review was often made up of multiple idea units. Like Kline et al. (2013), we coded each idea unit for its primary linguistic function (inform, direct, or elicit; see Sinclair & Coulthard, 1975), as well as its focus of attention. Here, we combined foci from the original coding scheme (e.g. comments about content, conventions, the general piece, and other factors) with foci that we knew were important to fanfiction writers (e.g. comments about characters, the fanfiction's "canon" original text, writing style). This work provided insight into the nature of reviews; for instance, 29% of reviews on one fan fiction story were general (e.g. "Great job!") and 5% offered feedback on writing conventions ("You have some spelling issues"). Additionally, we coded whether the idea unit explicitly or implicitly identified a problem in the writing (e.g., "This line doesn't make sense"), though we found that few reviews (2% in FFN; 10% in Figment) offered this kind of critical commentary (see Magnifico et al., 2015 for a full description).

As we worked more with this coding scheme, we hit several areas of disagreement, as the process of linguistic analysis is "not linear but iterative" (Hennessey et al., 2016, p. 19). In our first meeting to examine one another's analyses and calculate an initial inter-rater reliability, we found that all of us were confused by idea units where reviewers and authors seemed to be talking with each other socially—language that seldom comes up in classroom peer reviews, but is common in online conversation. For instance, one reviewer commented on a Figment story in this way:

I just took three hours to read this amazing story. You're welcome. It was SO worth it!!! This is really, really good. I really want to know how it turns out and how she kills [him]. She kills [him], right? You had a few grammar issues (sorry, a bit of a grammar freak here) but they weren't [sic] major and I can't remember them anyway. The story is so good and so gripping I didn't care much. Your characters were definitely interesting. I love the way you develop the characters- I feel like I know them well. This is great. Could you read what I have done on [my recent story] for me? I really am looking forward to how it turns out and any input would be very appreciated. :) Thanks!!!

This review contains several elements that are typical of classroom-based peer review, such as general praise ("this is really, really good") and an implicit direction to address "grammar issues" throughout the story. After noting these problems with conventions, the reviewer returns to offering praise-laden information focused on the "gripping" story in general, as well as information about the reviewer's "love" for the author's approach to character development. The reviewer points out the effect of this successful character development on readers, too — "I feel like I know them well."

At the same time, this reviewer shares information in ways that look very different from the initial exemplars in our classroombased coding scheme (see Kline et al., 2013 for original, and Magnifico et al., 2015 for our modifications). The comment begins by focusing on the reviewer and the experience of "[taking] three hours to read this amazing story," and elicits information about a conclusion that the reviewer expects ("She kills [him], right?"). In addition, the reviewer writes some of this comment as one half of a conversation ("You're welcome"), imagining, it seems, that the author would be thankful—for the reviewer's time, perhaps, or the effusive praise that begins the comment. The review ends with a conversational request for reciprocity, which would be unlikely in a classroom where peer commentary would likely be directed and managed by a teacher or in small working groups.

Many of these idea units conformed easily to our coding scheme, but, as a group, we were initially flummoxed by the conversational ways in which this review focuses on the reviewer and establishes his or her right to comment in the first place. We initially approached this difficulty by adding a "reader" focus of attention code that we used for reviewers' discussions of their preferences, habits, and experiences as readers. This move addressed comments like "I just took three hours to read this amazing story" from this example, and "I love the Hunger Games and fanfiction", from another review.

This addition, however, failed to capture the friendly-letter conventions that some reviewers added, like closing with "a huge fan of your fanfiction, [name]," the context-establishing "hey it's me (the kid who sits in front of you in math)" [sic], or the conversational "you're welcome." Similarly, it did not address the many requests and thanks for reading and review swaps, from that

quoted above to "I seriously appreciate all the support you give to me." These comments weren't uncommon, either: they equated to a substantial 8% of our data set in the end.

