

Chapter One

Introduction: From Communities of Innovation to Cultural Critique

Cyborganic, the subject of this study, was a community whose members brought *Wired* magazine online; launched *Hotwired*, the first ad-supported online magazine; set-up Web production for CNET; led the open source Apache project; and staffed and started dozens of other Internet firms and projects—from Craig’s List to Organic Online—during the first phase of the Web’s development as a popular platform (1993-1999). Cyborganic was a conscious project to build a hybrid community both online via the Internet and offline via face-to-face interaction. It was also an Internet start-up and the business project provided both impetus and infrastructure for the community. The social forms and cultural practices developed in this milieu figured in the initial development of Web publishing, and prefigured Web 2.0 in online collaboration, collective knowledge creation, and social networking.

The objectives of this dissertation are several. The first is to demonstrate the role of Cyborganic in the innovation and adoption of networked social media through an ethnographic case study of the group, showing it as exemplary of the regional and cultural advantage of “technopoles” (Castells and Hall 1994:8), and as precursor to contemporary phenomena of online social networking. The second objective is to interrogate the relation between entrepreneurial and utopian practices and social imaginaries in the Cyborganic project, identifying not only their synergies,

but also their tensions. Finally, my third objective is to ground celebratory and utopian discourses of new media genealogically, showing that the social media heralded today as “revolutionary” grew from earlier media and practices, similarly hailed as revolutionary in their day. Rather than representing rupture with the past, the narrative of social revolution through technologies is a cultural legacy passed through generations already, and one that draws on quintessentially American attitudes and practice (Winner 1986; Bestor 1950).

Such a list of objectives may seem overly broad until one appreciates that they do not represent discrete research questions, but the untangling—via exposition and analysis—of phenomena tightly interwoven in Cyborganic, my object of study. Following the phenomena, my objectives themselves are interwoven in the description and argument of this ethnography, each building recursively on the others in each of the ethnographic chapters. Though separated and presented sequentially above, these objectives are co-constructed and coincide in a focus on the symbiosis of entrepreneurial and utopian in the Cyborganic project. Before turning to define the terms and concepts expressed in these objectives, let me illustrate how they took shape.

When I began thinking of how to write from my field research, one of the first tasks before me was to establish the wider relevance of my study of Cyborganic: a community that, at its height, included approximately 150 people. I came to focus on Cyborganic’s role in the development of Web publishing and on the group’s productivity—gauged in terms of its connection to successful firms, projects, and

products—as a way to demonstrate the general significance of this ethnographic case. This focus proved beneficial in that it linked the people I study to things of which my academic mentors and peers had heard: *Wired* magazine, online communities, open source software, and the phenomena of the Internet start-up, or “dot-com.” It also engaged me with research outside anthropology that highlights the role of local cultures and practices in creating self-sustaining regions of innovation and economic productivity (e.g., Castells and Hall 1994; Saxenian 1993, 1994). In this literature, regions such as Silicon Valley are identified as “technopoles,” or “milieus of innovation” (Castells and Hall 1994:21). Together these terms capture the argument that both *place* and *culture* form crucial bases for technical and economic growth.”¹ As a local community of computer geeks² who played a central role in the development of Web publishing, Cyborganic exemplifies the continuing importance of place-based culture and practice in an age where telecommunications might seem to render geography irrelevant. Moreover, many of the social forms, cultural practices, and media that constituted Cyborganic prefigure contemporary genres of networked social media. Thus, I came to my first objective of

¹ Both “pole” and “milieu” indicate place, with “milieu” referring more abstractly to surroundings, “especially of a social and cultural nature” (Dictionary.com Unabridged, v 1.1, s.v. “milieu,” <http://dictionary.reference.com/browse/milieu>, accessed November 24, 2007).

² This is a term Cyborganic members used to describe themselves. It is a group identifier that links them to the broader Internet culture, as will be discussed later in this introduction.

demonstrating Cyborganic's innovation and productivity to explain the broader significance of my study.

However valuable that demonstration in situating my subject, as ethnography, it is clearly insufficient on many levels. First, it fails to engage the richest material from a field study centered on the practices and social imaginaries of community, rather than economic productivity per se. Cyborganic was not only an Internet business and occupational community. It was also a project to use computer-mediated-communication to create the kind of face-to-face community its leaders, members, and social critics alike (e.g. Kunstler 1993; Putnam 2001) found lacking in contemporary American society. Though the "milieu of innovation" analysis is consistent with the idea that cultural factors—for example, communitarian practices—play a crucial role in sustaining technopoles, it subordinates such factors in a tale of economic heroism that engages my findings primarily in terms of technical and economic productivity. In offering that reading alone, I would be looking at my findings only within the framework of production, taking only samples illustrative of arguments transplanted from other fields, and leaving vast swaths untouched by the blade of my own analysis. While a focus on production might well be appropriate, as an ethnographer, I saw that as a determination that could only be made after more holistic consideration of the data. In other words—and this is the most important limitation of the first objective—stopping with it would fail to engage my research anthropologically.

