

Life in Virtual Worlds

Plural Existence, Multimodalities, and Other Online Research Challenges

T. L. TAYLOR

Brandeis University

Virtual environments present researchers with a range of methodological considerations, both new and old. With the advent of embodied online worlds, experiences with distributed presence, anonymity and multiple modes of engagement increasingly have become the norm. Avatars and their textual counterparts lead us to critically encounter how research can be most meaningfully handled given a terrain in which users are actually embodying themselves digitally, and often in multivalent ways. This article discusses some of the theoretical issues at stake in this form of research, as well as providing several grounded practices to help methodologically negotiate virtual worlds.

I ask, "Is there a body here?"

He replies, "Of course, I see them now."

I inquire, "But are they only representations?"

He answers, "True, but they are bodies . . . connected through keys."

As I talk to users of virtual worlds, and continue to inhabit them myself, such conversations repeat. When we speak about the nature of our online experience, one overarching question emerges: What will we look like and who will we be in a world where technology so deeply intersects our lives? Over the past several years, I have gathered material on emerging computer communications technology and its relationship to bodies and identities. In particular, I have focused on embodiment—looking at the kinds of bodies created and adopted in virtual worlds and the ways digital bodies are intricately tied to life online. On setting out to undertake such a research project, a review of how others have done similar work is always useful. Thoughtful handling of theoretical issues, as well as knowing and making use of methodological tricks are central to the completion of any successful project. However, for many of us engaged in research on virtual environments, models are not always so obvious. What is involved methodologically with inhabiting a virtual space and creating a digital identity and body? What is the nature of the "material" we are working with online? How should one integrate new technologies into research, and are there limits to online methods?

Depending on a project's larger goals and questions, the approach taken will vary. For example, Turkle (1995), in the work for her book *Life on the Screen: Identity in the Age of the Internet*, made a conscious decision to rely solely on offline face-to-face interviews. She writes,

Virtual reality poses a new methodological challenge for the researcher: what to make of online interviews and, indeed, whether and how to use them. I have chosen not to report on my own findings unless I have met the Internet user in person rather than simply in persona. I made this decision because of the focus of my research: how experiences in virtual reality affect real life, and, more generally, on the relationship between the virtual and the real. In this way, my work on cyberspace to this point is conservative because of its distinctly real-life bias. Researchers with different interests and theoretical perspectives will surely think about this decision differently. (p. 324)

This passage is crucial in that it draws out the ways online methodological strategies are grounded in not just the questions one is exploring but the theoretical perspectives being used. Because I am keenly interested in not only the relationship between the corporeal and online body but in the nature of digital embodiment *itself*, I felt it was important to use the electronic medium as a valid research site. Taking seriously the notion that online life might carry a legitimate presence in and of itself that needs to be explored, led me to actively work within the medium. In addition to approaching virtual environments this way, I made a conscious decision to directly orient to the bodies and selves I found there. Although a researcher may choose to use online life and phenomena as simply a reflection or extension of offline experience, I was interested in exploring the space as, at least partially, a thing in itself. What, then, did it mean to be engaged with the digital in a way that pays significant attention to its particular forms and life?

My research into embodiment in online multiuser space forms the entry point for my thinking about these issues. Although a fair amount has been written thus far regarding identity and community online (see, e.g., Dibbell, 1998; Doheny-Farina, 1996; Rheingold, 1993; Stone, 1995; Turkle, 1995), I am particularly interested in how the body—in both its digital and corporeal forms—is tightly woven into these facets of our lives. Our bodies are central to our lives as social beings. They shape and facilitate our identity as well as our interactions and experience with the world and others. The study of the body has been undertaken along a variety of perspectives, ranging from the philosophical to the anthropological (see, e.g., Bermudez, 1995; Grosz, 1994; Mauss, 1950; O'Donovan-Anderson, 1996; Radley, 1991; Scott & Morgan, 1993; Shilling, 1993; Springer, 1996; Synnott, 1993; Turner, 1996). Turner (1996), in his book, *The Body and Society*, points out that emerging technologies will open up yet another path of exploration. He writes, "The information superhighway and virtual reality will bring about new ways of conceptualizing the body in relation to time and space, offering both new opportunities for democratization and authoritarian control of



