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Hacker Woodstock: Observations on an Offline Cyber Culture at the Chaos Communication Camp 2011

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When describing broad-based cultural patterns of expression, sociologists generally assume that identity is anchored to space. As Stone (1962, 87–89) suggests, cultural identity is associated with the process of becoming socially situated in place. Possessing such an identity implies the individual has a cultural referent and is tied to a tangible locale. Such locales range from geographically specific metropolitan places (see Simmel [1903] 1951) to the more emergent spaces individuals demarcate for specific encounters (Goffman 1963, 88–99). No matter how the spaces become established, most sociologists assume that identities endure as long as anchored places remain stable (Sennet 1977; Fine 1989; Putnam 2000).

Assuming that identity emerges in a stable space does not ignore the notion of time in relation to the development of cultural patterns. Any form of identity activation or maintenance connects processes of how "individuals locate themselves" in regard to temporal (e.g., duration and frequency) or spatial (e.g., establishment and neighborhood) dimensions (Williams 2006, 174; Oldenberg 1989). Specific types of status, such as "regular" or "temporary," hinge on the ability to manage an identity in conjunction with both spatial and temporal boundaries (Fox 1987; Fine 1987, 2002; Katovich and Hardesty 1985; Katovich and Reese 1987). However, as ethereal statuses become more prominent in online communities that exhibit less pronounced tempo-spatial boundaries (see Bachmann 2010; Blevins and Holt 2009; Burkhalter 1999;

Nhan and Bachmann 2010; Wilson and Atkinson 2005), endurance of identity outside of time and independent of specific locales becomes increasingly emphasized (see Karp, Stone, and Yoels 1991, 25–27). Whereas identities explicitly linked to locales (e.g., regulars in a neighborhood bar) become anchored in particular traditions in those places, identities associated with temporality pertain more to ongoing accomplishments than to an established tradition of co-presence in any specific place (see Katovich and Reese 1987; Riesman, Glazer, and Denney 1961).

The shift from space to time in establishing identification coincides with the creation of more ethereal cultures, whose patterns of identification are not necessarily bound to strict correlations between time and space. Fox (1987, 345–348), for instance, maintained that the authenticity of "an anti-establishment style" favored by youth subcultures (e.g., punks) had more to do with commitment to the style over time, regardless of place. Indeed, as other recent ethnographies on dance, music, and Internet cultures have observed (see Doane 2006; Williams 2006), overt attention to space on the part of participants (e.g., "making the scene to be seen") as opposed to time (being seen and recognized as part of that(sub)culture anywhere), raises questions about one's authentic commitment to the regular status of one's identity—casting such an individual as a poseur or pretender (Fox 1987). It is easy to pose as a regular while situated in a place where such identities are expected, but it shows true commitment to an identity to stand apart from the expected and in places where such cultural patterns are not the norm.

In the following, we wish to expand on the proposition that as any particular culture becomes more ethereal, authentic regular identification becomes less anchored to measured time and literal space and more grounded in particular accomplishments beyond spatial and temporal markers. Whereas traditional ethnographers have bounded conceptions of authentic regulars to explicit spaces (e.g., bars, restaurants, dance halls) and as part of an overt and anchored culture, regular status has also been linked to ongoing activities that emerge in various social milieus. For example, Kinkade and Katovich (2008) analyzed involvement in gatherings of card players and found that as regularity became more tied to temporality, player accomplishments associated with the game itself gained importance in defining identity. In this case, communities and regularities that were once spatially defined became more ethereal and transitions in the roles and motives of the participants were a result.

In the current research, analysis and observation of an evolution of culture working in the opposite direction will be described. Hacker culture, as documented in this participant-observant ethnographic study, by its nature highly transcendent of time and space constraints, became spatially and temporally

confined during the Chaos Communication Camp 2011 and its typical existence in virtual cyberspace became challenged and adapted to a more traditional, social community structure. The primary focus of this interactionist study centers on the exchanges and cultures that emerged when hackers[1] met in person. Its ethnographic approach complements previous research based on mostly quantitative data collected at hacker conferences (see Bachmann 2008, 2010, 2011; Bachmann and Corzine 2010; Holt 2007, 2009, 2010; Holt and Kilger 2008; Schell and Dodge 2002; Schell and Melnychuk 2010).

Hacker Culture

So far, the chapter has referred to "hacker culture" as if a single subculture of all hackers existed today. That is simply not the case. While the term hacker culture—for reasons of text accessibility—will continue to be used throughout the chapter, the reader should be alerted to the fact that an understanding of such a culture as an overarching category under which all hackers can be subsumed would be a gross oversimplification. Rather than being a part of one unifying subculture, individual hackers and hacker groups vary widely in their understanding of what it means to "hack" or what exactly a "hacker" is (see also Bachmann 2008, 2009, 2010; Furnell 2002; Holt 2007, 2010). Moreover, both terms are fiercely contested between different types of hackers. Hackers, typically sharing an emphasis on independence and individuality, usually subscribe to their own, personal definition of these terms, thereby creating almost as many variations in understandings of these two terms as there are "hackers." Rather than aligning under the umbrella of one unifying hacker culture, hackers create "a rich and diverse culture consisting of justifications, highly specialized skills, information-sharing networks, norms, status hierarchies, language, and unifying symbolic meanings" (Turgeman-Goldschmidt 2008, 382; see also Meyer and Thomas 1990).

