



# Digital platforms and narrative exchange: Hidden constraints, emerging agency

new media & society  
2015, Vol. 17(6) 919–938  
© The Author(s) 2014  
Reprints and permissions:  
sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/1461444813518579  
nms.sagepub.com



**Wilma Clark**

Independent Researcher, UK

**Nick Couldry**

London School of Economics, UK

**Richard MacDonald**

Goldsmiths, University of London, UK

**Hilde C Stephansen**

The Open University, UK

## Abstract

It is well known that narrative exchange takes distinctive forms in the digital age. Less understood are the digitally based processes and infrastructures that support or constrain the wider *exchange* of narrative materials. This article reports on research in a UK sixth form college with ambitions to expand its students' digital skills. Our approach was to identify the preconditions (sometimes, but often not, involving fully formed narrative agency) that might support sustained narrative exchange. We call these conditions collectively 'proto-agency', and explore them as a way of establishing what a 'digital story *circle*' (not just a digital story) might be: that is, how new digital platforms and resources contribute to the infrastructures for narrative exchange and wider empowerment in a complex institutional context. During our fieldwork, interesting insights into the tensions around social media emerged. Only by understanding such

---

## Corresponding author:

Nick Couldry, Department of Media and Communications, London School of Economics, London WC2A 2AE, UK.

Email: [n.couldry@lse.ac.uk](mailto:n.couldry@lse.ac.uk)

forms of proto-agency can we begin to assess the participatory potential of digital platforms for young people in education today.

### Keywords

Community, digital story circle, digital storytelling, education, narrative exchange, proto-agency, recognition, space–time, voice

## Introduction

Narrative exchange takes distinctive forms in the digital age. The importance of digital form to narrative production and potential democratization has been widely discussed (Hartley and McWilliam, 2008; Lambert, 2006; this journal, special issue 10(3): 2008). Less understood are the digitally based processes and infrastructures that support the wider *exchange* of narrative materials and the institutional or other constraints to which that process is subject (Thumim, 2009). Not only do these digitally based processes, infrastructures and the digital narratives they support, take distinctive forms, but these digital forms interact with the wider processes that support their creation: does this interaction, over time, generate an *infrastructure* through which narratives of mutual recognition are sustainably exchanged? This was the underlying question that oriented our fieldwork.

We explore this question by introducing the heuristic concept of an open, *digitally enabled* ‘story circle’ (or ‘digital story circle’), the term ‘story circle’ itself being drawn from the Digital Storytelling movement (Lambert, 2006). We apply this to an institution that had ambitions to expand its students’ digital skills and develop relations with its wider community. This institutional setting was complex, necessitating multiple levels of research on the following: context; agency; narrative exchange; digital platforms and social media (mainly Twitter). We draw on these different levels to shape our understanding of the wider ‘digital story circle’ that in this institutional setting could be said to support narrative exchange. Attention to the tensions around, and contradictory understandings of, social media in the context of our fieldwork offers, we suggest, insights into the potential constraints and emerging forms of agency that arise when an institution and its members seek to embrace what is, for them, a relatively new and potentially troublesome digital medium.

Research under such circumstances must look widely for signs of the preconditions of sustained narrative exchange: we can expect such signs to take disparate forms and emerge over an extended period of time. Many factors are relevant: new forms of agency (understood as such), but also digital awareness and broader infrastructural changes involving a wide range of actors (staff, students, college leaders), whereby narrative exchange becomes stabilized and recognized in a digitally enabled educational setting. The word ‘agency’ is too blunt to grasp the heterogeneity of elements that, over time, make up such preconditions; instead, to cover all these elements, we use the term ‘proto-agency’, recalling Paul Willis’ concept of emergent ‘proto-communities’ within young people’s communications (Willis, 1990: 133–145). We argue that, in times of major

transformation, identifying and harnessing rapidly changing infrastructural conditions and such emerging forms of interaction may be just as significant as identifying fully formed and already clearly recognized agency on the part of distinct actors.

This article reports on action research conducted in the north of England that explored the embedding of digital storytelling in a local sixth form college (PCSF), one of five local partners with whom we worked during 2011–2013. At the time our research was conducted, PCSF was in a transitional phase of technology adoption; conventional digital technologies had been successfully integrated but social media remained a challenging space. The purpose of our research was *not* specifically to track digital storytelling processes as such within the curriculum, but more broadly to develop a broader process of digitally enabled narrative exchange that might support knowledge production and mutual recognition. Our research conceived of students not merely as pupils working to a set curriculum but as citizens with a contribution to ‘matters of common concern’ (Benhabib, 1996: 68), whose agency had the *potential* to connect with important debates about the digital, young people and civic agency (Bennett, 2008).

The constraints on such a broadly conceived project in the heavily regulated setting of a contemporary British college are clear. Firstly, students have very little free time or attention for any activity that is not compulsory and directed to assessment goals. Secondly, a college’s intensely regulated authority structure (Hodkinson and Bloomer, 2000; Stoten, 2011, 2012), with its emphasis on close policing of risks and continuous public accountability, gives teachers and students little opportunity to experiment with roles outside the formal teacher–student relationship, let alone roles in which, as citizens, students are given equal recognition to adults. Thirdly, wider UK society (compare boyd, 2008 for a similar argument on the USA) gives little recognition to 16–19 year-olds as citizens with a contribution to make to public culture or political deliberations: the vote is only given at 18 years and there are few forms of political recognition for those under 18.

The result, we hope, is a nuanced account of what happens when new digital platforms (Gillespie, 2010) and wider rhetorics of digital empowerment hit the ground in real-life settings. Only by understanding the constraints and particular forms of proto-agency in these settings can we begin to assess the participatory potential of digital platforms for young people in education today.

## Conceptual background

Four theoretical concepts support our argument: *community* (Senge et al., 2012; Wenger, 1998), *space–time* (Lefebvre, 1990; Zerubavel, 1981), *boundary* (Lotman, 1990, 2009) and *digital story circle* (drawing on Lambert, 2006). The first three identify dimensions of a complex institutional context characterized both by innovation and constraint within which new forms of activity by individuals (especially students) are emerging. The final concept connects the outcomes in this institutional context (in terms of narrative exchange) to the broader research tradition on digital storytelling, and its specific notion of a ‘story circle’ that we adapt to a digital context.