Early on in writing up my fieldwork, I came to see the symbiosis of Cyborganic's entrepreneurial and utopian dimensions as a key finding to be pursued analytically. This symbiosis was readily apparent, both in my field data, and in the expansive literature on Internet culture by academics, journalists, and members of the subculture of which Cyborganic was a part, i.e., insider or "native" texts (e.g., Raymond 1999; Behlendorf 1999; Pesce 2000). Seeing this confluence as ethnographically central led me to formulate a second objective: that of interrogating the relation between the entrepreneurial and utopian in Cyborganic. In particular, I sought to address the question of how to take Cyborganic's communitarian practices and imaginaries seriously as social phenomena in their own right, without explaining them away in terms of their productive outputs in a functionalist mode. Or, to put the question in terms quintessential to cultural anthropology, the task was to understand how Cyborganic's symbiosis of communitarian and entrepreneurial was "good to think," as well as "good to eat."³ By taking them seriously, I meant to examine Cyborganic's utopian practices, discourses, and social imaginaries in terms of my informant's self-understandings before interpreting them in terms of any analytic transplanted from other research, however apropos—e.g., the market, network society (Castells 1996), technopoles, cultural capital (Putnam 2001), or a new creative class (Florida 2002) of "no-collar" workers (Ross 2004).

³ I draw here on Claude Lévi-Strauss's famous distinction between "*bon à manger*" and "*bon à penser*" ("good to eat" and "good to think") in his analysis of totemic animals, which has become emblematic of the contrast between symbolic and materialist analyses of culture (Levi-Strauss 1963:89).

My third and final objective arose out of the challenge I faced pursuing the second. Put plainly, the most basic obstacle to understanding Cyborganic's communitarian and utopian aspects ethnographically was their apparent obviousness and familiarity. Though online communities, dot-com cottage industries, and geek culture were news to most in 1993 when my fieldwork began, by the time I started writing up my research in 2003, so much had been written and said on these subjects that it became difficult to speak about Cyborganic apart from a host of other discourses, celebratory as well as critical, focused on utopian claims and revolutionary characterizations of the Internet and Internet culture. Such discourses became pervasive on a number of fronts beginning in the 1990s, and are reflected in the popularity of such books as: *The Virtual Community* (Rheingold 1994); *Being Digital* (Negroponte 1995); *The Cathedral and the Bazaar* (Raymond 1999); *The Hacker Ethic* (Himanen 2001); and in the sheer volume of accounts of hacker, geek, and Internet culture. At first, I was heartened to find so much valuable corroboration and contextualization for my focus on the symbiosis of entrepreneurial and utopian practice and imaginaries, not only in the academic literature on Internet culture, but also in the readings my informants referenced or suggested I read, many of which were also on academic reading lists (e.g., Oldenburg 1991; Rheingold 1994). In this context, both the milieu of innovation analysis of Cyborganic (objective one), and the story of the vital symbiosis of entrepreneurial and utopian social imaginaries (objective two) seemed, in a certain sense, obligatory, like textbook examples of an

Internet culture already familiar to pundits and university researchers alike, and discussed in similar terms by both.

I found the conjunction of scholarly and what I above call “insider” discourses disquieting. It confounded the emic/etic distinction “a principle—if not the principle—conceptual tool” of anthropologists that underlies “the ability to understand and interpret other cultures” (Headland 1990:17).

Emic statements refer to logico-empirical systems whose phenomenal distinctions or “things” are built up of contrasts and discriminations significant, meaningful, real, accurate, or in some other fashion regarded as appropriate by the actors themselves... Etic statements depend upon phenomenal distinctions judged appropriate by the community of scientific observers. (Harris 1968:571, 575)

In other words, “emic” refers to the perspective of “the actors themselves,” those who are the objects of knowledge, while “etic” refers to the perspective of those who seek to know these actors in scientific terms. Because it was impossible to neatly separate emic from etic sources, findings from analysis, my initial representations of Cyborganic came to seem too much like common sense for ethnographic analysis. On the face of it, this obviousness (i.e., this confluence of emic and etic) presents an obstacle to ethnography: what is to be explained and what is explanation? The obstacle being that an anthropologist cannot simply present the self-understandings of her informants as analysis, yet the categories and imaginaries of those self-understandings were largely indistinguishable from many expert perspectives on Internet culture. Such obstacles endure only when they go unnoticed and remain in the blinds where culture works its magic and appears the real, natural order of things.

Once noticed and questioned, they often prove to be rich veins of ethnographic knowledge. In pursuing my initial objectives, I found Cyborganic's symbiosis of entrepreneurial and utopian—and the narrative of social revolution through computer technologies it articulates—presented just such a paradoxical obstacle: a blind spot of densely overlapping and aligned transparencies. Noticing, questioning, and working to make these visible, gave rise to the third and final objective of this dissertation: grounding the Cyborganic project genealogically within the broader cultural narrative of social revolution, and rooting both in a particular cultural history. The narrative of social revolution through computer technologies is precisely the sort of thing an anthropologist cannot take at face value.

James Holston encountered a similar challenge in his anthropological critique of Brasília's modernism and utopian project. Recognizing that “a critical analysis cannot simply use for its own categories those that the theoreticians of modernism developed for themselves,” and must “distance itself from such an internal view,” Holston at the same time saw “two great dangers in critical interpretation that distances itself too much: reductivism and dogmatism” (1989:12).

