Rethinking Literacies, Learning, and Research Methodology around Archeology in a Virtual World

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Introduction

One Friday evening in March 2008, I was hopping up and down in excitement, having discovered a wooden chest and skull within a submerged ship-wreck. Working with other archeologists, we safely removed the finds and conveyed them to an incident room on land. In actuality, I was sitting in front of a computer screen in my own house, communicating with teenagers I had never met face-to-face. Learning together in a virtual world, Schome Park, we were interacting in a simulated 3D environment through personalized avatars. We could move around our island home and sea, collaborating to work with artifacts and participate in events. However removed from physical sea, skulls, and the paraphernalia of archeology I may have been, my excitement was real.

Schome Park

The Schome Park Programme (SPP) was set up by a voluntary umbrella community of educationalists, young people, parents, teachers, and anyone who wanted to join online discussions about the future of education in the 21st century. This community (in the loosest sense) was led by Peter Twining of the United Kingdom's Open University. Schome derived from an early characterization of "not school, not home" that, while not being a simple rejection of both those domains, suggested that the firm boundaries between them needed to be shaken. The shared aim was to investigate and attempt to enact new models of education, centered upon a cradle to grave ethos, providing participants with increased range, responsibility, and control over their learning and greater opportunities for collaboration. Technology is seen not only as a tool to support and extend existing practices but as

having the potential to transform ways of representing the world and of supporting learning.

In 2006 SPP decided to explore the potential of virtual worlds, to consider their capacity to act as spaces in which visions of future practices and pedagogies can be built and experienced, making it "possible to construct, investigate and interrogate hypothetical worlds" (Squire 2006, p. 19). With funding from a number of organizations at various stages of the project and a great deal of further voluntary input (for more details, see Gillen et al. 2009; Sheehy, Ferguson, and Clough 2010) the community decided to use *Teen Second Life*, the youth version of the virtual world *Second Life*. (As of early 2014, *Second Life* continues, but *Teen Second Life* has been disbanded.) This virtual world was a technologically advanced 3D simulation without intrinsic goals; that is, it was not a rule-governed game such as *World of Warcraft*. Having downloaded the client application and gained parental consent to join the project, participants interacted remotely from their homes, schools, workplaces, or after-school clubs. Most were in the United Kingdom, with some in the United States.

As the first "closed"—that is, protected—*Teen Second Life* project in Europe, we "imported" a few resources from *Second Life*, but once the project had opened participants were responsible for designing artifacts and activities, establishing ground rules, and constructing community practices and discourses. (An overview of the enormous diversity of activities and participants on the island/s over the 13 months is beyond the scope of this article. For more information, see Twining 2009.) Here I am concerned with two meetings of a small group, about one hour in duration, one week apart. The Time Explorers, people interested in learning about archeology and ancient history, were organized by two teenagers.

Rethinking Methodology for Studying New Literacies and Learning

I term my methodology a "virtual literacy ethnography," infused by ethnographies of archeological practice (Edgeworth 2006). With Boellstorff (2008) I find ethnography an appropriate approach to the study of activities in *Second Life*, notwithstanding the mediation of the interactions via the computer screen and the absence of connections with project personnel in their other spheres of life. The challenge here is to "recenter ethnographic methodology in a way that is more consonant with the subject matter of material and technoculture research" (Vannini 2009, p. 6). Thus the concern is not so much with the beliefs and attitudes of people who are presenting themselves in the physical world but rather what is revealed through multimodal, virtual communications. I emphasize literacy, recognizing that, in line with the "consistently negative representation of young people's new media language" (Thurlow 2007, p. 214), the diversity of literacy practices in a virtual world is often overlooked. In part this may be owing to the emphasis of the visual in discourses about virtual worlds; *Second Life* in particular is an environment that demands constant deployment of literacy skills (Gillen 2009). From an ethnographic approach to studying literacy, drawing on my own experiences as a learner in the environment and as a staff member, I examined interactions across media, comprehending the use of tools in the course of purposeful activities imbued with cultural meanings. Scollon's (2001) notion of sites of engagement is useful here: he proposes that at the particular point in time when somebody deploys a new communicative tool they are negotiating their way through their understanding of the social practices they possess and are acting as they are enabled by the mediational means that are perceptibly open to them at that point. For example, as a community we gradually learned that the most effective way of advertising events was to list them all on an "events page" in the wiki with linked "sign-up" pages. During the early phases of the project considerable effort was wasted in advertising events on posters in-world, where they were often not encountered by people through their avatars until too late. So we had to develop practices. This was, as ever, not simply a matter of developing individualized operational skills but of collaborating to learn what worked best for what purpose, developing appropriate genres and registers (Barton, Hamilton, and Ivanič 2000).