Figure 1: A Sample of Bodies in Three Different Worlds

SOURCE: © 1999, Avaterra.com, Inc. and 1999 ActiveWorlds.com, Inc. All rights reserved. Avaterra images, text, or other material may be copied distributed, or otherwise used only with the express written permission of Avaterra.com, Inc.

the human self as an embodied agent" (p. 6). Seeking to understand the nature and experience of the body, I undertook a project that explored the range of ways bodies are "made real" online.

Digital bodies can be found most readily in virtual worlds. Using both graphical and text-based systems, users log into remote computers and engage in real-time communication and interaction with one another and the virtual space. Chatting, building, playing games, and a wide variety of other activities constitute life in these virtual environments. Users create digital presences, either via textual descriptions or graphical representations (see Figure 1), and all of these actions are thus done not by just an amorphous self in the space, but by a body imbued with certain characteristics and properties. The bodies users create and use in virtual spaces become inextricably linked to their performance of self and engagement in the community. As one participant described it, the activity of embodying via an avatar gave her "material to work with." Avatars and textual bodies facilitate interaction, shape and solidify identity, as well as more generally mediate users engagement with the world.

In these spaces, the "look" of any particular user can be altered fairly easily, and names are generally changeable. This means that a solid consistency of identity and body is not a given in any environment. In addition, the off-line identity of any particular user is generally unknown unless specifically disclosed. Confronted with the exciting (though at times daunting) task of looking at how the online body (typically conceived of as a decidedly nondigital thing) is produced, constructed, and experienced, I have found that if you accept the virtual world as a thing to be seriously reckoned with (vs. reducing it back to off-line referents), a variety of methodological issues are likely to emerge. This

theoretical orientation, in combination with the particularities of online life, raises specific issues and challenges. For example, the baseline anonymity of these spaces (and here I am specifically speaking of the anonymity of the offline self), in addition to its real embodied nature, can inform the practice of plurality in serious ways. Doing work in these worlds thus presents a range of issues, both conceptual and practical. In the following, I will weave together two threads: the ways the fundamental orientation of virtual worlds leads to a particular set of theoretical issues, and the related idea that online life also pushes the researcher to make use of specific data-collection strategies.

PLURAL EXISTENCE

Online virtual spaces open up the construction of self and body in dramatic ways. Users do not simply have one body and one identity while online, but at times inhabit a space in which they perform several, and often in complicated configurations. In fact, the moment you enter a virtual environment you immediately have *at least* two bodies: a corporeal one and a digital one. Although some users maintain a consistency within a single avatar or character, many do not (by either having multiple bodies within a single space or through their use of multiple worlds). It is also worth noting that although some spaces provide information that lets you know, for example, that the characters Iona and Taylor have the same person at the other end of the keyboard, it is not always the case. Thus, it is quite possible to run into one of your informants in a form (literally a body) you do not recognize.

Although every researcher hopes for respondents to be forthcoming and truthful about their selves (and here the multiplicity is intentionally noted), there are larger issues at stake regarding whether a respondent might have a bit of fun by pretending they have never met you before. Does it matter, for example, that you do not know all the identities/bodies a given participant has? Is an underlying continuity of self, or the attribution of such, necessary in getting at the "truth" of a given participant's experience? I have had occasion to meet avatars who, after speaking with me for a bit, revealed that I actually knew them in another avatar body/identity.¹ On several occasions, a person hinted at knowing me in some other form, but preferred to keep that interaction separate. At times I would find myself receiving private messages while in a crowded room, such as the following:

ESP from Cindy: Hi! This is Margaret!
 ESP from Cindy: We talked a couple days ago.
 ESP from Cindy: This is my alt. Hehe. It's secret though!²

In this instance I saw an avatar named Cindy on my screen who I did not recognize and had never met before. Her disclosure that Cindy is Margaret (and

it becomes even more layered by knowing that Margaret is a woman named Sue (offline) opens up another avenue of exploration for the research. Requiring a score card of sorts, the norm was to have a participant that had at least two (generally more) online existences. Add to the mix the multiple worlds people will often use, and the endeavor becomes quite a challenge.³ Keeping track of who was whom (or, better put, who is connected in some way to whom) was an important aspect of the research. My file for an individual would list their offline information as well as all their various avatars or textual bodies (often images or descriptions of them I could refer to were helpful as well). Because many people slip into and out of their various selves fairly easily (either linguistically or in actual form), a certain facility with remembering all the variations becomes key for real-time interaction.

In addition to their online bodies and selves, users continue, of course, to occupy offline ones. Given this, exploration into the ways offline and online bodies and selves coexist and yet operate independently can become multilayered and requires a precision of analysis and language. Quite often, interviewing a person involves interviewing several, all the while taking into account and documenting various, but often linked, biographies, experiences, and social contexts. Users may speak as their avatar, their offline self or as both. The following, for example, is a brief excerpt from an interview I conducted in a graphical world. Both the interviewee and I were logged into a system, sharing a graphical space our avatars inhabited, yet also sitting at our respective computers.

- Michael: He [speaking about his avatar] does things the Real Michael cannot do.
 Michael: Michael is more directly linked to my subconscious (for lack of a better term).
 Michael: Michael says things in here that he would not say in rw [real world].
 Michael: He tends to be sassier.
 Michael: Michael is a kind of social pariah in rw.
 Michael: The small community he lives in has in many respects rejected him.

It is worth noting that Michael is not the name this person uses offline (though he did say that he might change his name to it in "rw"), yet he shifts to referring to his offline self as such. The statements are also a mix of descriptions about his online and offline self. The linguistic moves he makes, in addition to telling two mixed stories nearly simultaneously, is just a brief example of how multiplicity (not to mention the trickiness of language around these matters) can play out in an interview. It is important to note as well that we are not simply talking in a chat room but standing together in a virtual room, each with avatar bodies, each in some way enacting our identity and facilitating our social engagement through them. We look a certain way. We gesture. We negotiate bounds of proximity. The "Michael" he speaks of is in fact made real via embodiment in that space. The plurality of self thus becomes interwoven in that construct.⁴

One lively and thoughtful user addressed this issue in one of the community newspapers. They wrote,

But I have experimented quite a bit, and the one thing that I've found most interesting, is that people treat you based on how you present yourself, and, if you pay attention, you'll notice that *you* change depending on how you present yourself. Or at least I do. When I was Cosmocat [a previous avatar], he seemed to be accepted for his computer skills due to the fact that he painted heads [heads are actual objects you wear and customize in this particular world], when in fact my ratava [the term used in this world for the off-line self—avatar spelled backwards] is totally clueless as far as computer programming is concerned, but somehow as Cosmocat I seemed to be able to fake it well enough that everyone assumed I was either a programmer or a hacker . . . But since Cosmocat was male and males are smarter when it comes to computers, (everyone knows that, right? <G>) [this is a common convention to signify "grin"], I just kind of believed I was a techno cat. If Cosmocat had been female, I'll bet not only would he not be accepted for his skills, but I wouldn't have felt comfortable pretending I knew stuff I didn't. As Cosmocat, it didn't matter, I just did it anyway, because Cosmocat had guts that my ratava didn't. (NONOBADKITTY!, 1997)