To avoid these charges, a critique of modernism can neither dismiss it out of hand nor reduce it to something else. What is needed instead is a method of assessment similar to what Frankfurt school theorists call immanent or dialectical criticism. This procedure begins with the substance of what is to be criticized and establishes its self-understanding (its premises, intentions, categories, instruments, and the like). It then unfolds their entailments, implications, and consequences which it uses to reexamine the object of investigation. This reassessment reveals its gaps and paradoxes. (Holston 1989:13)

I have adopted a similar procedure in my analysis of Cyborganic, establishing the self-understandings that informed the project, examining the practices and imaginaries entailed, and their implications, seeking not critical distance (cf. chapter 2) but to draw out the tensions and limitations, the “gaps and paradoxes,” immanent in the emic view.

Having traced the development of my objectives, I must make clear that this is an ethnographic text focused squarely on a micro-level analysis of the Cyborganic case. I foreground my overarching arguments precisely because they are built up gradually and intertwined in the cultural history of Silicon Valley, and throughout my history and description of Cyborganic itself. Further, I delineate them at the outset in order to define the concepts and terms of my argument, several of which, as I have noted, have emic and etic meanings that overlap. Chapter 2 lays out my research project and the epistemological and anthropological grounds from which it proceeded. Thus, I focus here on introducing the concepts and social theory that inform my argument, and giving a sense of how I use the terminology I have deployed both descriptively and analytically herein.

Networked Social Media: Key Terms and Definitions

Time and again in making my analysis of Cyborganic, I found myself writing of *social imaginaries* and the practices and discourses in which they are articulated, rather than culture, subculture, values, or beliefs, though all are certainly bound up in the concept. Charles Taylor (2002, 2004), Michael Warner (1990), Jurgen Habermas

(1989), and Christopher Kelty (2005), “have suggested that the public, or public sphere, can be thought of as one example of a social imaginary.” “[N]either strictly ideas nor strictly institutions” (Kelty 2005:186), the nation (Anderson 1991), market, and citizen state are others. As Taylor defines the term, social imaginaries are

the ways in which people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations.

I want to speak of social imaginary here, rather than social theory, because there are important—and multiple—differences between the two. I speak of imaginary because I’m talking about the way ordinary people “imagine” their social surroundings, and this is often not expressed in theoretical terms; it is carried in images, stories, and legends...it is shared by large groups of people, if not the whole society...the social imaginary is that common understanding that makes possible common practices and a widely shared sense of legitimacy. In addition, we should note that what start off as theories held by a few people may come to infiltrate the social imaginary, first that of elites, perhaps, and then of society as a whole. This is what happened, *grosso modo*, to the theories of Grotius and Locke, although the transformations have been many along the way, and the ultimate forms are rather varied. (Taylor 2002:106)

In this passage, Taylor introduces several ideas key to my use of the social imaginary concept. First, the concept covers social phenomena an earlier generation of anthropologists, such as Kroeber and Kluckhohn (1952), would have spoken of as *culture*, defined as that complex of human behaviors—including language, symbols, beliefs, values, manners, customs and practices—through, by, and in which human collectivities are instantiated. However, though it touches on this whole range of phenomena, the social imaginary pertains more specifically, to the images through which people conceive both their collectivity and “their social surroundings,” the

conditions of their collectivity. Thus, in a manner similar to the culture concept, social imaginaries are both figure and ground, contributing, so to speak, to the gestalt of a unified whole. They extend to the “‘repertory’ of collective actions at the disposal of a given sector of society” and the “background understandings behind them” (Taylor 2002:107).

Warner examines the way uses of print media realized new publics, “imagined communities,” in 18th century America. Drawing on Habermas (1989) and Anderson (1991), he employs the phrase “mediated imaginings” to emphasize the importance of cultural context for common understandings and practices to emerge around the use of media.

The most salient difference between the traditional culture of print and the republican one is a set of assumptions developed in the late seventeenth and eighteenth centuries, on the basis of which print could be taken as normally impersonal. By ‘normally impersonal,’ I mean that the reader does not imagine him- or herself receiving a direct communication or hearing the voice of the author. He or she now also incorporates into the meaning of the printed object an awareness of the potentially limitless others who may also be reading. For that reason, it becomes possible to imagine oneself, in the act of reading, becoming part of an arena of the national people that cannot be realized except through such mediated imaginings. (Warner 1990:xiii)

Cyborganic’s collectivity centered on the production and consumption of networked media, new “mediated imaginings” of community, genres and practices of networked social media. Thus, Warner’s attention to publics and publications—spaces of discourse that exist “by virtue of being addressed”—extends the social imaginary to my topical locus. His observations—“A public is always in excess of its known

social basis;” “It must include strangers,” and “A public is a relation among strangers” (Warner 2002:55)—are of particular anthropological relevance to my analysis of Cyborganic, the community form in which it was realized, and publics it addressed through its website and other media. Warner’s keen analysis of “publics and counterpublics” highlights a useful point of distinction between a *public* as relation among strangers, and a *community*, which—in emic and etic parlance alike—has rather the opposite connotation.