I can make a simple comparison with the practices of archeology. I have to search among huge record sets to find salient passages of chatlogs; read a considerable number of wiki pages to find relevant material; identify and study contemporaneous field images taken by myself and others; seek out secondary sources; and, perhaps most difficult of all, decide how to demarcate boundaries around what kinds of evidence and what depth of context I am going to investigate

before finalizing my analyses and beginning to write. In this paper, for example, I decided to neglect any investigation of the project forum and video or machinima productions.

Turning an ethnographic lens on the practices of archeologists "encompasses all aspects of the production of archaeological knowledge" (Edgeworth 2006, p. xii). This approach, emerging from within archeology itself, has been a useful influence because it subjects to the same open gaze all aspects of archeology perceived as cultural practice, from the use of a trowel to the construction of images. Van Reybrouck and Jacobs (2006) demonstrate how participation in archeological practices in professional fieldwork sites socializes novices into archeologists. This is consonant with a view of learning as situated participation in communities of practice (Lave and Wenger 1991).

Dataset

For this paper I compiled a dataset of relevant records:

- my chatlogs of the two evening meetings
- two "sign-up" pages on the wiki
- a poster advertising four "shipwreck archaeology" sessions
- 14 snapshots taken by me on March 7
- 9 snapshots taken by me on March 14
- brief field notes written on March 7
- mentions of the archeology meetings on the SPP "bliki" (a collaboratively written wiki that provides records of events and functions rather as a blog)
- a presentation and accompanying script written approximately seven months later by four students and another staff member, entering a competition as the Time Explorers group reflecting on the shipwreck archeology experiences.

Findings and Discussion

I began by collating all sources of evidence of instances where the participants oriented to practices of archeology in activities, including verbal interactions. The wiki sign-up page for the March 7 session, an extract of which appears as figure 1 below, listed five themes:

- archeological processes
- data recording
- presentation

Date: Friday 7th March
Time: 7:30 to approx. 8:00
Venue: Ruins
Max: 10
Organiser: Marsbar9 Schomer

Overview:
In this session we will begin our work on the shipwreck, a mini project that brings everything we've done so far together:

1. Archaeological processes
2. Data Recording
3. Preservation
4. Ethics
5. Underwater Archaeology

Anyone can join up to the event, we are looking for more participants. Why not join us as we begin archaeology under the waves..?

Some links to consider before hand:

- Underwater archaeology
- Finding out about Archaeology beneath the waves
- A list of registered wrecks under archaeological protection
- Nautical Archaeology Society

Fig. 1 Extract from wiki sign-up page.

- ethics
- underwater archeology

I then reviewed evidence according to these themes and examined how, working in collaboration and perhaps also as demonstrated by individuals, our agenda for learning about these was furthered. Within the compass of this brief paper I can offer only a flavor of my data and interpretation. (I have written at greater length about different levels of creativity in the Schome Time Explorers' studies of archeology; see Gillen 2012.)

Figure 1, an extract from a wiki sign-up page headed "Archaeology session 6, Shipwreck 1," sets the scene for the meeting recorded in my chatlog and snapshots, one of which is included as figure 2.

Figure 2 shows Rowan, my avatar, in the foreground with two others in the background: topper Schomer, a student; and marsbar9 Schomer, a student and organizer of the session. We have traveled to a shipwreck and found inside some crates and coins. Marsbar9 was the organizer of the event, and the three of us shared the implicit knowledge that he was likely the person who had crafted the crates and whatever was inside them. The shipwreck as a whole had been collaboratively built some time previously. The following is an extract from the chatlog that centrally deals with our discovery. Rowan ("You") and topper are discussing the evidence with marsbar9.

Fig. 2 Snapshot from March 7, 2008.