## Community: learning, practices and social processes in the institutional context

PCSF is a complex community within which all interactions were infused with multiple layers of agency and constraint. Constraints derive both from the social configurations of the institution and the contexts within which it interacts with its wider community. We adopt here a transdisciplinary approach to the notion of 'community' that draws on organizational sociologist Etienne Wenger's work on community as 'practice-oriented' and educational sociologist Senge's work on community as 'system'.

Wenger (1998) offers a distinctive internally focused understanding of a 'community of practice'. 'Community' for Wenger is 'a way of talking about the social configurations in which our enterprises are defined as *worth pursuing* and our participation is recognizable as *competence*' (1998: 5, added emphasis). For Wenger, 'communities of practice are the prime context in which we can work out common sense through mutual engagement' (1998: 47), that is, through the social production of value and authority. This approach is particularly useful in registering the role that narrative exchange can play in generating such common sense, value and authority.

Senge et al. (2012: 23) portrays community less as 'internally' focused and rather as just one element in a wider social context. In so doing, Senge accords recognition to the complex web of peripheral spaces within which the 'core' social and spatial structures of a 'learning community' are enmeshed (Senge et al., 2012: 23). He argues that the information age school is immersed in 'an unprecedented time of cultures colliding' where 'young people around the world are creating a web of relationships that has never existed before' (Senge, 1990: xiv). Negotiating this 'web of relationships' requires a broader, digitally oriented repertoire of knowledge, skills and understanding. In our analysis, we draw also on this concept of community to identify where, how and in what form(s) such negotiations of the digital take place and what this means for our understanding of the conditions under which a *digital* story circle emerges.

## Space–time

We argue that a key context within which the educational institution sustains itself as a community of practice is the curriculum. The curriculum is a stable patterning of time *and* space that enables the disparate educational activities of a school or college to be perceived and managed as a whole. More generally, the curriculum is a constructed form of 'social space' into which social relations are projected and inscribed (Lefebvre, 1990: 129). Since space persists in time, social space is always, in practice, 'social space–time'. Analysis of how the social space–time of the curriculum impacts on the possibilities for a digital story circle is important to our arguments, and involves identifying a series of elements, particularly the regulation and circumvention by staff and students of curriculum management and the organization breaking down of established patterns in social relations and social space that the curriculum implies.

Here Zerubavel's (1981) notion of the 'hidden rhythms' in social life is crucial. Similar to Senge et al. (2012), Zerubavel points to the complexity of the 'individual's web of social affiliations' that segment daily life along social and temporal boundaries

(1981: xv). Zerubavel wrote when computer-mediated communications were barely visible in public life, but many of his perceptions on time, its structures and limitations were echoed by PCSF participants when discussing, amongst others, the kinds of space–time constraints to which a sustainable educationally situated digital story circle is subject. Because the timetable (like any hidden rhythm) is also a practical means to pack activities into limited space–time (Hagerstrand, 1975), it necessarily regulates space as well as time, in particular classroom space as a formal learning setting. Conversely, the focus on the digital in the physical setting of the institution not only challenges traditional perceptions of time as a limited resource but also generates ambivalence about the ways in which space–time relations between teachers and students can evolve in a developing *digital* story circle. Such digital developments blur established boundary markers (curricula, regulatory frameworks, professional role and individual identity), requiring them to be rethought and renegotiated.

### Boundary

Lotman's concept of boundary helps us identify processes emerging at the periphery of existing practices and regulatory frameworks: by doing so, it enables a clearer framing of the inter-relations between community, space–time and institutional context.

This means recognizing *ambivalence* around the peripheries or boundaries in an institutional context, and the potential, over the longer term, for such ambivalence to stimulate new forms of individual agency. Lotman's (1990) spatially inflected cultural and semiotic analysis of *boundaries* and their role in framing agency is particularly helpful for grasping the contexts and constraints of an educational institution. Lotman proposes a complex conceptualization of 'boundary': in contrast to traditional ideas of boundary as a 'fixed limit' or 'containing' mechanism that separates or divides, Lotman conceives of the boundary as an ambivalent space, as a 'bilingual' mechanism (1990, 2005: 210) that stimulates the transformation of 'core' values (curricula, timetabling) through interaction with seemingly anomalous information from the periphery (social media and digital platforms).

### The digital story circle

A focus on the possibility of individual agency through storytelling was a fundamental value commitment of our research: exchanging stories is a way of recognizing each other as narrative agents, as producers of 'accounts of ourselves' and of the world around us (Butler, 2005; Cavarero, 2000; Couldry, 2010; Ricoeur, 1992). At stake in the college's experiment with us was the possibility of generating agency through digitally enabled narrative *exchange* exemplified, in our fieldwork, in and through the college's decision, as an institutional complex, to attempt to adopt and integrate social media tools into their existing repertoire of practices.

In the Digital Storytelling movement (Hartley and McWilliam, 2008; Lambert, 2006; Lundby, 2008; Thumim, 2009) the production and exchange of personal stories generally takes place within a workshop 'story circle' where actual *digital* stories are generated. However, the inherently combinatorial nature of digital communication changes more

than the form of the stories themselves. Not only may digital narratives take many forms, including shorter forms (tweet, retweet, blog, posting an image or video); the question of how the interaction of digital forms and processes creates over time a wider *infrastructure* through which narratives are sustainably exchanged becomes increasingly important. Within a broader understanding of the ongoing digitally based processes for narrative exchange and mutual recognition, the possibility emerges of a story circle that is *itself sustained digitally* across time and space, and may be embedded within the highly structured space–time of a complex educational institution.

In this article, we offer ‘*digital story circle*’ as a heuristic concept to grasp not just fully formed cases of narrative agency, but also the wider and heterogeneous bundle of things that are the preconditions for sustaining narrative exchange over the longer term, a bundle we call ‘proto-agency’ (as explained above). We therefore conceptualize a digital story circle in a complex institutional setting such as PCSF as a set of agents, processes *and* infrastructural conditions that enable narratives to consistently emerge and be acknowledged through exchange and mutual interaction. Those conditions will include at the very least (Couldry, 2008: 385) institutional contexts, the allocation of resources and agents, the wider circuits in which narrative content gets circulated, and the broader links such content acquires to wider fields (for example, civic life, popular and media culture).