Kelty (2004, 2005), too, imports the social imaginary to the topical domain of my study in his identification of a type of public “specific to the Internet”

whose defining characteristic is recursive in nature: a group constituted by a shared, profound concern for the technical and legal conditions of the possibility for their own association. I call this mode of association a “recursive public”; the people who participate in it will be called “geeks”; and the Internet is the condition of their association. (Kelty 2005:185-186)

Kelty studied a group of geeks focused on the technical and legal protocols that made possible the condition of their association. While a number of Cyborganics were also involved in groups such as the “Silk List” he describes (e.g. the Apache project), Cyborganic as a whole was a community constituted through its members’ shared concern for the social, practical, and everyday conditions of their association. As my examination of the group’s weekly dinners and mailing list (chapter 5) will show, Cyborganic, too, exhibited the characteristics of a recursive public.

Given that Cyborganic was an intentional project to create community, the term social imaginary has been invaluable for enabling me to speak collectively

about the group's norms and practices without imparting to them the boundedness implied by the terms "culture" or "subculture". The theoretical basis for my caution against assumptions of boundedness will be discussed in the next chapter, but the empirical basis lies in the fact that Cyborganics, the people I studied, were members of a community with its own set of social practices and imaginaries, and *simultaneously* members (natives?) of U.S. and Internet geek culture; and various youth subcultures (e.g., rave) that might be called "alternative." Cyborganic members were also part of the age cohort dubbed "Generation X," described in this passage from *alt.culture: an a-to-z guide to the 90s—underground, online, and over-the-counter*⁴ (Daly and Wice 1995).

With the notable exception of hip-hip, no major youth movement emerged during the '80s—in hindsight, the backlash looks inevitable. It came in the shape of a generation of musicians, designers, film- and other culture-makers who in large part defined themselves against the prevailing ethos, just as the original punks were galvanized by the rock-star excesses of the '70s. Comparisons were frequently made to America's last youth culture boom, in the 1960s, but chief among many differences was the fact that where hippie culture organized itself around rockstar iconography, the '90s were a pantheistic throwdown of self-expression and consumer choice. (Daly and Wice 1995:xiii)

In this context, the social imaginary concept enables me to talk about the images and vernaculars employed by my informants whether they are part of mainstream U.S. culture, Internet culture (described in chapter 4), or a particular youth subculture.

⁴ The title of is an allusion to the alt. ("alt-dot") class of Usenet newsgroups.

Media is another key term in my description and analysis of Cyborganic, as my objectives and discussion of Warner and Kelty indicate.

Communications genres—culturally specific forms of communication such as songs, jokes, stories, and conversations—occur in media... In media studies scholarship, the term...encompasses communications channels, technologies, formats, genres, and products. At base, however, media in this sense is best defined by what it is not: face-to-face communication. (Spitulnik 2001:143)

Debra Spitulnik's definition of *media as communication that is not face-to-face* is especially apt for my study of Cyborganic, a project rooted in the premise that online and face-to-face interaction are mutually sustaining and can be used together to build uniquely robust communities.

Lisa Gitelman's remarkable examination of the ways new media "are experienced and studied as historical subjects"—through the emergence of recorded sound and digitally networked text in public life and memory—has also served as a conceptual building block for my understanding of media and Cyborganic (Gitelman 2006:1). Gitelman writes:

I define media as socially realized structures of communication, where structures include both technological forms and their associated protocols, and where communication is a cultural practice, *a ritualized collocation of different people on the same mental map, sharing or engaged with popular ontologies of representation...* Defining media this way admittedly keep things muddy. If media include what I am calling protocols, they include a vast clutter of normative rules and default conditions, which gather and adhere like a nebulous array around a technological nucleus. Protocols express a huge variety of social, economic, and material relationships. So telephony includes the salutation "Hello?" (for English speakers, at least), the monthly billing cycle, and the wires and cables that materially connect our phones. E-mail includes all the elaborately layered technical protocols and interconnected service providers that

constitute the Internet, but it also includes the QWERTY keyboards on which e-mail gets ‘typed’ and the shared sense that people have of what the e-mail genre is. (Gitelman 2006:7-8, emphasis mine)

Gitelman’s definition has been particularly instrumental in enabling me to describe the kinds of innovation Cyborganics engaged in through their mutually constituted online and face-to-face collocations and mediated imaginings (i.e. social imaginaries). In its focus on community and self-publishing, Cyborganic prefigured many of the norms, forms, and practices of networked social media that have —with the rise of blogging, websites like Friendster, Facebook, and MySpace, and a host of other many-to-many media collectively known as “Web 2.0” —become predominant. Thus, in pursuing my first objective, I assay Cyborganic’s productivity and innovation in terms of Web publications, firms, and software, but also in terms of new production processes, genres, and sensibilities.