This multiplicity, and the traces of "avatar as thing in itself," emerged in a number of my interviews. In Michael's statement, he mentions that the avatar does things the "Real Michael" cannot do, implying that the avatar has some unique existence. Another participant put it more directly when they said, "Avatars have a mind of their own, and they grow in unexpected ways. . . . You are kidding yourself if you think you will be able to control or even predict what will happen to your avatar." Not subsuming out of hand all selves back to the offline form can also lead to interesting discoveries. For example, quite early on in my research I was admonished by a participant for not at the outset paying equal due in my questioning to their online selves. Despite being extremely sympathetic to the complicated ways online and offline selves and bodies are intermeshed, I had made a very early misstep by not acknowledging in a serious way via my opening questions the kind of plurality of experience most users have in these spaces.⁵ By implicitly privileging offline life through my initial focus on biographical data about the user ("tell me about yourself," and here I even went so far as to implicitly make "yourself" equal "your offline self"), I had set up the terms of analysis right out of the gate. Once I shifted this approach and gave equal initial weighting in my inquiry to the various forms of self a person took—both offline and on—I found the complexity of the nature of online life emerge in a much richer way.

ANONYMITY AND DISCLOSURE

Alongside this plurality there is a growing underlying assumption online, and in synchronous communication spaces in particular, that the norm or the

baseline of interaction is such that one's off-line identity is not necessarily known to others. Although this has certainly not been the case on the net historically, an ethos of anonymity has developed over the years and researchers must work with it. Virtual worlds (and chat rooms as well) tend to operate along these lines and pose particular challenges for a researcher.⁶ In these spaces, tracking down any user outside of a world may present a challenge. The expectation of off-line anonymity can also lead to an increased user demand for such, even in a confidential research setting.⁷ Although many participants will readily provide contact information and off-line data about themselves, some do not. Sometimes those that provide it do so only in small doses. The ethos of these spaces often requires that the researcher adapt to a lesser initial level of disclosure and work from there.

Rather than seeing these attempts by users at maintaining some initial anonymity, control, or separation between worlds as a hindrance, working with these early stages can be useful to a project. For example, having a discussion with my participants about anonymity and its relationship to online life in general has been very productive. Questions that do not require offline referents can also be explored in these instances, such as how much online life with its bodies and identities exist as things in themselves. In many ways, having to reckon with a user solely online brought me to explore my own theoretical assumptions and refine my analysis. Regrounding all questions of anonymity into an authenticity framework (i.e., it is only by knowing your participants offline that you know the "truth" of them online) can hamper a deeper reflection on the legitimacy of the separation of worlds and the benefits and limits of such.

Depending on the type of question one is exploring, offline anonymity may pose more or less of a problem. Given I was in part interested in the interrelation between the digital and the corporeal, I actively sought to include interviews that took some offline form, generally in face-to-face meetings.⁸ Quite often the researcher has to reckon with the baseline assumption for anonymity and work up to knowing a participant's offline information. Having strategies to anchor the legitimacy and confidentiality of a project, as well as to reveal more about the researcher's offline self, is useful in shifting the terms of engagement. In this way, electronic media can be of real benefit. I found having a Web page to refer people to that outlined the project, presented the consent form, and gave some information about myself extremely useful. In addition, access to communities that have a high degree of insider/outsider distinctions or high anonymity requirements can be very successfully achieved via the use of a snowball method. I was quite lucky, for example, to very early on get participation by several well-known members of the communities. They, in turn, referred me to others and cleared a path for my project. Although virtual worlds research may raise a hurdle of anonymity, through working with it as a legitimate concept and using traditional methods in handling close communities, this factor in online research can be managed quite well.

VERIFIABILITY AND RELIABILITY (THEIR LIMITS AND NECESSITY)

The phenomenon of plurality and anonymity lead us directly into questions about verifiability and reliability. At what level is it necessary or desirable to actually prove in some fashion the offline identity/body of a given participant? What does reliability mean when drawing on subjective user experience for accountings of offline life versus some verifications via face-to-face encounters? What is the nature of reliability in the midst of plural existence? Although answering this depends to some degree on the initial research question, the usefulness and limits of not just anonymity but the acceptance of online life as a thing in itself are raised in this type of work.