## Methodology

Our fieldwork methodology drew on grounded theory (Glaser and Strauss, 1967; Walker and Myrick, 2006) insofar as we were interested in exploring data arising from an educational institution’s developing attempts to engage with social media (and Twitter in particular) as a support for learning and civic participation; and action research (McNiff and Whitehead, 2009; Noffke and Somekh, 2009) in the sense that participants and researchers engaged in a collaborative and iterative cycle of research interventions that drew on existing practices and processes of the institution and, with researcher support, sought to align these with digitally enabled processes for sustained narrative exchange. The study comprised three phases between Autumn 2011 and Spring 2013, each of which was developed and co-designed by our research team in collaboration with teachers, students and college leaders. In this article we report on two of these phases that focused, respectively, on Digital Storytelling and Twitter.

Data from Phase 1 provided a valuable context for understanding existing practices involving digital technologies at PCSF. Data from Phase 2 provided interesting insights into how Twitter as a platform came to enable sustained narrative exchange; when used by staff and students, it emerged as a support for civic engagement specifically and processes of teaching and learning more broadly.

## Data collection and analysis

During Phases 1 and 2 of the project (September 2011–July 2012), we conducted 40 researcher-led interviews, four student focus groups, six researcher-led social media training workshops and approximately 70 hours of researcher-led participant observation

(in scheduled classes, training workshops and project-related events). This broad overview of the data corpus is presented to illustrate the breadth and depth of engagement with the study context by both researchers and participants. Whilst all data informed our overall analysis of the study context, it is not feasible to report on all of these in the space of one article. Thus, we do not explicitly refer to workshop or observational data here but focus, rather, on a more narrowly sampled corpus of interviews and focus group data.

Interview and focus group data were fully transcribed and analysed using NVivo software. Emergent themes were identified by a team of six researchers and a broad coding schema comprising 11 key categories (Actions and Practices, Themes, Issues, Media and the Digital, Resources, Consequences, Entities, Time, Space, Activities, Modulators) was generated. The coding schema was used to identify illustrative data samples from the data corpus.

## Findings

In this section, we report on our analysis of the study data. The section comprises two parts. Firstly, we focus on the related concepts of *community*, *space-time* and *boundary* and discuss ways in which these support or constrain narrative exchange over the longer term. Secondly, we focus on the conceptualization of the institution, its members and wider community as a *digital story circle*.

In the early stages of our research, PCSF presented itself as a community with a specific purpose and fixed goals whose members (college leaders, teachers, administrators and students) had particular roles to play. Whilst the college was open to connecting to wider networks, the ways in which this was able to be done were often constrained by limited resources (time, people, tools, skills) and/or existing regulatory frameworks. There was, at the start of our research, evidence of a sharp division of roles between staff and students, with an accompanying mutual lack of trust around use of digital technologies, despite a strong desire within the community as a whole to benefit from these. Existing practices indicated that much of the formal use of digital technologies was institution led and, conversely, students felt a distinct lack of freedom when it came to using their personal technologies within the college setting. Availability of time to negotiate the digital was an issue for both staff and students, with issues of accountability, limited technology resource and the access and skills to use these being cited.

Mobile phones (and the ease of access to social media and wider networks they provide) were a key bone of contention for staff and institution concerned about the potential for distraction. Students, meanwhile, saw these tools as providing easy, always-on, access to wider networks and information sources, thus bridging the gap of uneven access to limited institutional technology resources. Although standardized digital technologies were well embedded in the college's daily life at a formal level, effective mechanisms for enabling students to exchange narratives with external audiences were in other ways blocked by this struggle between institution and student body over the use of personal and/or social technologies. This tension echoed wider debate about mobile phones and social media in the classroom (Tække and Paulsen, 2012).

These diverse perspectives on digital technologies in the institutional setting reveal both a deterministic (staff and institution) and an ambivalent (students) attitude to digital

platforms. There is staff attachment to established ways of working (learning platforms, desktop or networked computers, heavily regulated access to Wi-Fi), whilst students acknowledge the ease of use of mobile technologies to access information. It is in this very ambivalence that we first began to see signs of proto-agency among individual students who were able to subvert formal systems within the institutional context through use of his or her personal digital technologies. In this moot area, the constraining features of the college's regulatory system were revealed and a contested space for mutual dialogue identified: a digitally enhanced communication space between staff, students and institution but also a 'danger zone' of potentially inappropriate behaviour in an 'open' and 'public' arena.

Yet, and despite these tensions, the college was motivated to embrace social media technologies as a support for students' learning, civic participation and to improve and increase their links with the wider community. Both college leaders and staff had a highly positive view of the *potential* of social media, and Twitter especially, to enhance pre-existing digital platforms and expand on traditional classroom-based teaching.

I think it's [social media] extremely valuable. [Students] have to have knowledge of the media industry and current issues and debates... there's only so much you can do in the classroom... Twitter has the power to get information out there instantly. (Staff)

Students, too, emphasized the immediacy of social media platforms, commenting that 'you see things on Twitter before it's even on the news'. They also pointed to ways in which these digital platforms allowed them to connect with real-world contexts and people of interest, albeit this was often a connection lacking in formality or purposeful engagement, for example tweeting celebrities.

Despite staff positivity about the potential of social media, the role of mobile technology as a *support* for learning went initially unrecognized, by staff, institution *and* students because such use did not yet 'make sense' (Zerubavel, 1981: 24) within a college setting conceived as a place of formal learning where digital learning takes place at fixed times and places (in networked classrooms with desktop PCs) and for particular purposes (online research, digital artwork, using industry software for editing). In this context, mobile phones were initially perceived as communication (not learning) technologies with a high potential for distraction and/or disruption. Those staff who were aware of mobile phones' potential to support more continuous and flexible learning felt unable to build on such opportunities due to the existing college policy on students' mobile phone use. Overall, new and emerging technology platforms initially remained heavily constrained by institutional digital policies around curricular needs, safeguarding students and legal, ethical and privacy concerns. The college's wider *in loco parentis* role was an overarching constraint to the 'open' adoption of social media for narrative exchange. Staff pressures for accountability to management and within the wider regulatory context of UK education also created an initial barrier to technology uptake.