Two further definitions figure in my analysis of Cyborganic as a community of new media producers and users. The first is Shoshana Zuboff’s identification of a “fundamental duality” between information technologies that automate, that is, “replace the human body...enabling the same processes to be performed with more continuity and control,” and those that, in her coinage, “infomate,” meaning they simultaneously generate “information about the underlying productive and administrative processes” of the work they automate. While the logic of automation “hardly differs from that of the nineteenth-century machine system,” Zuboff observes, “information technology supersedes the traditional logic” because it feeds back on itself by introducing

an additional dimension of reflexivity...Information technology not only produces action but also produces a voice that symbolically renders events, objects, and processes so that they become visible, knowable, and shareable in a new way. (Zuboff 1988:9-10)

Technologies that infomate form the technological nucleus for the array of phenomena which have recently been labeled “Web 2.0,” but which I prefer to call networked social media. The rationale for my preference is not simply that “Web 2.0” is, as Tim Berners-Lee has put it, “a piece of jargon⁵,” but rather that it defines in technical terms phenomena (uses of media) that are not technically distinguishable from those they are said to supersede. Further, Web 2.0 excludes the most massively popular genres such as e-mail, text and instant messaging (IM) on the basis that they are *not* Web applications.

Open source software proponent and publisher Tim O’Reilly coined the term “Web 2.0” for a conference in 2004, defining it in late 2005, writing:

Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications...[are] delivering software as a continually–updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation.” (in Scholz 2008)

⁵ Tim Berners-Lee originated the World Wide Web protocols developing the first Web browser and server at CERN between 1989 and 1991 (Moschovitis et al. 1999:162-164; Castells 2001:15). His widely quoted comments (e.g., in Scholz) about “Web 2.0” were made in an interview with Scott Laningham of I.B.M.’s developerWorks, a full transcript of which is online at: <http://www-128.ibm.com/developerworks/podcast/dwi/cm-int082206.txt>.

Despite the talk of platforms, applications, and architecture, the social networking sites and services “Web 2.0” encompasses do not represent a change of technical specifications so much as the extension, popularization, standardization, and commercialization of social practices and “realized structures of communication” that emerged in the early days of the Web and through the long history of computer-mediated communication.

Thus, while I use “Web 2.0” as an emic term (one closely associated with the wider public of Internet geeks in which Cyborganic was included), in my analysis I employ the compound *networked social media* to refer to the exponential extension and popular proliferation of communications forms, practices, and mediated imaginings developed concurrently in the growth of networked personal computing (discussed in chapter 3). All communications media are axiomatically social. Thus, what I mean to highlight by applying the word “social” is a focus on infomated, many-to-many communication which, at the level of production, involves social design—that is, engineering the system to enable and promote certain forms of connection (e.g., “send this to a friend” links)—and at the level of consumption involves social networking (a particular way of using media). Similarly, the term “networked” points both to the technical infrastructure of these media that enable aggregation of *infomated* data streams, and to the practices and imaginaries of their use. Networked social media thus refers to the nexus of (1) user-generated content (aggregation/participation), (2) social design/social networking, and (3) computer-mediated community. All elements of the nexus are present in contemporary Web

phenomena such as Wikipedia, Flickr, YouTube, MySpace, and del.icio.us, though each element is positioned differently in different genres, services, and contexts.

For example, Wikipedia, “the free encyclopedia that anyone can edit”⁶, emphasizes user-generated content, yet building and maintaining it involves both social design/networking, as well as computer-mediated community. What I mean by community (a key term examined in the next section of the chapter) is that Wikipedia encompasses a hierarchy of “user groups” with different roles, relations, and rights (e.g., permissions to access and change front- and back-ends of the system). These “access levels” are listed on the Wikipedia site as:

- 1 User groups⁷
 - 1.1 Anonymous users
 - 1.2 New users
 - 1.3 Autoconfirmed users
 - 1.4 Bots
 - 1.5 Rollbackers
 - 1.6 Administrators
 - 1.7 Bureaucrats
 - 1.8 Oversighters
 - 1.9 CheckUsers
 - 1.10 Stewards
 - 1.11 Developers
 - 1.12 Founder

Though all are listed under “user groups,” the repetition of the word “user” in the names for groups 1.1 through 1.3 separates them from the rest. While these

⁶ Wikipedia, main page, http://en.wikipedia.org/wiki/Main_Page, accessed March 3, 2008.

⁷ Wikipedia, “User access levels,” http://en.wikipedia.org/wiki/Wikipedia:User_access_levels, accessed September 3, 2008.

“user/users” might generally be seen to constitute a public, a relation among strangers, that is not the case for the higher level groups that work to maintain and improve Wikipedia; decide what improvement entails; and arbitrate the application of standards—from formatting specifications to applying “notability guidelines”⁸ to determine whether or not a subject merits its own article. In doing so, these “producer/users” of Wikipedia (a term explicated in chapter 3) are not quite the strangers of Warner’s publics and, I would venture, in their core/corps of active members constitute a social form one might speak of as community. I have not undertaken ethnographic study of Wikipedia, but present the familiar example to clarify my claim that all three dimensions of networked social media delineated above are necessary to the amorphous array of phenomena known as “social networking” and “Web 2.0.” My claim itself will be argued through the cultural history of networked personal computing (in chapter 3) and ethnography of Cyborganic (chapter 4-6), that emphasize the role of communities of producer/users in realizing the structures and genres of communication encompassed in these new media.