A researcher may legitimately grapple with the question, "But are my online interviewees telling me the truth about even the most basic facts of their offline life?" This can be a jolting thought while in the midst of gathering data, and may seem more dramatic if your primary or sole experience of a participant is in a virtual world. However, I would argue that there are several points to be made here, most notably that this issue is not specific to online research. There are many things that in even an offline interview we must take at the interviewee's word. Depending on the amount of cross-checking information we have, there is quite often no way to confirm the validity of an interviewee's statements about their experience, biography, or life. This is particularly true when we are studying subjective experience. Can we ever verify the subjective experience of an interviewee? If not, then the argument that the offline interview poses a clearer path to a more true set of responses is not entirely convincing. When handling the subjective side of user experience, validity questions may be equally unverifiable offline.

In addition, the idea that verifiability can be achieved offline is often embedded in a larger epistemological claim I am less willing to accept. This position seems to suggest that via the offline interview, one can confront the true, authentic other to get past persona in some way. I am not convinced that this is the case, nor that it should be. That there is something that lies "beyond persona" strikes me as an interesting notion worth exploring in more depth. If, in fact, we are always already creating and recreating selves, then the assumption that somehow offline interview space is located in a way that allows for more authentic conversation is a bit problematic. It also tends to have shades of wishing to create a situation that allows for objective truth about subjectivity to emerge, something I also find theoretically impossible. Here, it is important to be clear, and I do not mean to suggest that offline interviews do not provide any different information than what one might get via an online interview. Both mediums will elicit varying responses (as both will conceal). However, I am arguing that to privilege one over the other on the basis of an authenticity argument (person vs. persona) is problematic.

Although questions of plurality, anonymity, and reliability often arise in some form with non-Internet-based work, I would suggest that the experience of online life and virtual worlds in particular nonetheless have a profound way of reshaping the terms that research is actually engaged in with many participants. Recognizing and using these issues to a project's benefit is an important part of such a study. These theoretical concerns are often closely linked to the technology itself. What does worlds' software allow or facilitate in terms of body/identity construction and how do these aspects affect both the social and research situation? How does software enhance or constrain the interview setting? In what ways do virtual worlds help or hinder researchers in pursuing ethnographic work?

MULTIMODAL GATHERING TECHNIQUES

Because of the nature of the Internet, many participants use several different modes to communicate and be online. Web pages, in-world participation, instant messaging systems, bulletin boards, and the like are often the material by which participants create themselves. Evaluating the usefulness of engaging in multimodal gathering and interaction is then crucial. This is closely related to the issues of plural existence, anonymity/disclosure, and reliability. Given a participant is working with both online and offline selves/bodies, using multiple modes to engage with them often fits well and elicits different information.

My use of multimodal techniques took several forms. In addition to traditional methods such as telephone conversations and offline face-to-face meetings, I used electronic mail as well as virtual environments to conduct interviews. There are pros and cons with all methods. Electronic mail as a medium for conversation provides some interesting advantages. Statements made by participants can be looked at extremely closely, with a sensitive eye to language. Although this can be done to some degree in an offline interview setting, the ability to read, reread, and then respond to someone line by line via e-mail can be very productive.

Certainly this model requires an interviewee who is interested and willing to look closely at any particular statement, but this is no different in an off-line interview. If, in fact, you have a participant who is very adept at the written form and inclined to want to pursue a subject in depth, this can be an ideal forum. Here, we see a clear flag for when e-mail is particularly bad—a respondent who either (a) is not good expressing themselves in a written form, or (b) finds replying via e-mail cumbersome (this could be for a variety of reasons, including time constraints, the seemingly daunting nature of replying, or even computer system limitations). It is important to be receptive early on to the medium any particular respondent will be most comfortable with and use methods that will facilitate not simply replies, but thoughtful ones.