So that is a barrier – it's how I'm going to make this work ...and what policy college puts in place because it's a new area they're getting involved with and there's obviously no legal things dealt with yet, there's no college policy, nothing's gone wrong yet. (Staff)



Safeguarding and related issues of privacy and identity were viewed by staff and students with a degree of confusion, fear and resistance to any blurring of boundaries between institutional and wider social contexts:

That leads me on to Twitter where, I mean, it's often referred to as a safeguarding issue, that there's potential for problems and, at the moment, I haven't followed any students back. Students are following me but I'm not following them and I'm going to leave it that way. (Staff)

The inherent potential for surveillance in social media creates a further double barrier: a concern to maintain professional relationships among staff and a lack of trust in staff among students. Some staff and students devised their own rules for dealing with such issues, as in the example above, with staff avoiding looking at students' social media timelines and some students setting up their own dedicated student social media accounts. Nonetheless problems remained. Mistrust arose in connection with online activity, with staff concerned about the level of criticality in students' comments made on social media and students concerned with the consequences of staff surveillance of their activities:

I wouldn't add a teacher. If they got like a Twitter thing or if they had a Facebook and they added me, I wouldn't accept them because they could see all my own stuff I get up to. (Student)

Within the highly regulated context of PCSF, this mutual suspicion militated against wider digital exchange. Other more subtle constraints, here identified by a college art tutor, derived from how students approached these new forms of communication opportunity:

However much students utilize digital technology, I think the bulk of them don't think of it as a vehicle for their art in a way . . . They think of it in terms of literally 'chat' - you know, in the bogus sort of Twitter way. They think of it in terms of making arrangements on a social level *but they don't quite see maybe how those same kinds of arrangements can be made for another purpose*, how you can garner an audience for another purpose. (Staff)

This staff reflection echoes earlier findings (Green and Hannon, 2007) on deficiencies in students' digital literacy. Many students agreed, but some claimed they *were* making purposeful use of social media for specific goals:

I started following the police, seeing they had a Twitter account... I wanted to see what they were doing about the riots. (Student)

Key constraints began to emerge through participants' early engagement with our research team. These were reflected in staff's and students' initially limited engagement around digital platforms. When multiple constraints become consolidated, a negative framing of potentially transformative activities may stabilize and in our fieldwork we saw some signs of this:

I think in terms of getting feedback from learners, that's something we do every day but we don't use social media to do that *at the moment* and there's different reasons for that. (Staff)

Students, meanwhile, clearly did see feedback via social media as a positive thing, raising their self-esteem.

I use Tumblr. ... I like feedback, I really like feedback, cause I like to know if it's good or not. Like I'll always be asking friends ... what do you think? Is there anything that needs to be done?  
(Student)

Are opportunities for recognizing student voice being missed in the focus on formal, structured patterns of use of digital media? If so, an institution's space-time organization structures (Zerubavel, 1981), its overall cognitive patterns, cultural values and behavioural routines must be challenged if anything like *effective* narrative exchange based on mutual recognition is to occur.

Yet, on a broader scale, both staff and students pointed to the competing demands of institutional or other commitments on their time as a constraint on digitally enabled narrative exchange:

I've got two students who voted to digitize all the artwork from the original body of work and upload that and tweet some information about that but they've not had a chance because they're all doing portfolio information at the moment for interviews after Christmas, so that's sort of taken over. (Staff)

Digitizing analogue work, and then organizing it and acquiring the skills to use digital tools effectively, all take time, which in the intensely managed context of the college, is in short supply, especially in the run-up to examinations. Yet students sometimes circumvented this constraint:

We did our music video, we had to all put it on YouTube... there was a YouTube account that the technician created for people to upload their videos... but I think people just did it for their own accounts. *Just to save time.* (Student)

As evidenced above, time was identified as the most pressing constraint on using digital media and infrastructure to extend dialogue between institution, staff, students and the wider community. In a tightly timetabled institutional context all college-based time must be 'accounted for'.

Zerubavel (1981) shows how the temporal structure within an institution influences cognitive patterns, cultural values and the behaviour structures of its members. He helps us to identify 'logjams' in the routes between agency and constraint, yet also to highlight the 'inbetween spaces' around the periphery of existing practices where new action is possible. Zerubavel (1981: xiv) suggests that 'time functions as a context for anchoring the meaning of social acts and situations'. This was a strongly held perception within the college, where many staff (especially those in leadership roles) perceived the college's temporal structure (curriculum, examinations, timetable) to be sacrosanct. Others, especially younger or newer staff, sought out a more flexible role for teaching and learning, taking dialogue with students beyond the school day, via Twitter debate and discussion. In the sections that follow, we focus on ways in which two interventions involving

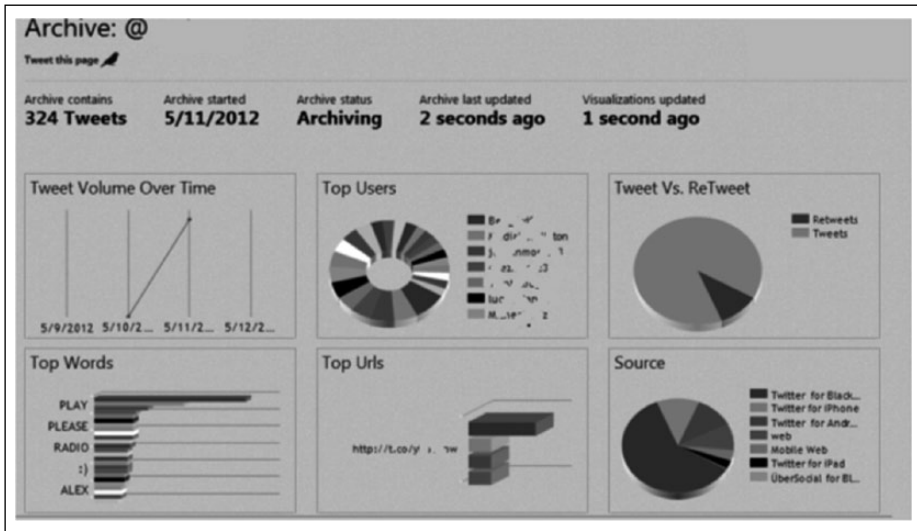
Twitter supported the beginnings of a digital infrastructure. The first, a Twitter event, was researcher-led; the second, the introduction of a departmental Twitter account, was staff-led.

Our analysis of these two interventions differs in an important respect from existing research on the use of Twitter in (mostly higher) education, which has tended to focus on the microblogging platform's effectiveness as a tool for formal learning (e.g. Blessing et al., 2012; Vazquez Cano, 2012). Even where such research has explored the use of Twitter to support more informal processes and relationships, this has tended to be conceptualized ultimately as a means to improved learning outcomes (e.g. Johnson, 2011; Junco et al., 2011; Kassens-Noor, 2012); and in higher education (Joosten, 2012). Our interest is broader than this: we want to explore how these experiments in Twitter use can enable at least the preconditions of sustained processes of narrative exchange that might support knowledge production and mutual recognition that extend beyond classroom and curriculum, and so new 'communities of practice' (Senge et al., 2012; Wenger, 1998).