Community: Social Imaginary and Social Theory

Having defined the other key terms of my analysis, I come now to the keynote itself, the tonic, or tonal center of this work: community. The word itself

⁸ Wikipedia, “Wikipedia:Notability,” <http://en.wikipedia.org/wiki/Wikipedia:Notability>, accessed March 3, 2008.

carries such a freight of meaning, emic and etic, that my intention here is not to define it, but rather explain how I deploy the term in description, analysis, and argument. In essence, my aim is to present the reasoning that informs my use of “community.” From an ethnographic perspective, the first thing that must be said is that “community” is a word I encountered in the field. Cyborganic was a self-described community whose members used this appellation more than any other to refer to their collectivity. Indeed, community was the central social imaginary shared by members, whom I identify as “Cyborganics.” As such, it is as much the tonal center of my object of study as it is of the study itself. Yet, emic use is no reason to employ the term in social analysis. My second rationale for the term stems from seeing community as Cyborganic’s formative and framing social imaginary. Community is, to paraphrase Geertz (1976), what “the natives” say they’re up to. While this licenses using “community” to describe the emic perspective of my informants, I also use the term to make etic statements and this is the use that requires more exposition and contextualization.

In scholarly discourse, as in the vernacular, the term *community* carries a good deal of baggage and is the topic of a voluminous literature that has grown in conjunction with growth of the Internet. I, thus, begin by identifying questions my analysis does *not* address, namely, whether online communities are as real as those not mediated by computers or whether they instead represent a type of “pseudocommunity” (Beniger 1987). Or, from another angle, whether computer-mediated-communication engenders dynamic new forms of community, or breaks

down and subverts such social formations. The proliferation of the Internet and ubiquity of the term *community* in popular and expert discourse precipitated widespread debate of such questions. Computer-mediated communication (CMC) has long been studied in work and institutional settings (Rice 1988; Sproull and Kiesler 1991; Jones 1995). However, since the 1990s a growing body of scholarship in a variety of disciplines has come to focus on communities online (Rheingold 1994; Kollock and Smith 1994; Jones 1995; Wellman and Gulia 1999). Steven Jones, who has edited three anthologies on communication and community in “cybersociety” (1995, 1997, 1998), has argued that both popular discourses hyping virtual communities and many academic discourses critiquing them reveal a yearning for community in contemporary culture (1995). The idea that the Internet can bring about new and better social forms is something many people seem to “want or need to be true” (Burnett 1996). Researchers have looked at the way online communities succeed or fail at creating meaningful, interpersonal connections and at the social and discursive norms and practices shaping that process (e.g. Baym 1995; Stoll 1995; Barnes 2001). They have focused on identity and embodiment and the way in which computer-mediated communication can contribute to both increased social connection as well as socially disruptive forms of identity play (Turkle 1984; Stone 1991; Dibbell 1998).

While I am deeply interested in what happens in social interaction online, I am not concerned with the “realness” or virtuality of communities. These are not the community questions I address, for I hold with Anderson that “all communities

larger than primordial villages of face-to-face contact (and perhaps even these) are imagined. Communities are to be distinguished, not by their falsity/genuineness, but by the style in which they are imagined” (Anderson 1991:6).

Even before Anderson’s watershed book, *Imagined Communities* (1991), the concept of communities as self-contained, bounded in place and defined by face-to-face interaction (Foster 1953; Redfield 1960), had been challenged in anthropology (Barnes 1954; Bott 1957; Mitchell 1969; Boissevain and Mitchell 1973), and it has fallen out of favor in current theory, if not entirely in practice (cf. Gupta and Ferguson 1997b, 1997c). This shift in anthropological thought is examined in the next chapter so let me simply state my agreement with Samuel Wilson and Leighton Peterson who write:

Our view, and one that seems most consonant with current anthropological theory and practice, is that the distinction of real and imagined or virtual community is not a useful one, and that an anthropological approach is well suited to investigate the continuum of communities, identities, and networks that exist—from the most cohesive to the most diffuse—regardless of the ways in which community members interact. (Wilson and Peterson 2002:456)

These anthropologists also make another point of value to my study in “acknowledging that individuals within any community are simultaneously part of other interacting communities, societies, or cultures,” “bounded to different extents (2002:455).” Though Cyborganic constituted a community, as my case study will show, its members were simultaneously members of other collectivities (e.g. geeks, ravers, American society).

The online/offline conceptual dichotomy so prominent in early social research on the Internet has been supplanted by attention to ways the Internet is taken up in everyday life, and by a growing appreciation for the mutuality of these domains.

[Online] community extends beyond the Internet into face-to-face communities, inextricably linking the Net into local communities and struggles. Conversely, such struggles and perceptions are bound into a network which is mediated through the Internet, through other mass media such as television, and through individual social dialogue. The Net itself is mediated by everyday life. (Shields 1996:8)

The perspective that emerges in this literature is one in which online and offline worlds are interdependent and socially co-constructed. Communications scholars (Jones 1995, 1997, 1998; Shields 1996; Gurak 1999), social geographers (Kitchin 1998), sociologists (Smith and Kollock 1999; Wellman and Gulia 1999) and ethnographers (Miller and Slater 2000; Hine 2000) have all taken this approach in their work on the Internet. Wellman has been particularly influential in promulgating the understanding that

people do not neatly divide their worlds into two discrete sets: people seen in-person and people contacted online. Rather, many community ties connect offline as well as online. It is the relationship that is the important thing, and not the communication medium. (Wellman and Gulia 1999:182)

Such understanding, which directs attention to the relationships mediated by technology, underlies the approach I have taken in highlighting the role of communities in milieus of innovation. By emphasizing the importance of community as a social form, and situating Cyborganic in the cultural history and social

geography of Silicon Valley, I have taken the perspective that online and offline realms are mutually interdependent and co-constructed.

