Chapter 10 A Typology of Ethnographic Scales for Virtual Worlds

Tom Boellstorff

We are in a historical moment when virtual worlds are coming into being as a significant mode of technologically mediated sociality. Alongside and within these virtual worlds, a new research community is in formation, one whose growth will only be stimulated by the continuing emergence of new virtual worlds. This community includes a wide range of researchers, from those who have studied virtual worlds for decades to students conceiving new projects. It is an interdisciplinary research community, including persons from many academic disciplines, persons working in nonprofit and industry contexts, independent scholars, designers, journalists, and residents (these are, of course, not exclusive categories). Two key questions that emerge around this new research community (indeed, all new research communities) are as follows: What is the object of our study? What do various methodologies bring to the table in terms of researching this object of study?

The Setup: From Positivism to Ethnographic Scale

Peril as well as promise lies ahead as the contours of these research communities harden and canons are established for what counts as legitimate research. One of the most disturbing of these perils involves a methodological partisanship asserting that only quantitative, experimental methods are scientific and/or worthy of pursuit – to the extent that we could imagine, even if with chagrin, a future in which these are the only methods used (see Bloomfield 2009; Boellstorff 2009; Castronova 2006). Key to this partisanship is the ideology that the only valid forms of social research are those that seek to make predictions, an ideology based in turn on the view that culture can be described in terms of regular laws analogous to, say, the law of gravity. Science fiction has played an important role in the development of virtual worlds (Boellstorff 2008, Chapter 2) – so that, for instance, works such as

T. Boellstorff

Department of Anthropology, University of California, Irvine 3151 Social Science Plaza, Irvine, CA 92697

e-mail: tboellst@uci.edu

Neil Stephenson's *Snow Crash* have played a key role in imagining what virtual worlds might be like (Stephenson 1992). In turn, the ideology that laws for culture exist is certainly shaped by the figure of Hari Seldon, the character who in Isaac Asimov's influential *Foundation* series of novels (beginning with Asimov 1951) developed a science of "psychohistory" that could predict the development of societies thousands of years into the future.

I find little that is convincing in this ideology, often termed "positivist" because of its indebtedness to the philosophy of Auguste Comte, not only due to its partisan denigration of other methods and analytical goals, but because human sociality is so contingent and emergent that predicting historical change is not possible (not simply imperfect, due to our failure to try hard enough or develop the right tools). No method (experimental or otherwise) could have predicted the emergence and form of, say, Modern English, or gay identity. Of course, experimental methods need not be restricted to seeking predictive laws. Either experimental or what I will provisionally term "ethnographic" methods can also be used for a better interpretive understanding of actually existing human cultures, online and offline. The debate is not new: for instance, it appears at the beginnings of disciplinary anthropology in the late 19th and early 20th centuries. Franz Boas – typically considered the foundational figure of United States anthropology – argued in 1887 with "those accustomed to value a study according to the scope of the laws found by means of it" (Boas 1940 [1887]:640). Using the figures of "the physicist" and "the historian" as examples, Boas noted that:

The physicist compares a series of similar facts, from which he isolates the general phenomenon which is common to all of them. Henceforth the single facts become less important to him, as he lays stress on the general law alone. On the other hand, the facts are the object which is of importance and interest to the historian... [for such a researcher, the] mere existence [of a phenomenon] entitles it to a full share of our attention; and the knowledge of its existence and evolution in space and time fully satisfies the student, without regard to the laws which it corroborates or which may be deduced from it. (Boas 1940 [1887]:641–642)

In this chapter, I seek to contribute to the contemporary incarnation of this debate with regard to virtual worlds by focusing on a key discussion taking place within the domain of ethnographic methodology itself. While less consumed by issues like defining what counts as a valid research finding, participants in this discussion are nonetheless establishing a paradigm for classifying ethnographic research about virtual worlds, with consequences for how we conceptualize what "virtual worlds" represent in the first place.