### *The Twitter event*

A review of Phase 1 led to a decision to focus in particular on the processes around the gradual introduction of Twitter into the culture of the college. A Twitter event, initially conceived as a social media awareness event to stimulate student debate on issues relevant to them (for example, the UK riots of August 2011), was proposed. Existing temporal and organizational practices and constraints within the college, however, led to this becoming a general leisure and entertainment event, linked to the launch of a new college radio station. The 90-minute event was held during students' lunch-break, in an open-air quad and nearby dining-hall, away from traditional classroom settings. Students were encouraged to tweet and the college Wi-Fi network was opened up to students' mobile phones for the first time. Digital screens around the dining-hall were used to display student tweets in real time. Whilst these shifts to the *physical* (out of class), *temporal* (out of timetable) and *digital* (open access to college Wi-Fi) 'peripheries' of the college (Lotman, 1990) meant more students were able to participate and to do so in ways that were 'new' in the college setting, our proposed semi-structured civic debate on the theme of riots lost ground in this informal music-led use of students' free time. Positive outcomes were nevertheless achieved and we turn to the longer-term consequences of this event below.

Data captured using the software tool Archivist included volume of tweets over time, top users, tweets versus retweets, top key words, URLs and source (Figure 1). This type of data was of great interest to college staff and encouraged a more informed and purposeful debate around early-surfacing tensions about the use of mobile phones by students. This snapshot data led, ultimately, to a focused, college-wide survey on students' adoption, use and perceptions of digital technologies. The event was viewed by staff as a successful intervention as it enabled them to experience a real-world, authentic context within which to evaluate social media and to discuss openly and in an informed way issues around student-led debate in a public arena, alongside related safeguarding and digital literacy concerns.



**Figure 1.** Archivist – overview of participant tweet patterns (anonymized).

The Twitter event acted as a catalyst for dialogue amongst college leaders about open access to college networks and their potential use for ‘open’ debate. During and in response to our fieldwork for the Twitter event, college regulatory structures around Wi-Fi access were reshaped to permit student access via personal mobile technologies. Student access to the Wi-Fi network was deemed a success and, subsequently, availability was extended throughout the college. Mobile phones, generally perceived as disruptive technologies in the college setting, began to be perceived as valuable for certain kinds of activity,

The Twitter event also opened up a boundary space for dialogue (around issues of identity, privacy, professional role, staff–student and institutional–community relationships, widening participation, etc.) between college leaders, teachers and students around new and emerging technology platforms (especially social media networks and students’ use of personal mobile technologies). This, according to one college leader was a ‘big change’ for them as an institution:

... the impact it’s [Twitter event] had on staff in terms of building their confidence to be able to say to the students, okay, well pull out your phone and use it ... That’s pushed us much further down the line in terms of staff getting students to use technology... It’s important that staff allow students to have that level of creativity and to use the tools and the techniques that are at their fingertips. ... (Staff)

An example of this increase in staff confidence emerged in early 2012 (following a researcher-led Twitter workshop for staff and prior to the Twitter event above) when one department chose to experiment with the use of Twitter as a support for teaching, learning and developing a web-based learning community for a ‘digital story circle’.

### *The departmental Twitter account*

Alongside our researcher-led work on Twitter which, in addition to the Twitter event above, included social media awareness workshops with staff and students (held separately), one college department began independently to use a departmental Twitter account. The account was open to contributions from all tutors and students within the department, across a range of subject areas. This aspect of the project is reported in more detail in a related paper (Stephansen and Coudry, in press). Here, we consider briefly how this staff-led social media intervention revealed processes of proto-agency leading towards narrative exchange, in particular the beginnings of a conceptualization of the college and its members and wider community as a *space* of narrative exchange (what we could call a digital story circle).

At departmental level, social media *use* was successful in directly engaging students, especially where championed by staff or student enthusiasts:

All the teachers ... have access to the [departmental Twitter] account and there's about four of us who tweet about four times a day. And, over weekends and holidays... we've spent hours discussing theories on, or arguments about, politics, with a few students on there. (Staff)

Here, staff and students voluntarily continued their conversation beyond the space-time of the curriculum, allowing for a new immediacy of action. Significant within this mixing of the formal (departmental Twitter account) with informal (extra-curricular, everyday context) were activities that, in themselves, often fell short of the full agency of telling a complete story, yet, through their regularity had the potential to contribute to the preconditions for more flexible learning structures (in time and space) and more focused debate (bridging formal and informal learning contexts). As such, these activities were more 'proto-agency' (in our term) than full narrative agency. Nonetheless they were significant:

Students use it [departmental Twitter account] to ask for resources... if they've seen a news report and want to know what certain things are, they'll ask questions or they'll spark their own debates and it has really worked. I think it's just because we're all on it and active. (Staff)

More effective were cases where highly motivated students championed social media use as a self-expressed expansion of curricular learning:

There's been about eight or nine students who really got into debating about one particular philosopher who they study in theology... and it's actually led to two students setting up parodies of philosophers as a Twitter group... and they tweet and argue with each other as those philosophers. (Staff)

Staff were quick to grasp the benefits of social media for transcending the college's tight timetable and building student commitment beyond it, even into their private time:

I had about five or six students after the lesson, for the next 48 hours, as part of their revision, carrying on tweeting – summing up theories in 140 characters – very clever ways of doing it. (Staff)