Online real-time interviews can also provide a wonderful opportunity to fully inhabit a space you are researching and pull out a range of interactions you might not otherwise. As one of my participants told me early on, "I would [also] be suspicious of anyone who thought that they could understand avatars, without BEING an avatar." These kinds of interactions flow much more as an offline conversation would and lend themselves to somewhat more spontaneous replies than e-mail. In the case of my work, I was able to use the medium to explore the question of embodiment via the interview, for example, by reaching out in the virtual space to shake a person's hand and then having a discussion about that experience. Much like e-mail, in-world interviews work best if both participants are familiar with the way online conversations flow, and if the software itself does not constrain the communication (for example, by posing limits on the number of characters that can be used in any given sentence).

Ultimately, some participants may be more comfortable using e-mail, whereas others would prefer a phone conversation, an in-world interview, or an off-line meeting. Depending on one's ability to engage in any of these, leaving the field open and flexible can provide an interesting and useful diversity. In all cases, the choice of mode should be considered in light of the overall project and questions to be explored. I would suggest that for virtual worlds, a diversity of settings is key. If one is interested in exploring the boundaries people live in when engaged in these spaces, drawing on multiple channels provides a methodology that fits with the larger project. In the same way that conducting an off-line interview provides you with particular cues and grounding, so then does conducting a digital interview provide you with corresponding nuances of the electronic medium. Although there is much to be said for the limits of gestural cues in cyberspace, it would be reductionist to think that participants in this medium have not developed elaborate and meaningful ways of negotiating social relationships and communicating. Thus, if I am interested in looking at the nature of embodiment online, I would be doing a grave disservice to the project if I did not actually conduct interviews in that space.

Finally, various modes of communication—both online and off—can provide a richness of experience and interview data. Users quite often create Web pages for themselves (either as their avatar or their off-line identity), and looking at their sites can provide new information and insight into your participant's lives. There are also quite often community Web pages (for example, one of the worlds I am in has several "newspapers" run by community members), and keeping up with them can be invaluable in tracing the life of the world. Instant messaging systems also are quite popular, and getting added to people's friends and buddy lists can be yet another way of being involved with the spontaneous life of the community. In addition, keeping up with any bulletin boards can provide another method of involvement in the community and information about it. In these spaces, you get to see the public side of your participants, which provides you with a much fuller sense of who they are and, quite often, provides

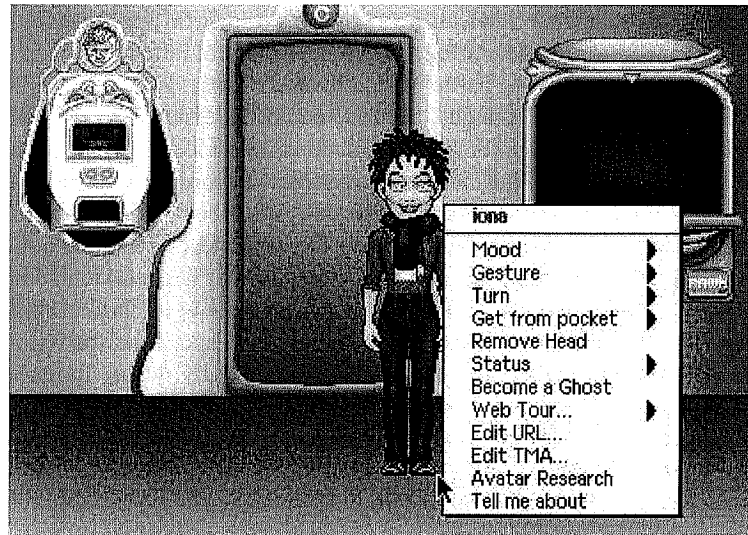


Figure 2: URL ("Avatar Research") attached to a body.
SOURCE: © 1999, Avaterra.com, Inc.

threads to follow-up on in private interviews. Ethnographic work in virtual environments generally means much more than simply spending time in that world. Full participation also likely requires an engagement with the range of different media users are working with. The Web, bulletin boards, file libraries, and the like make up a vibrant part of many communities and can be considered a central component of the ethnographic terrain.