It is with the goal of contributing to the development of this paradigm that in this chapter I set out a typology of genres of ethnographic research with regard to virtual worlds. A "typology" is simply a classification scheme for a set of phenomena. For instance, linguists who work in language typology classify languages in terms of the Indo-European language family, the Austronesian language family, the Bantu language family, and so on. This work involves both defining (1) what criteria will count for inclusion in a particular group, and (2) which languages belong in which groups. My analogous goals in this chapter are (1) to set out a typology for forms of ethnographic research in virtual worlds, and (2) to identify published research that exemplifies each of these categories. (As this is not a review essay, I will provide only a few illustrative examples, not an exhaustive catalogue.)

However, even setting aside experimental and quantitative approaches so as to narrow the discussion to ethnographic methods still leaves me with too wide a conceptual scope for the space limits of a book chapter. As a result, I will not discuss issues like the relative contributions of participant observation versus interviewing, focus groups, archival work, and other methods for ethnographic research. Instead, I focus my analysis on the question of what could be termed ethnographic object, scope, scale, or fieldsite. For understanding the ways in which virtual worlds have arisen and continue to develop in the context of a political economic formation I term "creationist capitalism" (Boellstorff 2008) – a formation demanding "detailed attention to the problematic of space, its social production, and its historical transformation" (Brenner 1999:39) – it is crucial to ask: What are the different ways ethnographic researchers of virtual worlds demarcate the cultures they study, and what is at stake in these unavoidable but necessary and even productive decisions?

The Background: From Indonesia to Second Life

The proximate inspiration for this analysis is my desire to expand on methodological questions I discuss in Coming of Age in Second Life: An Anthropologist Explores the Virtually Human, an ethnographic study of the virtual world Second Life (Boellstorff 2008). This question of the "fieldsite" has been an area of great interest with regard to this research. I find this gratifying because I have intentionally designed all my projects to push on the boundaries of what we mean by "the fieldsite" (Gupta and Ferguson 1997). I have conducted research for many years in Indonesia on gay Indonesians on three islands (Java, Bali, and Sulawesi), but in my books The Gay Archipelago and A Coincidence of Desires I discuss how, in a powerful sense, this research is not "multisited": the fieldsite is Indonesia itself (Boellstorff 2005, 2007). This is because gay Indonesians have historically seen themselves as gay "Indonesians," not gay Javanese, Balinese, and so on. There are many different kinds of spatial scales operative in human life, including local, national, regional, and global, and it is crucial not to equate culture with locality. Sometimes that equation is valid, sometimes not: it depends. Translocal cultural logics exist with regard to everything from religion to gender. In the case of gay Indonesians, while they may think of themselves in terms of locality with regard to some aspects of their lives, with regard to homosexuality they typically think of themselves as Indonesians. This makes sense given that the concept of gay subjectivity is associated with modernity, and is rarely if ever learned from one's parents or tradition, but the linkages to the nation turn out to be much more complex. One reason so little has been written on gay Indonesians is that these persons fall outside one's analytical horizon if that horizon is founded in the spatial scale of locality. Researchers who equate culture with locality can miss the forest for the trees, so to

¹I mention only gay Indonesians here for brevity: in this work I also discuss lesbian and transgender Indonesians.

speak: they will see all kinds of cultural logics that are local, but those that are translocal in some fashion will appear as inauthentic impositions.

I realized soon after beginning my research in Second Life that the conceptual tendencies with regard to virtual worlds were strikingly opposed to those I had encountered in my earlier work. Whereas in Indonesia studies, the presumption was in the direction of locality, in the study of virtual worlds the presumption was in the direction of translocality. For instance, there were (and still are) persons claiming that all virtual-world research projects must include meeting persons in the actual world to be valid! Particularly for some researchers influenced by (but oversimplifying) the game studies literature this presumption of translocality has taken a predicable two-stage form. The first stage is to invoke classic conceptions of games, particularly Johan Huizinga's notion of a "magic circle" of play involving "a stepping out of 'real' life into a temporary sphere of activity with a disposition all of its own" (Huizinga 1950:8). The second stage is to claim that these conceptions of games are invalid because there now exists "blurring" between game and nongame spaces. This two-stage narrative is clearly flawed, and not only because it caricatures the thoughtful understandings of games (and particularly the place of rules in games) found in the classic literature, as even Huizinga's use of "temporary sphere" in the quotation above indicates. It is also flawed because it ignores the consequential ways in which boundaries between game and nongame spaces persist online, boundaries that can be retrenched (not just eroded) by movement between online and offline contexts, or even by movement between different online games.