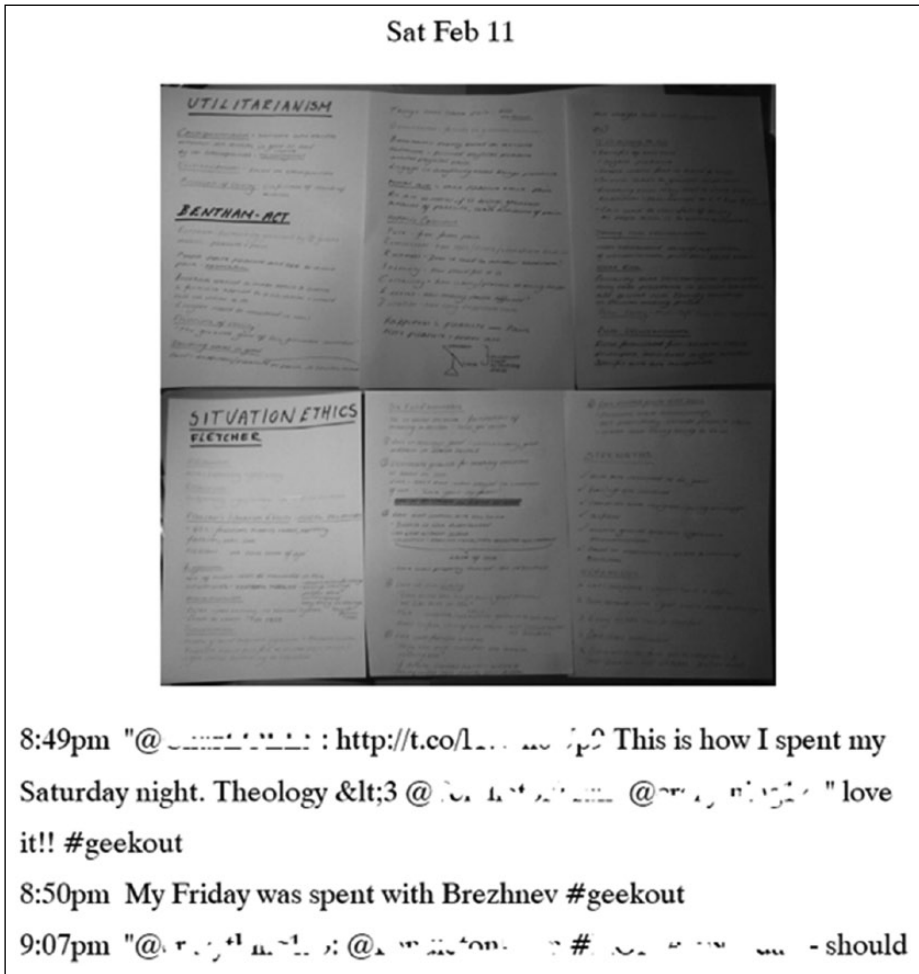


Figure 2. Student revision on departmental Twitter account (anonymized).

These interactions on Twitter (for example, see Figure 2) suggest that learning can benefit from social and mobile media use, although this possibility currently remains under-developed in the college setting as a whole. This example was, however, an exceptional case, when set against the general timetable that determines when, where and how staff and students can interact with each other and the wider world.

As engagement in the study progressed, use of social networks by other staff members increased, and staff confidence in entering into dialogue with students using social media and in encouraging use of digital tools and personal mobile technologies started to become normalized. Student contributions also began to be recognized at institutional level on the college's institution-wide social networks (Facebook, Twitter). In a further successful outcome from the project, as fieldwork progressed, there was growing recognition amongst college leaders and staff of the utility of mobile phones as a support for

learning and empowering student voice in formal educational contexts (compare Barkham and Moss, 2012; Carrick-Davies, 2012; Johnson et al., 2012). Each of these represent subtle changes to the practices and processes of the college in their negotiation of digital infrastructures and the broader social networks and opportunities for narrative exchange they provide: in our view, these subtle but important changes are the nuclei of an emerging digital story circle.

## Discussion

We found both hidden constraints and elements of proto-agency within one college's practices around digital platforms, especially social media. Both pass largely unrecognized because they are 'filtered' out from the college's institutional 'core' culture, regulatory frameworks and resource systems; indeed, this everyday filtering out is one reason why we needed to introduce the term 'proto-agency' to capture inchoate processes that have the potential to become preconditions for longer-term transformation. However, the digitally enabled narrative exchange envisaged by our project could only happen if a *digitally shared temporal and/or spatial boundary zone* (Lotman, 1990) to facilitate such exchanges was recognized. The college's 'core-oriented' filtering processes, following Lotman, involve both boundary-setting and boundary-blocking (Clark, 2010). Traditional boundary maintenance of this type reduces opportunities for dialogue around the periphery. The blurring of teacher–student and institutional–community relationships in the hybrid digital spaces afforded by social media is treated as difficulty, not opportunity.

Notwithstanding the need (Senge et al., 2012) for greater interaction between formal institutions and the communities within which they are embedded, the costs of negotiating that complex relationship are high and potentially disruptive to existing rules and norms. The latter, as Zerubavel (1981) points out, exist primarily to *order* the use of limited resources. Yet digital platforms that facilitate communicative exchange (Twitter, Facebook, YouTube) remain open to new contributors, temporally open-ended, and widely networked in stark contrast to the temporal rigidity and sequential regularity (Zerubavel, 1981) of a college's normal temporal organization. In the course of their adoption during our fieldwork, possibilities for transformation emerged. Where digital technologies *were* successfully adopted, this opened up avenues for broader connectivity, more open dialogue and more student-led forms of teaching and learning, for example the departmental Twitter account referred to earlier. Even if this did not yet achieve an explicitly civic dimension, signs that new forms of student engagement were beginning to appear were evident.

During this study, staff and institution did begin to recognize the role of boundary objects (Wenger, 1998, 2000), boundary-brokers (Wenger, 1998) and the potential for boundary-crossing (Clark, 2010; Tuomi-Gröhn and Engeström, 2003) in relation to teaching, learning and learner interaction with the wider community. However, practical recognition of such boundary spaces and processes (see generally Akkerman and Bakker, 2011; Lamont and Molnar, 2002) involves rethinking existing relationships and practices for new contexts – for example, open access to institutional infrastructures (college Wi-Fi) or personal technologies (mobile phones) – and requires a broader understanding of the digital 'reach' of the college as a social organization within a wider 'learning community'

(Senge et al., 2012). This, in turn, requires a new framework of *mutual* recognition and trust on multiple levels (leaders–teachers, teachers–students, students–students) and rethinking the contexts within which educational institutions operate in the digital era.

For sure, when set within the dynamics of a complex social organization such as PCSF, such emerging boundary-crossing activity may be unstable and requires constant negotiation (Clark, 2010; Hartley and McKee, 2000; Lave and Wenger, 1991). Such negotiation is enhanced when new (or, as Lotman would say, ‘peripheral’) values become acknowledged and ultimately accepted into the institutional core, as, in this study, with the gradual recognition of mobile phone technology as a platform for teaching, learning and narrative exchange supported by cost-free ‘open’ access to college Wi-Fi networks.