After several long discussions about what reviewers were trying to accomplish with similar overtures, we added a new primary linguistic function to our coding. "Social communication" included idea units that sought to establish a reader's credibility (Royster, 2005) or social presence (Kehrwald, 2008). Many fanfiction writers and readers emphasize the importance of building relationships with others because connections help authors to share their stories widely, find help when needed, and learn about potential collaborations. For reviewers who are commenting on an author's story, demonstrating their own love for a series and asking for feedback helps them to establish ethos and knowledge, much as students ask expert peers or academics cite prior influential work in a literature review. These actions are not "merely" social; rather, such rhetorical moves demonstrate their right to comment and contribute when shared context and common interests are not as automatic as they might be in a physical classroom. Social communication serves to reveal readers' expertise and presence, promote reciprocity in review practices across the network, and demonstrate appreciation.

In this process of developing our methods for coding fanfiction reviews, we engaged in extensive conversations about the practices and interactions in fanfiction writing and reviewing. We learned that reviewing does not necessarily lead to authoring, and that reviewers often abide by distinct social and reciprocal norms, ones that we had originally overlooked because they seemed irrelevant to the specific creative content or wider fandom. When they write and review, fanfiction authors describe drawing on a diverse array of sources, including what they learn from school (Lammers, 2016b; Magnifico, 2012).

In short, creating, describing, and refining our coding scheme led us to articulate many areas in which the environments, tools, and genres of school writing and fanfiction writing are profoundly different — despite the fact that authors in both contexts appreciate feedback. Thus, while Sinclair and Coulthard's (1975) classroom-based work proved a helpful beginning for understanding fanfiction writers' and students' peer review discourse (Kline et al., 2013), we needed to extend it to understand the online interactions of readers and writers traversing a fandom space (Magnifico et al., 2015). Our addition of the fourth function, social communication, sought to both identify the nature of this sociality and to value its role within fanfiction networks.

5. Discussion and implications

As English teacher educators and former classroom teachers, we initially brought our conceptualizations of fixed-progression, school-based literacy practices to bear on our research across online writing spaces as a learning framework that we know well. As a participant in Smith, West-Puckett, Cantrill, and Zamora's (2016) study put it, "Just as you are susceptible to Earth's gravity, you are susceptible to associate learning with courses" (p. 1). In addition, our space-based theoretical orientation shaped the way we defined the boundaries of our study. However, our attempts to begin tracing and describing "ancillary" practices valued by affinity spaces have pushed us to see greater complexity in the ways that readers and writers learn, collaborate, and relate to each other. Though the stories written by creators remain major texts of fanfiction, it is social communication, negotiation, and the movements of writers, readers, and reviewers that create the network — and thus deserve closer research and attention.

Our ongoing collaboration has helped us begin to see the theoretical and methodological limitations of our original approaches, as well as challenged us to innovate analyses that effectively describe learning and writing processes across online affinity spaces. Researchers and teachers alike need to understand the human contexts and consequences of these differences in order to appreciate how networked spaces and the ways writers travel them may have implications for literacy and learning. While we have focused here on how transliteracies frameworks provide guidance to future studies of online writing, similar conclusions apply to formal learning spaces. Students, too, have built complex identities and learning practices that traverse contexts across and beyond schools (cf. Prior, 1998).

We argue that in order to move online inquiry forward, researchers must *interrogate* their methods, *innovate* for the context, and *explicate* their approaches to data analysis. Law (2004) suggests that the world is an inherently messy and complex place, and that any attempt by researchers to superimpose a methodological stance will invariably fall short. He pushes researchers to engage in introspection, understand our agency in constructing realities, and develop methods that account for more than linearity and order. Hine (2009) adds that online scholarship needs to "explore the texture of social life as lived without expecting that there will be clear patterns or boundaries" (p. 5), while Stornaiuolo et al. (2017) and Prior and Smith (this issue) argue that such bright lines are unlikely to exist in face-to-face settings, either. Human learning and activity are messy and contextual. Not only does much published scholarship that examines online writing focus on exceptional cases, it often privileges the findings over the explanation of methods. If our aim is to understand how readers and writers bring a variety of practices to bear across situations, then we need greater transparency in our scholarship — and perhaps, a willingness to display greater vulnerability as researchers.