1. [2008/03/07 11:38] topper Schomer: none f the evidence adds up
2. [2008/03/07 11:38] Gaea SParker is Online
3. [2008/03/07 11:38] marsbar9 Schomer: Why's that?
4. [2008/03/07 11:38] topper Schomer: some parts have rotted some not
5. [2008/03/07 11:38] marsbar9 Schomer: It happens
6. [2008/03/07 11:38] You: is it wet here I would have thought so
7. [2008/03/07 11:38] topper Schomer: well the human body has decomposed
8. [2008/03/07 11:38] You: oh really where?
9. [2008/03/07 11:39] topper Schomer: however the crates havent
10. [2008/03/07 11:39] Rowan SParker jumps up and down in excitement
11. [2008/03/07 11:39] marsbar9 Schomer: There's a skull up on the 2nd deck
12. [2008/03/07 11:39] You: sorry Topper and Mars my connection is odd
13. [2008/03/07 11:39] You: I can't move smootlhly
14. [2008/03/07 11:39] topper Schomer: it has a layout of a older ship than th cre#ates could have you belive
15. [2008/03/07 11:39] marsbar9 Schomer: No worries—could be the lag, it's been incredibly bad lately
16. [2008/03/07 11:40] topper Schomer: skulls here are primate
17. [2008/03/07 11:40] Steam Schomer: hi

18. [2008/03/07 11:40] topper Schomer: its to big to be human yet resamele a rimate skull

Note that much of this transcription appears automatically. Each turn is date- and time-stamped and arranged so that turns appear consecutively, although their production most likely overlaps. Each avatar's name appears in the transcript, but because this is my log, "You" is used instead of my avatar name, Rowan.

Several observations can be made about the exchange:

- The time stamps and amount of text indicate that typing is taking place very fast, usually a sign of high engagement and affect.
- Line 2 is automatically generated by the software rather than by any avatar and is almost certainly ignored.
- Line 17 is a greeting by a newcomer (who will shortly be greeted in turn).
- Lines 12, 13, and 15 concern difficulties Rowan is having in moving; she feels the need to apologize for this but the problems are (politely) ascribed to technical issues rather than any other possible reason, such as incompetence.
- Line 10 is understood by all present to have been crafted by Rowan, to convey enthusiasm.
- At lines 1, 4, 7, 14, 16, and 18 Topper is presenting his interpretations of evidence. Since those present (other than perhaps Steam) likely thought that Mars participated in the creation of the shipwreck, artifacts, skull, and so on, his apparent identification of inconsistencies is probably meant to have a tongue-in-cheek quality.

Later in this meeting Mars suggested an attempt to lift some of the artifacts and transport them to an incident room. Meeting the challenges this presented occupied a large proportion of the time in the following week's meeting. Care of the skull, eventually put in its own display cabinet, was a particular concern. Through this extended role-play, all five aspects of the themes for the session were practiced and recorded in diverse multimodal forms.

Without the experience of participating in the project, assessing the evidence and reading the chat-logs would be far more difficult. At times the flow of "automatically" produced utterances—that is, those programmed into *Second Life* or scripted into bots—quantitatively overwhelmed those spontaneously keyed in by avatars. This is just one example of what

one needs to learn to identify, to sort, in order to know what requires paying attention to and what should be regarded as peripheral. Referring to a complex semiotic tool used by archeologists, Goodwin observes, "human beings have the ability to secrete cognitive organization into the world they inhabit in ways that create new forms of both knowledge and action, while transforming the environment within which relevant activities are accomplished" (Goodwin 2006, p. 51). Practicing archeology in Schome Park is a vivid instantiation of this. Creating the "finds" and designing the learning activities required the deployment of relevant knowledge, and interacting over their "discovery" required understanding of this particular form of embodiment and culturally informed perceptions, simultaneously in diverse modes. (Acting as a researcher at the same time as engaging in such an intense learning experience was a further experiential load.)

Conclusions

As Bauman (2010) asserts, communicative practices are historical and experiential emergents. Contexts for "new literacies" such as virtual worlds can offer opportunities for creating innovative learning experiences. But this is not to suppose technological determinism. This specific community of practice—including its considerable history, tradition of collaboration, and support for learning—shaped the site of engagement that was shipwreck archeology. The Time Explorers creatively rethought practices drawn from a shared knowledge of archeology gained from media in which we were positioned as consumers—as watchers of TV, readers, and so on. In their public presentation several months later, the Time Explorers wrote, "Schome Park has given its students a real chance to study History and Archaeology in new ways which are more engaging and interactive than those used in the classroom." In SPP we practiced a new kind of archeology and shaped new identities as virtual archeologists.

Finally, I can say with Goodwin that "I have found it useful to use ethnographic analysis of archaeological practice to investigate how human beings build the actions that constitute the social and cognitive worlds they inhabit together" (Goodwin 2006, p. 52). "Build the actions" is an unusual collocation, but when everybody is interacting in ways they

experience as "real" and the scene of those interactions is the sometimes captivating setting of a virtual world, it does seem apposite.

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