The Four Confusions: Defining What a Virtual World Is Not

As the discussion above concerning the "fieldsite" indicates, debates over definitions and terminologies remain common in this formative period in the study of virtual worlds. A difficulty in moving these debates forward is the remarkably negative attitude toward virtual worlds found not just in some quarters of anthropology, but even in science and technology studies. In part, this may be due to the simultaneously utopian and dystopian narratives that frequently cooccur with new communications technologies, a state of affairs well summarized by John Naughton's First Law: "we invariably overestimate the short-term implications of new communications technologies, and we grievously underestimate their long term impacts" (Naughton 2006:4). It may also be relevant that to date, the most prevalent popular-culture reference to virtual worlds is *The Matrix* movies, in which a virtual world is used to enslave humanity.

Perhaps the core definitional problem standing in the way of setting out a typology of methods for ethnographic research in virtual worlds is that the definition of "virtual world" is itself unsettled. I define virtual worlds as places of human culture realized by computer programs through the Internet, a definition that includes online games but excludes things like email and websites, and thus even social networking sites like Facebook (social networking sites are increasingly associated with virtual worlds, as in the case of Facebook's YoVille, but the distinction between the social

networking site and the virtual world persists: the association is not a conflation). In concretizing our understanding of what constitutes a virtual world, identifying mis-categorizations can be just as helpful as working to pin down an exact definition. Four such misunderstandings – what I term the "four confusions" – are particularly common; each originates in mistaking something that frequently cooccurs with virtual worlds with a necessary condition of their existence.

The First Confusion: Games. Virtual worlds are not games. Historically, they have been and continue to be shaped by video games; they may contain games within them; they may even be largely structured in a game-like manner; but there is no way to equate virtual worlds with games without defining "game" so vaguely as to include all social life under its purview. The confusion originates to some extent in the English-language distinction between "game" and "play," a distinction not found in all languages and cultures. Because it is incorrect to assume, by fiat, that all virtual worlds are games, it follows that the use of theories from game studies to virtual worlds must be contextual. In some cases, such theories will be highly effective, in other cases less so (as in my discussion of the "magic circle" in the previous section), but in any case the applicability of theories about games and play to virtual worlds must be established and substantiated, not simply asserted.

The Second Confusion: Visuality. Despite the fact that phrases like "the 3D web" are frequently used as synonyms for "virtual world," virtual worlds need not be graphical or even visual. This is seen most clearly in the fact that historically, virtual worlds were exclusively text-based (as in the case of multiuser dungeons [MUDs]).² The fact that nearly all contemporary virtual worlds are built around three-dimensional graphics is fascinating and important to study, but this does not mean that such graphics are a definitional precondition for deeming something a virtual world. For instance, one could in theory have a virtual world composed entirely of soundscapes, within which persons blind in the actual world would be on equal footing with the seeing. One could also imagine a purely haptic virtual world, in which an interface technology like a glove allowed residents to navigate and interact solely through touch. There is no indication that such virtual worlds based on sound, touch, or any other sensorial framework would involve more than comparatively small communities were they to come into existence. If anything, the trend toward visuality seems to be accelerating. Nonetheless, it remains crucial that we avoid conflating virtual worlds and visuality. Since most contemporary virtual worlds are structured around visuality, theories from visual studies will be crucial to understanding them, but it would prove less effective to use such theories to make categorical claims about virtual worlds.