In order to interrogate our methods, Stornaiuolo et al. (2017) offer several "thinking devices" (p. 77) for researchers who are interested in taking up a transliteracies orientation in their own work. Using such ideas begins by asking: What is the logic of inquiry that links our research questions, theoretical perspectives, and methodological frameworks (Gee & Green, 1998)? What are the affordances and limitations of available analytical tools? Where are the patterns, but also where are the outliers and how can we account for them? How do we need to adapt analytical approaches originally developed for physical environments marked by synchronous, face-to-face communication for digital contexts that feature asynchronous communication across multiple websites and social media tools? Are we overly reliant on what is easily accessed or readily visible in online affinity spaces? As we found in conducting this analysis, however, similar exploration of our own assumptions and natural frameworks was necessary, too. Regardless, taking up complex, unwieldy data on "ancillary" practices, requires close examination.

Methodological innovation is needed if we are to understand literacy practices and learning processes in and across online affinity

spaces. As Crook and Bligh (2016) note, "any anticipation of re-invented places for learning has to struggle with predicting the changing ecology, economy, technology, and even psychology of the society within which learners are situated" (p. 173). To innovate can be understood as either using "existing theoretical approaches and methods in reformed or mixed and applied ways" (Xenitidou & Gilbert, 2009, p. 4) or creating entirely "new designs, concepts, and ways of doing things" (Taylor & Coffey, 2008, p. 8). While some scholars are concerned that the latter could create an "over emphasis on discontinuities and change," which diminishes established research methods (Delamont & Atkinson, 2001, p. 277), we suggest that methodological innovation builds upon and enriches existing qualitative methods. Particularly when research contexts, modes of representation, and methods of communication are rapidly changing, the ways in which we collect, analyze, and triangulate data must be revisited. Jewitt, Xambo, and Price (2017) propose four categories of methodological innovation, which exist along a continuum: "the *expansion* of methods within its originating discipline; *re-situating* methods across contexts within its discipline; the *transfer* of methods, concepts, knowledge and practices across disciplinary borders to be adapted, reformed or remixed; to the *generation* of new methods through inter-disciplinary mixing" (p. 107). By advancing and enhancing available methodologies, and drawing upon interdisciplinary perspectives, researchers will be better situated to identify, trace, and make sense of writing processes and transliteracies across timespaces.

It is not enough, though, to engage in methodological innovation: researchers must explicate and share their adaptations and creations. To that end, we argue that collaboration, communication, and even contestation are crucial to move research on literacy practices across online spaces forward. We want to highlight Smagorinsky's (2008) call for more attention on explicating methods in our reports of research, particularly as our transliteracies research will necessitate methodological innovation. We recognize the inherent challenges in methodological innovation, as a significant amount of such professional work involves "ideas that stretch over time, space, agency, causation, and perspectives – ideas which are too complex to be expressed fully in external representations, or thought of, in their entirety, by the human mind on its own" (Markauskaite & Goodyear, 2016, p. 320).

As shown in the worked example of our coding scheme, the data we collected, especially the ways fanfiction review comments foregrounded social communication, challenged our initially school-centered understanding of the purpose and rhetoric of reviews. This experience pushed us to interrogate our methods, theoretical framework, and previous conversations about our research contexts. In our resulting journal publications and conference presentations, we have strived to create visual representations, explicate coding schemes, and offer examples of our analysis in order to generate new ways of thinking about the centrality of what have been referred to as "ancillary" practices across online affinity spaces.

6. Concluding thoughts

"The problem with our field is that there's some kinda general understandin' bout what's what, but no real tried-and-true 'how to'" (Saldaña, 2014, p. 978). The field's general understandin' about fanfiction practices, spaces, and writers derives largely from case studies of exceptional writers. We argue for a move beyond this focus to learn more about what's what for broader practices and forms of participation in online affinity spaces. It is incumbent upon researchers to offer more 'how to,' shedding light on how they made sense of a given context, how they used analytical tools and coding processes to answer their questions, and how they wrestled with data. To move the field forward, scholars need to apply a transliteracies orientation to methodological innovation. Rather than employing fixed tools or static approaches, researchers need to collaborate and leverage knowledge from various disciplines, beyond education, to study literacies across contexts and timespaces. To that end, researchers need to engage in the generation of new methods that capture, trace, and highlight the impact of transliteracies on content generation and knowledge creation across networks. In that work, researchers might also think of their participants as collaborators in these efforts. As insiders to the practice, our participants have invaluable insights into the complexity of what's what *and* the how to of writing in online affinity spaces; their expertise can be utilized to strengthen findings through member-checking (e.g., Lammers & Marsh, 2018) and to generate knowledge through dialogic co-analysis with participants (e.g., Abrams et al., 2018; Onwuegbuzie & Frels, 2013). As Hall and Stornaiuolo (this issue) argue, flexible and responsive methodological tools are necessary to understand complex practices. While participants did not co-interpret data in this study, we hope to take up similar ideas in designing future work.