To complicate matters even further, commonplace discourses within the general public and the mainstream media, largely ignorant of the important differences that exist between various types of hackers, continue to perpetu-

1. The term "hacker" is highly contested and the difficulties involved in providing an accurate definition are detailed in the next section on hacker culture. The following sections provide a more detailed description of how the term hacker is understood in this chapter than any one abbreviated dictionary-type definition could. The controversies surrounding such a definition and the dimensions along which they arise have to be elaborated for a better understanding of why no universally agreed-on academic definition of the term "hacker" exists to date.

ate an oversimplified understanding of a hacker as a person who commits crimes on the Internet or through the means of computer technology. Needless to say that in the eyes of many hackers who have no criminal intentions and do not commit any crimes, this stigmatization is a glaring misrepresentation. In an attempt to shed some light on the contested etymology and usage of the terms, the following section provides a brief overview over the most widespread understandings of what it means to hack or be a hacker and delineates some of the more common factions of hackers (see Bachmann 2008, 2011; Bachmann and Corzine 2010; Holt 2007; Schell and Holt 2009; Thomas 2003; Turgeman-Goldschmidt 2008; Voiskounsky and Smyslova 2003; Yar 2006 for a more detailed description). Such an introduction is necessary for a contextualization and an understanding of the specific hacker camp observations presented in this chapter (see also Holt 2007; Jordan and Taylor 1998; Meyer 1989; or Taylor 1999 for further discussions of general subcultural norms and groups within broader hacker culture).

Since its first appearance in the Yiddish language, where it was used to describe an unskilled person who would use an axe to make furniture (Schell and Martin 2004), the term "hacker" has substantially changed form. After many intervening years with changing meanings, it eventually resurfaced in the context of computer technology during the 1960s. It was reintroduced as a neologism into the specialized and confined language of computer technicians and programming experts. It was used as a positive label for programmers who were particularly skilled in developing highly efficient, creative, and compact programs and algorithms. "Hacker" enthusiasts, however, were also united in their passion for technological innovations and in their playful and individualistic quest to satisfy their intellectual curiosity. "Hacker" in this understanding denotes someone who is an accomplished designer of computer software or hardware, a superb technician who possesses a high degree of skill and competence and directs much of his efforts to improving computer technology or, especially in the days prior to the TCP/IP based Internet, to exploring the technical aspects of telephone switching and communication systems. Respectively, then "hacking" can refer to the continuous improvement of computer program code and algorithms, of software applications and hardware components (Bachmann 2008). It was hackers who first realized the true potential of computers and their applications. All early contributors to the advancement and expansion of computer technology, all innovators who developed new computer-based solutions to a multitude of problems, all entrepreneurs who pioneered and fostered the "computer revolution" (Naughton 2000, 313), and all those who paved the way for today's omnipresent Internet, were considered prototypical hackers in this original understanding of the term (Levy 1984).

The original hacker community formed a subculture shaped by ideals and moral concepts tied to the zeitgeist of the time. As with many other sub- and counter-culture movements, the early hacking community was, in part, characterized by a fundamental distrust of governmental and military monopolies of power, and authority in general. Early hackers defied corporate domination of culture and rejected traditional and conservative values, norms, and lifestyles (Kovacich 1999). Instead, they genuinely adhered to the enlightenment ideals of human emancipation and self-fulfillment through rational thought (Yar 2006). They advocated the freedom of information and an intellectualist approach to politics, and promoted the idea that knowledge should be accessible to everyone without restriction or intervention (Thomas 2003). Many members of the early hacking community were idealists who advocated the use of computer technology for the higher goals of intellectual discovery, aesthetic expression, and for improving the overall quality of life for all (Schrutzki 1989). Today, hacker programming and other activities that support these views are oftentimes referred to as "hacktivism" within the general subculture to emphasize their political nature (Jordan and Taylor 2004; Taylor 2004).

While their exploratory quests for new information and data frequently included unauthorized accesses to remote computer systems, traditional hackers undertook such accesses without criminal intent. Instead, they were carried out to investigate and better understand the intricacies of different system setups, to utilize existing computing resources, to detect security breaches and weaknesses, and to ultimately enhance computer protections (Levy 1984). The vast majority of members of the original hacker community adhered to the "Hacker Ethic," a set of rules that was introduced by Steven Levy (1984) to describe the values of the hackers at the MIT Artificial Intelligence Laboratory. The main principles of this Hacker Ethic are that: 1) access to computers and anything that might teach something about how the world works should be unlimited and total; 2) all information should be free; 3) authority should be mistrusted and decentralization promoted; 4) hackers should be judged solely by their hacking, not ascribed criteria such as degrees, age, race, or position (hence the characterization of the hacking community as a strong meritocracy); 5) art and beauty can be created on a computer; and, 6) computers can change life for the better (Levy 1984). One important implication of this Ethic is that any form of damage to remote computer systems, be it intentional or as a result of incompetence, is principally objectionable and contemptible.