Through long-term engagement with the college as a learning community, our fieldwork explored what a ‘digital story circle’ might look like. We learned that a ‘digital story circle’ is not just about ‘digital’ content, but it concerns the social circles within which digital infrastructures are embedded and *sustained* as tools and processes that promote narrative exchange. A digital story circle enables participants to develop a deeper awareness of the complex contexts to which they are contributing. By bringing together the social and the digital, a digital story circle can increase the effectiveness of social networks and transcend, in part, the barriers inherent in traditional institutional contexts. These advantages should be recognized, even as we acknowledge the potential personal costs of an ‘always on’ culture and, specifically, the extension of teachers’ labour-time beyond the space–time of the formal curriculum (Terranova, 2004; Turkle, 2011).

Our account has been concerned with the preconditions for emerging social processes of narrative-making (that is, diverse bundles of activities, resources and processes that we have called ‘proto-agency’). They are easily missed in the context of highly regulated educational institutions. Nor should the countervailing pressures against agency within the wider landscape of digitization be underestimated (Beer, 2009; Eubands, 2011; Gillspie, 2010; Van Dijck, 2009; Van Dijck and Nieborg, 2009).

At the end of our fieldwork the potential contribution of continuous mobile media access to stable forms of knowledge exchange (to a stable *digital* story circle) began to be glimpsed:

It’s given us new ways of evaluating, of examining work – with students recording each other. They don’t have a separate camera now, the cameras on their phones are brilliant so they can record it and upload it straight away . . . and the students are telling the staff about things... they’ve said, oh this is available and this is available and they’ve taken it on further and it’s just a natural thing that they do on their phone now. (Staff, exit focus group discussion)

Two years on from our entry into the field (April 2013), this staff perspective is in stark contrast to those gathered early in our research (October 2011), which reflected staff fears of constraining factors in the use of new technologies, particularly those relating to safeguarding, time and student behaviour.

## Conclusion

Through our extended fieldwork, we learned that digital platforms and infrastructures, especially social media, offer heterogeneous preconditions for longer-term



narrative exchange (what we have called ‘proto-agency’) that potentially connects formal learning with wider society and social debate. However, levels of engagement in our fieldwork were *initially* constrained by time, technological awareness and conflicts with existing college-based systems of accountability. A shift had to be culturally negotiated from digital platforms focused on *delivery* to digital platforms and infrastructures facilitating *dialogue*, *exchange* and *collaborative participation* on scales far larger than the institution had, until now, negotiated. Implied was an even greater institutional shift from essentially a ‘closed’ community with a particular focus (teaching and learning) to a more ‘open’ community that connected with its wider networks on a basis of mutual recognition (as equal voices in a distributed narrative exchange).

Insofar as students engaged purposefully with social media such as Twitter, there were clear signs of proto-agency around digital platforms, pointing, for the longer term, to the development of wider civic participation among students and between students and staff. However, genuine participation will require students to be engaged at a more concrete and purposeful level than was exhibited in this study. In a formal environment such as the college, there is a potential disconnect from wider society: one source is the constraints derived from the college’s core function as a site of formal learning. While many staff expressed a desire to promote digitally based communication beyond current institutional contexts, students, facing a two- or three-year period in which to achieve their academic goals, appeared less open to merging their wider social connections with the formal contexts of college-based learning.

However, signs of new narrative exchange (tweeting, blogging, commenting image, audio and video sharing) between students and staff as well as a more open digital architecture (free college-wide Wi-Fi access, ability to use personal and mobile technologies and greater dialogic engagement with social media platforms) were, by the end of our fieldwork, beginning to emerge.

Following the work of theorists such as Senge, Wenger, Zerubavel and Lotman, we have identified boundary spaces as rich zones for proto-agency involving many staff and students in open-ended distributed interaction. The term digital story circle (as defined) offers a useful way of capturing the sustained ways in which digitally based communication practices between young people and their social and institutional contexts can develop from within, and often against the inherent constraints of, formal educational settings. A digital story circle involves processes that are necessarily uncertain and ambivalent, because they negotiate the boundary zone between old and emerging values and organizational routines (Akkerman and Bakker, 2011). The fragility of those processes should not be underestimated and is largely ignored by bolder rhetorics of digital empowerment and transformation. However, it is through following closely the fine-grained details of such ambivalent processes that the real potential of digitally enhanced narrative exchange for engaging young people in wider society can more realistically be grasped.

## Funding

This article is based on research carried out on the Storycircle project ([www.storycircle.co.uk](http://www.storycircle.co.uk)) funded under the RCUK Digital Economy programme as part of the FIRM consortium (<http://www.firm-innovation.net/>).

## References

- Akkerman S and Bakker A (2011) Boundary crossing and boundary objects. *Review of Educational Research* 81(2): 132–169.
- Barkham P and Moss S (2012) Should mobile phones be banned in schools? *The Guardian*, 27 November. Available at: <http://www.guardian.co.uk/education/2012/nov/27/should-mobiles-be-banned-schools?> (accessed 16 January 2013).
- Beer D (2009) Power through the algorithm? Participatory web cultures and the technological unconscious. *New Media & Society* 11(6): 985–1002.
- Benhabib S (1996) Toward a deliberative model of democratic legitimacy. In: Benhabib S (ed.) *Democracy and Difference*. Princeton, NJ: Princeton University Press, pp. 67–94.
- Bennett L (ed.) (2008) *Civic Life Online*. Cambridge, MA: MIT Press.
- Blessing SB, Blessing JS and Fleck BKB (2012) Using Twitter to reinforce classroom concepts. *Teaching of Psychology* 39(4): 268–271.
- Boyd D (2008) Why youth ♥ social network sites: the role of networked publics. In: Buckingham D (ed.) *Youth, Identity and Digital Media*. Cambridge, MA: MIT Press, pp. 119–142.
- Butler J (2005) *Giving an Account of Oneself*. New York: Fordham University Press.
- Carrick-Davies S (2012) Has blocking mobiles in schools had its day? *The Guardian*, 19 November. Available at: <http://www.guardian.co.uk/teacher-network/teacher-blog/2012/nov/19/restrictions-mobiles-social-media-schools-rethink?> (accessed 16 January 2013).
- Cavarero A (2000) *Relating Narratives*. London: Routledge.
- Clark W (2010) *Lotman's semiosphere: a systems thinking approach to students' meaning-making practices with digital texts*. PhD Thesis, Institute of Education, University of London. Available at: <http://eprints.ioe.ac.uk/6496/>
- Couldry N (2008) Mediatization or mediation? Alternative understandings of the emergent space of digital storytelling. *New Media & Society* 10(3): 373–392.
- Couldry N (2010) *Why Voice Matters*. London: SAGE.
- Gillespie T (2010) The politics of platforms. *New Media & Society* 12(3): 347–364.
- Glaser B and Strauss A (1967) *The Discovery of Grounded Theory*. Piscataway, NJ: Transaction Publishers.
- Green H and Hannon C (2007) *Their Space: Education for a Digital Generation*. London: Demos.
- Hagerstrand T (1975) Space, time and human conditions. In: Karlqvist A, Lundqvist L and Snickars F (eds) *Dynamic Allocation of Urban Space*. Farnborough: Saxon House, pp. 3–12.
- Hartley J and McKee A (2000) *The Indigenous Public Sphere*. Oxford: Oxford University Press.
- Hartley J and McWilliam K (eds) (2008) *Story Circle: Digital Storytelling around the World*. Chichester: Wiley-Blackwell.
- Hodkinson PM and Bloomer M (2000) Learning careers: continuity and change in young people's dispositions to learning. *British Educational Research Journal* 26(5): 583–597.
- Johnson KA (2011) The effect of Twitter posts on students' perceptions of instructor credibility. *Learning, Media and Technology* 36(1): 21–38.
- Johnson L, Adams S and Cummins M (2012) *NMC Horizon Report: 2012 K-12 Edition*. Austin, TX: The New Media Consortium. Available at: <http://www.nmc.org/pdf/2012-horizon-report-K12.pdf> (accessed 16 January 2013).
- Joosten T (2012) *Social Media for Educators*. London: John Wiley & Sons.
- Junco R, Heiberger G and Loken E (2011) The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning* 27(2): 119–132.
- Kassens-Noor E (2012) Twitter as a teaching practice to enhance active and informal learning in higher education: the case of sustainable tweets. *Active Learning in Higher Education* 13(1): 9–21.
- Lambert J (2006) *Digital Storytelling*. 2nd ed. Berkeley, CA: Digital Diner Press.