Our worked example, on its own, is not an analysis of transliteracies, as it focuses on the reviews of two unconnected fanfiction stories within a particular fandom. But it builds on our ethnographic studies of young people's transliteracy practices across fandoms, and points not only to the importance of peer critique, but also to how the social cohesion of readers and writers is evident in the supportive practice of soliciting and writing fanfiction reviews. The next step in this line of inquiry is to examine reviewing practices more widely, perhaps drawing on computational technologies to collect, categorize, and describe broad swaths of data (Lazer et al., 2009). In order to gain a broader understanding of transliteracies work, and how youth are engaging in transliteracy practices across online affinity spaces, case studies of exceptional young people are no longer sufficient. At the same time, we need to be cautious about how we access and analyze big data in an attempt to answer our questions about people's literacy practices and creative products across networks. As researchers navigate the tensions among theoretical frameworks, methodological approaches, and ethical perspectives, we must critically consider how we develop and articulate our 'how to' within and across our disciplines.

References

Abrams, S. S., & Lammers, J. C. (2017). Belonging in a videogame space: bridging affinity spaces and communities of practice. *Teachers College Record*, 119(12). Abrams, S. S., Schaefer, M. B., Ness, D., Abrams, C. S., Kurpis, M., & Ness, E. (2018, November). Middle schoolers and their middle aged parents: A methodological

[&]quot;Lulu" [internet pseudonym] (2013, October 5). AO3 census: Masterpost. The slow dance of the infinite stars [blog]. Retrieved from http://centrumlumina.tumblr. com/post/63208278796/ao3-census-masterpost.

discussion of literacy research with children. Paper to be presented at the Literacy Research Association Annual Conference. CA: Indian Wells.

Alvermann, D. E. (2008). Why bother theorizing adolescents' online literacies for classroom practice and research? *Journal of Adolescent and Adult Literacy*, 52(1), 8–19. Black, R. W. (2008). *Adolescents and online fan fiction*. New York: Peter Lang.

Bommarito, D. (2014). Tending to change: Toward a situated model of affinity spaces. E-Learning and Digital Media, 11(4), 406-418.

Buck, A. (2012). Examining digital literacies practices on social network sites. Research in the Teaching of English, 47(1), 9-38.

Chafe, W. L. (1980). The deployment of consciousness in the production of a narrative. In W. L. Chafe (Ed.). The pear stories: Cognitive, cultural, and linguistic aspects of narrative production. Norwood, NY: Ablex Publishing Corporation.

Crook, C., & Bligh, B. (2016). Technology and the dis-placing of learning in educational futures. Learning, Culture and Social Interaction, 11, 162-175.

Curwood, J. S. (2013). The Hunger Games: Literature, literacy. and online affinity spaces. Language Arts, 90(6), 417-427.

Curwood, J. S., Magnifico, A. M., & Lammers, J. C. (2013). Writing in the wild: Writers' motivation in fan-based affinity spaces. Journal of Adolescent and Adult Literacy, 56(8), 677–685.

Delamont, S., & Atkinson, P. (2001). Editorial. Qualitative Research, 1, 275-277.

Deng, L., Connelly, J., & Lau, M. (2016). Interest-driven digital practices of secondary students: Cases of connected learning. *Learning, Culture and Social Interaction, 9*, 45–54.

DeVane, B. (2012). Wither membership? Identity and social learning in affinity spaces. In E. R. Hayes, & S. C. Duncan (Eds.). Learning in video game affinity spaces (pp. 162–185). New York, NY: Peter Lang.

Ellis, M. J. (2011). Peer feedback on writing: Is online better than on-paper? Journal of Academic Language and Learning, 5(1), A88-A99.

Fields, D. A., Kafai, Y. B., & Giang, M. T. (2016). Participation by choice: A transitional analysis of patterns in social networking and coding contributions in the online Scratch community. In U. Cress, H. Jeong, & J. Moskaliuk (Eds.). Mass Collaboration and Education (pp. 209–240). New York, NY: Springer.