Finally, in terms of social theory, the community concept invokes questions of social morphology, that is, of the relation between small face-to-face social forms—such as households and neighborhoods—and the larger society of which they are part. As Wellman framed it for urban sociology twenty years ago, “the community question” is essentially a structural one.

The basic question—*the community question*—is how the large-scale structure of social systems reciprocally affects the small-scale structure and contents of interpersonal relations within them. Traditionally the public (as well as scholars) have called such ties “communities” when they have clustered in neighborhoods. But much the same issues pertain to the study of kinship groups, households and work groups. (Wellman 1988:82)

The present work looks at the reciprocal effects of small and large-scale social forms in several places and ways. In situating Cyborganic within the long cultural history of Bay Area technocultures (chapter 3), I examine the role of the U.S. government, defense spending, and research universities in the genesis of Silicon Valley’s high technology industry and communities of producer/users. Reciprocally, I point up the role of these communities, their practices, and social imaginaries in spurring and structuring technical and business innovation in the region. In a similar way, my ethnographic chapters (4-6) describe the interplay of Cyborganic (and other face-to-face communities) with larger structures and systems of production and distribution in U.S. society: for example, those of venture capital, stockholder corporations, and advertising-supported media. Because this is an ethnographic text based on

participant-observation research, these larger structures are examined from the ground, that is, the micro-level of my informants' everyday lives. Therefore, in order to frame my subject (Cyborganic) more broadly and situate it in relation to macro-level social structures and forces, my analysis also draws on Manuel Castells' theorization of network society in his trilogy on economy, society, and culture in the information age (1996, 1997, 1998). This engagement with Castells reflects my interest in the structural question of community that Wellman delineates and, in particular, the question of how information and communications technologies affect the reciprocal relations of large- and small-scale social forms. Taken together Castells' analysis of "informationalism" as a new global mode of development (1996, 1997, 1998); his characterization of the "culture of the creators of the Internet" (2001:37); and his extensive research of cities and urban culture in advanced capitalist societies (1977; Susser 2002); provide insight into the community question and a comprehensive frame connecting my milieu of innovation analysis of Cyborganic with my analysis of the group's social imaginaries and practices of community.

Chapters and Objectives

As noted at the outset, my three overarching objectives in this work—showing Cyborganic's milieu of innovation, elucidating the relation of its entrepreneurial and communitarian aspects, and grounding a critique of the narrative of social revolution through technology—are not treated discretely but advanced

throughout the work. Initially, I tried to separate description from analysis and grappled unsuccessfully with different ways to break up my ethnographic subject to support that aim, for example, dividing online from face-to-face, or the Cyborganic business from the community. In this process, I deepened my understanding of the mutualism of Cyborganic's constituent parts and came to see my difficulties in separating them as further evidence of their symbiosis. Thus, while the structure of this work might seem unconventional, it takes its shape from my understanding of the object of investigation itself. Each chapter combines description, analysis, and argumentation of my main objectives, along with a number of contributory and corollary findings and interpretations.

I begin chapter 2, "Epistemology, Fieldwork, and Situated Knowledge," with a description of my research project, fieldwork, and methods, giving an account of how I came to know what I claim to know about Cyborganic. Here I lay out the epistemological and anthropological grounds on which my research has proceeded, situating my work in relation to current thought and practice in the discipline. The understanding of situated knowledge articulated in this chapter shaped my field study and representation of its findings. This view of knowledge leads me to begin by situating my work within anthropology, and situating myself in the work, describing my positionality as the ethnographer of a community in which I was a member, and bringing the questions of objectivity, subjectivity, and "native" anthropology raised in the chapter to bear on my Cyborganic research. Situated knowledge also informed my decision to begin my representation of Cyborganic, not with a description of the

group itself, but by locating the community within a particular regional and cultural history (in chapter 3).

Chapter 3, “Cyborganic Sources: Technocultures and Countercultures,” traces the subcultures and cultural legacies that came together in Cyborganic. In one sense it is a cultural history of both networked personal computing and Silicon Valley (paragon of the technopole) that traces the role of communities of production and use in the rise of the Bay Area as a hub of technoculture over the last century. In another sense, this chapter is a genealogy of the “culture of the creators of the Internet” (Castells 2001: 37) attentive to the formation of practices, values, norms, and knowledge, rather than “a quest for their ‘origins’” (Foucault 1977:144-145). Castells has characterized Internet culture as “a blending of military strategy, big science cooperation, and countercultural innovation” (1996:351). I work in this chapter to show how these disparate lineages came to be amalgamated in Internet culture and to establish Cyborganic’s relation to these ancestors. My aim through this chapter is to highlight the role of communities in the social construction of both the Silicon Valley region and the technologies through which it was developed. By emphasizing the importance of such small-scale social forms and situating them in the cultural history and social geography of Silicon Valley, I have taken the perspective that online and offline realms are mutually interdependent and co-constructed. This chapter works toward all three of my overarching objectives to different degrees. It prepares the way for the milieu of innovation argument by demonstrating Cyborganic’s kinship to the communities within which Silicon

Valley, the Internet, and the personal computer were developed. It elucidates the circumstances and processes through which entrepreneurial and communitarian imaginaries were alloyed in Internet culture. And, most importantly, it shows the long history and role of large-scale social structures in the development of Silicon Valley and Internet culture.