- Lamont M and Molnar V (2002) The study of boundaries in the social sciences. *Annual Review of Sociology* 28: 167–195.
- Lave J and Wenger E (1991) *Situated Learning*. Cambridge: Cambridge University Press.
- Lefebvre H (1990) *The Production of Space*. Oxford: Blackwell.
- Lotman Y (1990) *Universe of the Mind*. London: I.B.Tauris.
- Lotman Y (2005) On the semiosphere. *Sign Systems Studies* 33(1): 205–229.
- Lotman Y (2009) *Culture and Explosion*. Berlin: De Gruyter.
- Lundby K (ed) (2008) *Digital Storytelling, Mediatized Stories*. New York: Peter Lang.
- McNiff J and Whitehead J (2009) *Doing and Writing Action Research*. London: SAGE.
- Noffke SE and Somekh B (eds) (2009) *Handbook of Educational Action Research*. London: SAGE.
- Ricoeur P (1992) *Oneself as Another*. Chicago: Chicago University Press.
- Senge P (1990) *The Fifth Discipline: The Art and Practice of Learning*. London: Random House.
- Senge P, Cambron-McCabe N, Luca T, et al. (2012) *Schools That Learn (updated and revised edition)*. 2nd ed. London: Nicholas Brealey Publishing.
- Stephansen H and Couldry N (in press) Understanding micro-processes of community building and mutual learning on Twitter: a ‘small data’ approach”. *Information, Communication and Society*.
- Stoten DW (2011) Positioning or positioned: teachers’ perspectives on the leadership of sixth form colleges. *Research in Post-Compulsory Education* 16(1): 59–84.
- Stoten DW (2012) Exploring quality assurance in sixth form colleges. *Quality Assurance in Education* 20(3): 259–273.
- Tække J and Paulsen M (2012) *The challenge of social media – between prohibition and indifference in the classroom*. In: 13th Annual Convention of the Media Ecology Association: The crossroads of the word, New York, 7–10 June 2012. New York: Manhattan College Riverdale.
- Terranova T (2004) *Network Culture*. London: Pluto.
- Thumim N (2009) “Everyone has a story to tell”: mediation and self-representation in two UK institutions. *International Journal of Cultural Studies* 12(6): 617–638.
- Tuomi-Gröhn T and Engeström Y (2003) *Between School and Work*. Oxford: Elsevier Science Ltd.
- Turkle T (2011) *Alone Together*. New York: Basic Books.
- Van Dijck J (2009) Users like you? Theorising agency in user-generated content. *Media Culture & Society* 31(1): 41–58.
- Van Dijck J and Nieborg D (2009) Wikinomics and its discontents: a critical analysis of Web 2.0 business manifestoes. *New Media & Society* 11(5): 855–874.
- Vazquez Cano E (2012) Mobile learning with Twitter to improve linguistic competence at secondary schools. *New Educational Review* 29(3): 134–147.
- Walker D and Myrick F (2006) Grounded theory: an exploration of process and procedure. *Qualitative Health Research* 16: 547–559.
- Wenger E (1998) *Communities of Practice*. Cambridge: Cambridge University Press.
- Wenger E (2000) Communities of practice and social learning systems. *Organization* 7: 225–246.
- Willis P (1990) *Common Culture*. Milton Keynes: Open University Press.
- Zerubavel E (1981) *Hidden Rhythms*. Berkeley, CA: University of California Press.

## Author biographies

Wilma Clark is a Researcher in digital technologies whose interests lie in the technosocial aspects and systems design of digital communication networks. She received a PhD in Cultural Semiotics

from the London Knowledge Lab at the Institute of Education, University of London, for a thesis on semiotician Yuri Lotman and the negotiation of boundary processes in students' meaning-making practices with digital texts. Wilma was a member of Storycircle, a multi-disciplinary research project based in the Department of Media and Communications at Goldsmiths.

**Nick Couldry** is Professor of Media, Communications and Social Theory at the London School of Economics and was previously Professor at Goldsmiths, University of London, where he led the Storycircle project. He is the author or editor of 11 books including *Ethics of Media* (Palgrave MacMillan, 2013), *Media, Society, World* (Polity 2012) and *Why Voice Matters* (Sage 2010).

**Richard MacDonald** is a Lecturer in Media and Communications at Goldsmiths, University of London. He was the lead research associate on the Storycircle project between 2010 and 2013.

**Hilde C Stephansen** is a Research Associate in the Centre for Citizenship, Identities and Governance at The Open University. Previously, she worked at Goldsmiths, University of London, on 'Storycircle', an action research project focused on narrative and voice. Her research focuses on how communication practices of various kinds are implicated in social processes of knowledge production.