Gee, J. P. (2004). Situated language and learning: A critique of traditional schooling. New York, NY: Routledge.

Gee, J. P. (2017). Teaching, learning, literacy in our high-risk high-tech world: A framework for becoming human. New York, NY: Teachers College Press.

Gee, J. P., & Green, J. L. (1998). Discourse analysis, learning, and social practice: A methodological study. Review of Research in Education, 23, 119–169. Gerber, H. R., Abrams, S. S., Curwood, J. S., & Magnifico, A. M. (2017). Conducting qualitative research of learning in online spaces. Thousand Oaks, CA: SAGE.

Gray, J. (2010). Show sold separately: Promos, spoilers, and other media paratexts. New York: NYU Press.

Hall, M., & Stornaiuolo, A. (2019). Tracing networked writing in an online community through resonance maps. *Learning, Culture and Social Interaction* (this issue).
 Halverson, E. R. (2012). Participatory media spaces: A design perspective on learning with media and technology in the twenty-first century. In C. Steinkuehler, K. Squire, & S. Barab (Eds.). *Games, Learning, & Society: Learning and Meaning in the Digital Age* (pp. 244–268). New York: Cambridge University Press.

Hayes, E. R., & Duncan, S. C. (2012). Learning in video game affinity spaces. New York, NY: Peter Lang.

Hennessy, S., Rojas-Drummond, S., Higham, R., Marquez, A. M., Maine, F., Rios, R. M., ... Berrera, M. J. (2016). Developing a coding scheme for analyzing classroom dialogue across educational contexts. Language, Culture and Social Interaction, 9, 16–44.

Hine, C. (2009). How can qualitative Internet researchers define the boundaries of their projects? In A. N. Markham, & N. K. Baym (Eds.). Internet inquiry: Conversations about method (pp. 5–32). Thousand Oaks, CA: SAGE.

Hull, G., Stornaiuolo, A., & Sterponi, L. (2013). Imagined readers and hospitable texts: Global youth connect online. In D. E. Alvermann, N. J. Unrau, & R. B. Ruddell (Eds.). *Theoretical models and processes of reading* (pp. 1208–1240). Newark, DE: International Reading Association.

Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., Herr-Stevenson, B., Horst, H. A., et al. (2010). Hanging out, messing around, and geeking out: Kids living and learning with new media. Cambridge, MA: MIT Press.

Jamison, A. (2013). Fic: Why fanfiction is taking over the world. Dallas, TX: Smart Pop Books.

Jewitt, C., Xambo, A., & Price, S. (2017). Exploring methodological innovation in the social sciences: the body in digital environments and the arts. International Journal of Social Research Methodology, 20(1), 105–120.

Kalantzis, M., & Cope, W. (2012). Literacies. New York: Cambridge University Press.

Kehrwald, B. (2008). Understanding social presence in text-based online learning environments. Distance Education, 29(1), 89-106.

Kline, S., Letofsky, K., & Woodard, R. (2013). Democratizing classroom discourse: The challenge for online writing environments. *E-Learning and Digital Media*, 10(4), 378–394.

Lam, W. S. E. (2009). Multiliteracies on instant messaging in negotiating local, translocal, and transnational affiliations: A case of an adolescent immigrant. *Reading Research Quarterly*, 44(4), 377–397.

Lammers, J. C. (2016a). Examining the pedagogic discourse of an online fan space: A focus on flexible roles. The Mid-Atlantic. Education Review, 4(2), 1–13.

Lammers, J. C. (2016b). "The Hangout was serious business": Leveraging participation in an online space to design Sims fanfiction. Research in the Teaching of English, 50, 309–332.

Lammers, J. C., Curwood, J. S., & Magnifico, A. M. (2012). Toward an affinity space methodology: Considerations for literacy research. English Teaching: Practice and Critique, 11(2), 44–58.

Lammers, J. C., & Marsh, V. L. (2015). Going public: An adolescent's networked writing on Fanfiction.net. Journal of Adolescent & Adult Literacy, 59, 277-285.