Achieving a level of comfort with multimodal research means knowing well the software you are working with and using it to your advantage. For example, in one world I was able to attach a URL (Universal Resource Locator, a pointer to my Web page) to my avatar as a way of directing potential participants to information about my research. Users could then simply click on my avatar, see the phrase "Avatar Research" and be automatically taken to my site (see Figure 2). This proved a crucial method of soliciting participation, especially in spaces where researchers were looked upon warily. In addition, because significant portions of my interview time were conducted in an online setting as well as the ethnographic field itself being electronic, effectively knowing and using a range of communication software was key. Knowing how to log online interview sessions and take screen shots, as well as dealing with consent forms and more subtle issues of pacing/multithreaded conversations is necessary. Staying abreast of the latest software your participants are using is also important. I make a point to always follow-up and at least check out new software programs (like instant messengers or other worlds' software) community members are using. As with any skill, facility with these forms comes with practice. Some

communities are often quite generous with "newbies," but a researcher must be willing to try new techniques and work on learning the conventions and norms the worlds and software entails. Just as good note-taking practice is crucial in ethnographic work, online researchers must be adept with the software tools they use.

EXPLORING DIGITAL MATERIALITY

Finally, despite the somewhat ethereal world of online spaces, there is a level of material practice that is worth paying attention to. Uncovering artifacts in the digital domain can be a challenge, but in my work, for example, tracking the online body historically and accounting for its present forms was central to my project. Depending on one's research question, an attention to this side of online life might be crucial. Just as your participants may be hard to nail down at points, data (in the form of the material that makes up the world and bodies) is easily lost, disposed of, and overwritten. Using various techniques to track down the artifacts of digital life is often required. Reliance on file libraries, user and company documentation/archives, user-generated histories/accounts, bulletin boards, and the like become very useful in building complete accounts of a virtual environment. Playing detective can often yield great data. Having a good search engine, using catalogues and indexes users create, as well as finding official repositories of information about the world are extremely useful. Quite often individual users have stored on their personal computers treasure troves of archived data, things long since gone from the Internet. Constantly inquiring and being on the lookout for these is key. In addition, when finding something online it is always best to make a copy on your local machine. I have found wonderful Web sites, for example, that are gone months later. Without having archived the found material on my own, it would have been lost to me forever. Remembering the transitory nature of the net and working with the flux is necessary.

This kind of documentation of a space (the artifacts of it, if you will) can also be immensely helpful in interview settings, often providing paths of conversation one may not have otherwise had. For example, I ran across images in a file library of a past world on which the one I was currently researching was roughly based. I was struck by the difference in appearance of the bodies. With this as a point of comparison, I was able to elicit fascinating information and opinions from both designers and users on the change of the world and software. This kind of material then becomes the data by which we can also track the growth and change of communities, software, and individuals.

Just as knowing one's field well in an offline space is crucial, understanding the range of technical affordances and, more important, being willing to explore and evaluate them is important to good online research practice. The technology, in turn, often presents not just new avenues of technique, but larger theoretical issues as well. Plural existence, anonymity, and reliability are only a handful of

the issues one may encounter when doing online work. In response, a range of practical skills are required in these new virtual spaces. Drawing from my work on embodiment in multiuser spaces, I have tried to clear a path through these issues. Given the wide variety of questions the field is exploring right now, I suspect this is only the beginning and that other approaches and techniques will continue to emerge. We are well served to look at the ways we can draw from established strategies while fostering new approaches that engagement in online research presents. Being willing to fully inhabit the spaces we are researching, and adapt ourselves to the new methodological challenges they present, is likely the best (and possibly the only) way we will begin to make sense of life in these fluid landscapes.