The Third Confusion: Mass Media. Because virtual worlds are places, they are not mass media, though they may contain mass media within them (everything from magazines, books, and embedded websites to streaming audio and video media). Virtual worlds need not mediate two or more places, since they are places in their own right. If anything, it is more accurate to think of a virtual world as

² See Boellstorff 2008, chapter 2 for an extensive listing of scholarly work on MUDs.

a "medium," in the sense of a material with which one crafts things. This has consequences for the use of mass media theory for understanding virtual worlds: we cannot assume ahead of time how such theories will need to be reworked for virtual-world contexts.

The Fourth Confusion: Anonymity and Roleplaying. The majority of existing virtual worlds require that participants have accounts in which their online identity differs from their actual-world identity. For instance, in Second Life I am known as "Tom Bukowski," because while one is allowed to choose any first name one wishes, last names must be selected from a predefined list.³

However, it is not a definitional precondition of virtual worlds that they be built around anonymity. One could imagine a virtual world that encouraged or required participants to use their actual-world names inworld, along the lines of social networking websites like Facebook. As virtual worlds are used increasingly in contexts like education, nonprofit work, and the corporate sphere, virtual worlds disallowing anonymity, or at least not mandating anonymity, have become more common.

Linked to this question of anonymity is that of roleplaying. Since many virtual worlds are structured partially or overwhelmingly as games, and given the historical linkages between virtual worlds and fantasy fiction like J.R.R. Tolkien's *Lord of the Rings*, it is unsurprising that forms of roleplay are crucial to many virtual worlds. Roleplay, however, is not a necessity for deeming something a virtual world. Not all persons enter virtual worlds for purposes of escapism: virtual worlds can be places that elaborate and support aspects of actual-world identity, rather than places where residents carve out spaces for separate identities.

The Typology: Research Questions and Ethnographic Scale

With the preceding discussion in mind, I now set out a three-part typology of methods for ethnographic research in virtual worlds, focusing on the relationship between research design and ethnographic scale. I intend "typology" to be taken in a heuristic sense, not an exhaustive one. My undergraduate mentor in linguistics and one of the most important typologists in the history of the discipline, Joseph Greenberg, talked about "splitters" and "clumpers": researchers who sought the finest-grained categorizations possible, versus those who sought to gather the world's languages into a small number of expansive groups. For the purposes of this chapter I will be a clumper: I will heuristically group all methods with regard to ethnographic scale in virtual worlds into only three categories. I could easily have set forth a typology with five or more categories, but a parsimonious typology has the benefit of brevity, as well as highlighting key distinctions.

³There have been a few exceptions to this rule made for celebrities of various kinds, for persons willing to pay additional fees, and for corporate uses of *Second Life*.

It is crucial to foreground the relationship between "research question" and "method." As illustrated by the discussion of positivist versus ethnographic approaches with which I opened this chapter, any claim that a particular method is the best (or the only valid) method for researching virtual worlds misses how research always involves a coming-together of research question and methodology. How one conducts research is not determined by some essential property "out there;" it is determined by the research questions one wishes to investigate. In my work as Editor-in-Chief of American Anthropologist, I found that one of the most common reasons I ended up rejecting a manuscript was that the research questions (while fascinating) and methodology (while rigorous) did not match up: the methods were not working to answer the questions the researcher had ostensibly chosen to examine. If I wish to study patterns of HIV infection in a certain social group, quantitative methods will prove invaluable. If I wish to understand how a certain population comes to think of itself as a "social group," qualitative methods will in all likelihood be a better fit. Methodological partisanship is not helpful in moving these kinds of conversations forward: what ideally emerges is a research community, with researchers using different methods to answer differing research questions with regard to a shared field of interest. With this pivotal point regarding the relationship between research question and method in mind, here is my "clumping," preliminary tripartite typology of methods for researching virtual worlds in terms of ethnographic scale:

First Ethnographic Scale: Virtual/Actual Interfaces. One class of methods for researching virtual worlds with regard to ethnographic scale explores interfaces between virtual worlds and the actual world. An example of this kind of research is T.L. Taylor's Play Between Worlds: Exploring Online Game Culture, which opens with the researcher attending a hotel convention for participants of Everquest (Taylor 2006). This class of methods builds off a history of examining such interfaces with regard to the Internet more generally, as in the case of Daniel Miller and Don Slater's The Internet: an Ethnographic Approach, which examines how Trinidadians use the Internet to reconfigure Trinidadian identity and community (Miller and Slater 2000). Since work in this genre emphasizes relationships between virtual-world and actual-world selfhood and sociality, a logical methodological outcome is that researchers often strive to interview the same persons in the actual world as they encounter in a virtual world or worlds, and are particularly interested in cases where residents of a virtual world meet collectively in actual-world contexts, like gaming cafés.

Second Ethnographic Scale: Virtual/Virtual Interfaces. Another class of ethnographic methods with regard to virtual worlds examines interfaces between two or more virtual worlds. In some cases, this can be a comparative research design in which residents do not (or mostly do not) move between the virtual worlds in question. This is analogous to Clifford Geertz's book Islam Observed: Religious Development in Morocco and Indonesia (Geertz 1968), in which the Moroccans and Indonesians studied do not travel between Morocco and Indonesia and are, indeed, largely unaware of each other's existence. In other cases, this can be a research design that tracks a community or communities moving between virtual worlds.

An example of this is Celia Pearce's *Communities of Play: Emergent Cultures in Online Games and Virtual Worlds* (Pearce 2009). In this work, Pearce examines the "Uru diaspora," a community formed when the virtual world Uru shut down and residents worked to rebuild their lost virtual home in other virtual contexts like Second Life and There.com. One frequent topic addressed by research in this genre is how notions of selfhood and community are sustained and destabilized across differing virtual contexts. This is analogous to work like Engseng Ho's *The Graves of Tarim: Genealogy & Mobility across the Indian Ocean*, which ethnographically explores Hadrami communities located across parts of the Arab world, South Asia, and Southeast Asia (Ho 2006).

Third Ethnographic Scale: Virtual Worlds In Their Own Terms. The third class of ethnographic methods making up my heuristic typology involves studying a single virtual world, and thus not attempting to meet residents of that virtual world in either the physical world or in other virtual worlds. This is the primary method I employ in my book Coming of Age in Second Life, where I refer to it as studying a virtual world "in its own terms" (see Boellstorff 2008, Chapter 3). This idea of "claim[ing] online contexts as field sites in their own right" (Hine 2005:7) dates back to the earliest ethnographic work on virtual worlds (e.g., Curtis 1992). If Geertz's book Islam Observed can serve as an analogue for studying virtual/virtual interfaces, then several of his other books (for instance, his first ethnography, *The* Religion of Java [Geertz 1960]), can serve a similar purpose in regard to studying a virtual world "in its own terms." Geertz's Religion of Java is, as its name indicates, a study of Islam in Java, and it is now but one of hundreds of insightful ethnographies of Islam, exploring Muslim life around the world. That such ethnographies usually focus on particular places and communities does not mean they ignore that Muslims are found worldwide, that many Muslims make the pilgrimage to Mecca, that persons migrate, and so on. Instead, it means that they examine how such translocal cultural logics and practices shape a particular community or communities.

It is unnecessary that a study of Islam in Morocco, or Indonesia, or even in a specific village in Morocco or Indonesia include multiple villages or nation-states to have broad relevance. It is not just possible but powerful to, in Boas's terms, turn careful attention to the "mere existence" of phenomena and from that careful attention derive theories and insights whose relevance extends beyond the ethnographic context of their formulation. Against claims that ethnographic research is "anecdotal," that extension is quite feasible and verifiable – but it is not the positivist extension of "law," in which, for example, the law of gravity derived from dropping weights from a tower or seeing apples fall from a tree is applicable in toto to all objects throughout all time and all the universe. To the positivist dream of such extensibility with regard to cultural phenomena, our response must be that the extension of ethnographically derived theories and insights is real and valid, but historically and spatially contingent. Something learned about a gay man in one Indonesian city may help us understanding a gay man in another Indonesian city, or perhaps in some more circumscribed fashion, a gay man in Thailand or the United States - but that work of extension, comparison, and circumscription is

itself a contextual intellectual endeavor rather than the rote invocation of "law." Similarly, something learned about identity or community or economics or anything else in one virtual world may help us understand these topics in other virtual worlds or even in the actual world, but that work of extension, comparison, and circumscription is itself part of the intellectual work of the research community.