In chapter 4, “Cyborganic as Network of Innovation: A History of the Project,” I turn my focus to the Cyborganic community itself and to the first objective of demonstrating its innovation, showing Cyborganic as exemplary of the regional advantage of technopoles. Here I recount the history of the project, beginning with an explanation of Cyborganic’s vision and central premises. Though I describe Cyborganic’s growth as a local, online community, and as a business, this chapter is essentially a network history. That is, it gives a narrative account of the individuals, firms, projects, and communities that connected Cyborganics to each other and to San Francisco’s Web industry in the mid-1990s. As such, it identifies the contributions of Cyborganic members to the development of new Web-publishing firms, software, and production processes. Two thematic arguments are developed in the analysis of this network history, both in the service of my first objective—showing Cyborganic as exemplary of the regional and cultural advantage of milieus of innovation. The first compares Cyborganic to communities of producer/users discussed in chapter 3, enumerating the legacies inherited from this earlier generation of Internet culture, and highlighting their common symbiosis of technology, enterprise, and sociality. The second argues that Cyborganic drew on

Silicon Valley's culture of entrepreneurial sociality to join place, technology, and community in new productive relationships that yielded new businesses, commercially successful software products, and process innovation.

In contrast to tracing linkages to and from the community, chapter 5, “The Cyborganic Whole: Business and Community, Online and Onground,” looks internally at Cyborganic’s constituent parts, people, and practices. Business and community, online and face-to-face: these were the symbiotic pairs I had initially tried to partition. Thus, in this chapter I work to give an *in vivo* sense of the norms and forms of networked social media the group produced and practiced in its own community. The analysis in this chapter works to show the inseparability of Cyborganic’s business and community projects, and their mutually reinforcing articulation online and onground. This demonstration serves the first of my monograph’s objectives (the milieu of innovation argument), and also the second (examining the relations of entrepreneurial and communitarian), in two ways. First, it details a number of innovative forms and uses of networked media within Cyborganic that have—with the rise of blogging, websites like Friendster, Facebook, and MySpace—become predominant. Second, it illustrates the vital roles place, culture, and dense social ties of community play in milieus of innovation by showing the multiple synergies of Cyborganic’s online and face-to-face, entrepreneurial and communitarian dimensions.

In chapter 6, “Project for Life: Cyborganic’s Creative and Communitarian Imaginaries,” I turn from the milieu of innovation argument advanced in previous

chapters, to examine the utopian aspects of Cyborganic. By looking specifically at these phenomena, I seek to provide both a sense of their emic cultural meanings, and to clarify my characterization of them as utopian. I argue that Cyborganic's creative and communitarian practices and imaginaries are best understood as a response to the economic, social, and cultural transformations of network society. I call this response a "project for life" to distinguish it from the business project, and to propose that Cyborganic be understood as a cultural commune of the type Castells describes as aiming to produce a "local utopia" addressed to "the real issues of our time" (Castells 1997:61). As such, it was a defensive project, aimed at providing a support system for its members and a refuge against the atomizing, individualizing forces of urban life. However, I argue, Cyborganic was also a creative project that can be understood in the broader context of "urban social movements" (Castells 1997:60). To support this analysis, I discuss the utopian ideals at the core of the business vision then show that the wider community also shared these ideals by presenting examples of member-organized projects. The significance of the group's communitarian projects, practices, and imaginaries, I argue, can be seen in the continuing influence of Cyborganic as an exemplary community for imagining and managing life in contemporary, urban society. In the second part of chapter 6, I turn to the tensions between Cyborganic's entrepreneurial and communitarian dimensions and, thus, to my second objective of elucidating the relation between the two. While earlier chapters emphasized the productive synergies of business and community, here I bring to the surface conflicts and contradictions—"gaps and paradoxes"

(Holston 1989:13)—apparent from the ethnographic material presented throughout the work. This analysis initiates my critical consideration of the ethnographic case and readies the way for me to pursue my third objective in the final chapter.

Chapter 7, “Cyborganic and Social Change: The Power and Limits of Community,” returns to the “community question” about the relation of large- and small-scale social structures. While the preceding chapter drew out the tensions between Cyborganic’s entrepreneurial and utopian imaginaries and practices, this one addresses the limitations of its community form in terms of addressing “the real issues of our time” (Castells 1997:61). The story of Cyborganic told in this ethnography is a story about the productive power of community, in particular, of intentional communities mobilized in conscious projects of self-creation. But it is also a story of constraints and limitations on this power vis-à-vis larger social structures and cultural forces.