NOTES

1. It should be noted that who the *them* is in those moments is quite tricky, as the following account shows.
2. *ESP* is the term used for private paging in one world and it is noted this way on your screen when you receive the message. *Alt* is the expression used in this world for identifying one's other (alternate) avatar.
3. It must be noted that different worlds and communities have vastly different approaches to the plurality issue. In many spaces, it is considered a given that people will have multiple bodies and identities, some of which will be known, some not. In other communities, users maintain the same name and general identity across many different worlds. I would note, however, that plurality *does not necessarily* indicate a lack of persistent identity. Many people have a core group of selves and bodies that they consistently perform over long periods of time.
4. This is also highlighted, for example, by the way one participant described to me the change in social relationships that took place when he went from using a unassuming male avatar to a female one, complete with turbaned head. I asked if the new look affected interactions in any way and he replied, "A huge amount, actually. People treat me as a gypsy fortune teller, and their troubles come pouring out. That never happened with the top hat and muttonchop whiskers."
5. I have found it interesting how many participants were actively and willingly engaged in a methodological exploration of my research even without my prompting. Many have remarked on the ways electronic communication often leads to lessened inhibitions. People quite often do not hold back and will comment readily on your research approach. I have found this to be an invaluable tool, especially given that the terrain is still so unmarked. Our participants are in many ways some of our best methodological guides.
6. This is often built into the software itself, which may not require the user to reveal their offline identity to others. This is not the case in some spaces, such as MediaMOO, a professional community for media researchers. Their offline identity is explicitly known via a name and e-mail address that are submitted with a membership application.
7. All of my participants gave informed consent, but for many a signature was provided via e-mail and consisted of their online avatar name and e-mail address (often no clue in itself to offline identity, e.g., anyavatar@hotmail.com).
8. If such angles are not a research concern, however, the degree of offline information one has about any participant may be less important. For the purposes of this study, offline encounters were not generally anonymous, though that need not necessarily be the case.

REFERENCES

- Bernandez, J. L. (Ed.). (1995). *The body and the self*. Cambridge, MA: MIT Press.
- Dibbell, J. (1998). *My tiny life: Crime and passion in a virtual world*. New York: Henry Holt.
- Doheny-Farina, S. (1996). *The wired neighborhood*. New Haven, CT: Yale University Press.
- Grosz, E. (1994). *Volatile bodies: Toward a corporeal feminism*. Bloomington: Indiana University Press.
- Mauss, M. (1950). *Sociology and psychology: Essays*. London: Routledge.
- NONOBADKITTITY! (1997, December). Avatar identities: Thoughts on virtual identity and pizza noses. *Bridge of dreams*. Available online at http://ourworld.compuserve.com/homepages/charles_langelly/771224.htm.
- O'Donovan-Anderson, M. (Ed.). (1996). *The incorporated self: Interdisciplinary perspectives on embodiment*. Lanham, MD: Rowman & Littlefield.
- Radley, A. (1991). *The body and social psychology*. New York: Springer-Verlag.
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Reading, MA: Addison-Wesley.
- Scott, S., & Morgan, D. (Eds.). (1993). *Body matters: Essays on the sociology of the body*. London: Falmer Press.
- Shilling, C. (1993). *The body and social theory*. London: Sage Ltd.
- Springer, C. (1996). *Electronic eros: Bodies and desire in the postindustrial age*. Austin: University of Texas Press.
- Stone, A. R. (1995). *The war of desire and technology at the close of the mechanical age*. Cambridge, MA: MIT Press.
- Synnott, A. (1993). *The body social: Symbolism, self and society*. London: Routledge.
- Turkle, S. (1995). *Life on the screen: Identity in the age of the Internet*. New York: Simon & Schuster.
- Turner, B. S. (1996). *The body & society*. London: Sage Ltd.