It is thus absolutely crucial to recognize that an interest in intersectionality, translocality, and the coconstitution of cultural domains is typically common to all three scales of ethnographic research I have identified. For instance, some studies of virtual worlds "in their own terms" focus on subcultures or specific topics (e.g., sexuality or economics). Others strive for a more holistic portrait, examining how shared practices and meanings emerge and are contested within a virtual world. It is emphatically not the case that these three ethnographic scales can be mapped onto categories like "local" or "global," so that one could be seen to be more generalizable or broad, and another as more limited or narrow. To assume any such isomorphism between ethnographic scale and scope of claims would be to engage in the "confusing closure with scale" (Gupta 1998:12) sometimes used to assert that ethnographic methods are less broadly relevant than other methods. In reality, all ethnographic methods, whatever scale they employ, are (like any method) most effective when keyed to specific and appropriate research questions. All have something to offer, and all can speak to a range of specific and comparative concerns.

The Road Ahead: Concluding Thoughts

I intend this rough typology of methods for researching virtual worlds in terms of ethnographic scale to underscore how different genres of research design allow for exploring differing sets of research questions. Most researchers end up working in all of these genres, but at any point in time the best research is based on focusing one's methods in line with a particular avenue of investigation. Arriving at a workable and compelling design is perhaps the most challenging and important step in conducting research: it is not possible to do everything. In the emerging research community around virtual worlds, I have encountered not just the "four confusions" discussed above, but a misreading of George Marcus's work on multisited ethnography (Marcus 1995) — a misreading which assumes that the more "multi," the better. In this misunderstanding, research on a single fieldsite is, a priori, suspect or outdated, while research on multiple fieldsites is, a priori, valorized as cutting-edge. In reality, both single-sited and multisited methods go back to the earliest decades of ethnographic research: indeed, nineteenth century anthropology was dominated by evolutionary approaches predicated on multiple sites of research and comparison.

It should be clear that all three of the methodologies discussed above (or the many additional methods that I could have set forth with a more "splitter" typology) are valid approaches to researching virtual worlds. All have strengths, and all involve sacrifices in terms of honing a doable research plan. In what I find to be the best research in virtual worlds or the actual world, we are moving toward forms of

what I have elsewhere termed "postreflexive" modes of ethnographic engagement (Boellstorff 2003) that foreground and theorize how "the fieldsite" of any research project emerges through that ethnographic engagement, rather than being set in stone "out there." It is by now well acknowledged that the single fieldsite is, in this sense, an ethnographic fiction. The irony is that in virtual worlds research, what sometimes appears to be less well-acknowledged is that multiple fieldsites are also so constructed.

What does the future hold? It appears that research on virtual worlds will continue to increase and diversify. A subset of that research will continue to be ethnographic in some sense, and this work bears every indication of representing an innovative set of contributions. Obviously, there is no need to choose between the various methods for ethnographic research with regard to virtual worlds that I have discussed above. All can be done well or badly, but none are by definition invalid. When properly keyed to appropriate research questions, each can contribute to building a body of ethnographic work that will help illuminate what virtual worlds are, as well as their changing place in human life. In some ways this body of work will be specific to virtual worlds, but it will continue to draw from a range of other fields as well. For instance, while (as noted above) virtual worlds are not necessarily visual and are not necessarily games, they do tend to be highly visual and often are games or emphasize play. As a result, theoretical perspectives from game studies and visual studies, as well as anthropological theory, will continue to be crucial for understanding most virtual worlds. In turn, the growing body of research on virtual worlds, informed in part by various modes of ethnography, will have much to offer many other fields of inquiry. The conjunction of ethnography and virtual worlds will continue to stand as a vibrant field of research, contributing to central debates about human selfhood and sociality in the years to come.