Lammers, J. C., & Marsh, V. L. (2018). "A writer more than...a child": A longitudinal study examining adolescent writer identity. Written Communication, 35(1), 89–114.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge: UK: Cambridge.

Law, J. (2004). After method. New York, NY: Routledge.

Lazer, D., et al. (2009). Life in the network: The coming age of computational social science. Science, 323(5915), 721-723.

Leander, K. M., & Boldt, G. (2013). Rereading "a pedagogy of multiliteracies": Bodies, texts, and emergence. Journal of Literacy Research, 45, 22-46.

Loretto, A., DeMartino, S., & Godley, A. (2016). Secondary students' perceptions of peer review of writing. Research in the Teaching of English, 51(2), 134-161.

Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. Journal of Second Language Writing, 18(1), 30-43.

Magnifico, A. M. (2012). The game of Neopian writing. In E. R. Hayes, & S. C. Duncan (Eds.). Learning in Video Game Affinity Spaces (pp. 212–234). New York: Peter Lang.

Magnifico, A. M., Curwood, J. S., & Lammers, J. C. (2015). Words on the screen: Broadening analyses of interactions among fanfiction writers and reviewers. *Literacy*, 49(3), 158–166.

Magnifico, A. M., Lammers, J. C., & Fields, D. A. (2018). Affinity spaces, literacies, and classrooms: Tensions and opportunities. Literacy, 52(3), 145–152.

Magnifico, A. M., Woodard, R. L., & McCarthey, S. J. (2019). Teachers as co-authors of student writing: How teachers' initiating texts influence response and revision. *Computers and Composition*, 52(3), 107–131.

Markauskaite, L., & Goodyear, P. (2016). Epistemic fluency and professional education. Dordrecht: Springer.

Onwuegbuzie, A. J., & Frels, R. K. (2013). Introduction: Towards a new research philosophy for addressing social justice issues: Critical dialectical pluralism 1.0. International Journal of Multiple Research Approaches, 7, 9–26.

Padgett, E., & Curwood, J. S. (2016). A figment of their imagination: Adolescent poetic literacy in an online affinity space. Journal of Adolescent and Adult Literacy, 59(4), 397-407.

Prior, P. A. (1998). Writing/disciplinarity: A sociohistoric account of literate activity in the academy. Mahwah, NJ: Lawrence Erlbaum.

Royster, B. (2005). Inspiration, creativity, and crisis: The romantic myth of the writer meets the creative writing classroom. In A. Leahy (Ed.). Power and Identity in the Writing Classroom: The Authority Project (pp. 26–38). Tonawanda. NY: Multilingual Matters.

Saldaña, J. (2014). Blue-collar qualitative research: A rant. Qualitative Inquiry, 20(8), 976-980.

Sendlor, C. (2011, March 18). Fan fiction demographics in 2010: Age, sex, country. Fan Fiction Statistics, FFN Research [blog]. Retrieved from http://ffnresearch. blogspot.com/2011/03/fan-fiction-demographics-in-2010-age.html.

Shivers-McNair, A. (2019). Mediation and mattering: A case study of making literacies in a makerspace. Learning, Culture and Social Interaction (this issue).

Simmons, J. (2003). Responders are taught. not born. Journal of Adolescent & Adult Literacy, 46(8), 684-693.

Sinclair, J. M., & Coulthard, R. M. (1975). Towards an analysis of discourse: The English used by teachers and pupils. Oxford, UK: Oxford University Press.
 Smagorinsky, P. (2008). The method section as conceptual epicenter in constructing social science research reports. Written Communication, 25(3), 389–411.
 Smith, A., West-Puckett, S., Cantrill, C., & Zamora, M. (2016). Remix as professional learning: Educators' iterative literacy practice in CLMOOC. Education. Sciences, 6(12), 1–19.

Stornaiuolo, A., Smith, A., & Phillips, N. C. (2017). Developing a transliteracies framework for a connected world. Journal of Literacy Research, 49(1), 68–91.
Taylor, C., & Coffey, A. (2008). Innovation in qualitative research methods: Possibilities and challenges. Cardiff University. Retrieved from http://www.cardiff.ac.uk.
Xenitidou, M., & Gilbert, N. (2009). Innovations in social science research methods. National centre for research methods report. Retrieved from http://eprints.ncrm.ac.
uk/804/.