Acknowledgments A draft version of this chapter was posted on the *Savage Minds* blog in August 2008. I thank the moderators of that blog, in particular Alex Golub, for their kind support. I thank also readers who commented on the draft, including "Montgamery McBlackwater" and Matthew T. Bradley.

References

Asimov, I. (1951). Foundation. New York: Gnome Press.

Bloomfield, R. (2009). *How online communities and flawed reasoning sound a death knell for qualitative methods*, from (http://terranova.blogs.com/terra_nova/2009/03/do-online-communities-sound-a-death-knell-for-qualitative-methods.html), posted March 31, 2009.

Boas, F. (1940). The study of geography. In *Race, Language, and Culture* (pp. 639–647). Chicago, IL: University of Chicago Press. (Original work published 1887)

Boellstorff, T. (2003). Dubbing culture: Indonesian gay and lesbi subjectivities and ethnography in an already globalized world. *American Ethnologist*, 30(2), 225–242.

Boellstorff, T. (2005). *The gay archipelago: Sexuality and nation in Indonesia*. Princeton, NJ: Princeton University Press.

Boellstorff, T. (2007). A coincidence of desires: Anthropology, queer studies, Indonesia. Durham, NC: Duke University Press.

- Boellstorff, T. (2008). Coming of age in Second Life: An anthropologist explores the virtually human. Princeton, NJ: Princeton University Press.
- Boellstorff, T. (2009). Method and the virtual: Anecdote, analogy, culture. *Journal of Virtual Worlds Research*, 1(3), 4–7.
- Brenner, N. (1999). Beyond state-centrism? Space, territoriality, and geographical scale in globalization studies. *Theory & Society*, 28(1), 39–78.
- Castronova, E. (2006). On the research value of large games: Natural experiments in Norrath and Camelot. *Games and Culture*, 1(2), 163–186.
- Curtis, P. (1992 [1997]). Mudding: Social phenomena in text-based virtual realities. In S. Kiesler (Ed.), *Culture of the internet* (pp. 121–142). Mahwah, NJ: Lawrence Erlbaum Associates.
- Geertz, C. (1960). The religion of Java. Glencoe, IL: Free Press.
- Geertz, C. (1968). *Islam observed: Religious development in Morocco and Indonesia*. New Haven, CT: Yale University Press.
- Gupta, A. (1998). *Postcolonial developments: Agriculture in the making of modern India*. Durham, NC: Duke University Press.
- Gupta, A. & Ferguson, J. (Eds.). (1997). Discipline and practice: "The Field" as site, method, and location in anthropology. In *Anthropological locations: Boundaries and grounds of a field science* (pp. 1–46). Berkeley, CA: University of California Press.
- Hine, C. (Ed.). (2005). Virtual methods and the sociology of cyber-social-scientific knowledge. In *Virtual methods: Issues in social research on the internet* (pp. 1–13). Oxford, UK: Berg.
- Ho, E. (2006). *The graves of Tarim: Genealogy and mobility across the Indian Ocean*. Berkeley, CA: University of California Press.
- Huizinga, J. (1950). Homo Ludens: A study of the play-element in culture. Boston, MA: Beacon Press. (Original work published 1938).
- Marcus, G. (1995). Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual Review of Anthropology*, 24, 95–117.
- Miller, D., & Slater, D. (2000). The internet: An ethnographic approach. Oxford, UK: Berg.
- Naughton, J. (2006). *Net benefit: How the internet is transforming our world*. UK Marketing Society Keynote Address: 28 February, 2006.
- Pearce, C. (2009). Communities of play: Emergent cultures in online games and virtual worlds. Cambridge, MA: MIT Press.
- Stephenson, N. (1992). Snow Crash. New York: Bantam Books.
- Taylor, T. L. (2006). Play between worlds: Exploring online game culture. Cambridge, MA: MIT Press.