Unfortunately, the original positive meanings of the terms "hackers" and "hacking" became gradually substituted with negative connotations in the 1980s and 1990s. The increasingly mission-critical nature of computer networks for many industries and the expanding popularity of electronic financial transac-

tions began to interest many unsavory people with less-than-noble intentions. For many at this juncture in time, breaking into computer systems was not done in an attempt to understand them or make them more secure, but to abuse, disrupt, sabotage, and exploit private information. Angered by what appeared to be tarnishing the hacking community, traditional hackers reacted to this development by introducing the new label "crackers" for unethical and menacing hackers and from whom they attempted to distinguish themselves. The term is derived from the activity of cracking, or breaking into, a safe and it refers to people who breach (or crack) security measures on a computer system, a network, or an application with the intent to damage or exploit the target or to steal information from it. Hackers who engage in these kinds of malicious activities, on the other hand, largely reject the label "crackers" because cracking typically involves programming software applications specifically designed to discover and exploit weaknesses. In their logic, the ability to create programs that are able to circumvent or breach defensive security measures is proof of their ability to write superior code. Hence, they prefer to refer to themselves as hackers. In the context of this debate, it should also be noted that the rejection of generalizing labels is a common and widespread part of the larger hacker culture. Most hackers simply reject having any labels assigned to them.

The fiercely contested battle over these two labels created considerable linguistic confusion and is not the only controversial cultural differentiation in the hacker community. Similar to the distinction that exists between "hackers" and "crackers" is the classic and somewhat antiquated differentiation (Holt and Kilger 2008) between "white hat" and "black hat" hackers. "White hat" denotes hackers who abide by the Hacker Ethic and hold its rules in highest regard, whereas "black hat" hackers do not commit themselves to the same ethical standards. Other designations within the community include "grey hats," oftentimes used to describe hackers who resort to illicit means to achieve what they see as worthy or ethical goals. Over time, the color spectrum of different "hats" has expanded further. For instance, "penetration testers," individuals employed by an outside computer security firm to probe a system prior to its launch to look for weaknesses, are also being called "blue hats." The expansion of the color of hats is, at least to some extent, also indicative of the decline of these classic distinctions within the community because similar to colors, there are simply too many types of different hackers to justify any classification in over-generalizing "hat" terms.

Other social identities for hackers include "elites," "script kiddies," and "noobies." Elites are the most skilled hackers and their exploits will circulate among the general community. An association with elite groups also typically confers credibility on the member. On the other end of the spectrum are script kiddies, unskilled dilettantes who break in using pre-packaged, automated tools written by others to carry out hacking attacks. Finally, a noobie refers to someone who is simply new to hacking and who has almost no knowledge of the workings of computer-technology (see also the taxonomies developed by Chiesa, Ducci and Ciappi 2008 or Rogers 2006).

While the majority of the masses of unskilled script kiddies who merely download and execute preconfigured attack applications and routines can adequately be subsumed under the label of black hat hackers (Twist 2003), the contested nature of the terms "hacker" and "hacking" within the scene is important to bear in mind when studying hackers. Studies that do not distinguish between white hat penetration testers and criminal black hat hackers will inevitably introduce a bias that produces distorted and inaccurate perceptions.

Notwithstanding the resistance to the criminal label within the traditional hacker community, large parts of the general public are either unaware or ignorant of the distinctions between hackers and crackers, white hats and black hats and the rest. Similarly, mainstream media outlets generally do not subscribe to these distinctions. Instead, they subsume any type of hacking activity under the currently predominant definition as an inherently negative, criminal activity (Taylor 2000). They usually also equate hackers with cybercriminals, merely because this is how the vast majority of people outside of the community understand hacking and hackers (Twist 2003; Yar 2006). The distorted picture of hackers is partly a result of the circumstance that only very few people have direct personal contacts to actual hackers in their social networks. Without direct personal experience, a majority of people derive their knowledge about hackers from representations in popular fiction and the media. Thus, the definitions of what constitute a hacker and hacking activities are not only deeply contested within the hacking community, but also between the general public and hackers, to whom the criminal label is universally applied. While many black hat hackers accept or embrace this label, self-proclaimed white hat hackers consider themselves misrepresented by it and continue to challenge and reject the label.

Both the various contested meanings of the terms "hacker" and "hacking" and the perceptions of hackers in the general public are important elements that must be taken into consideration in a scientific study of hackers. The disputed nature of the two terms implies that researchers must gather a specific understanding of what exactly the terms "hacker" and "hacking" mean to the study subjects before attempting to collect any observations regarding the motivations to attend the camp or the roles assumed at the camp with any accuracy. The common perception of hackers, on the other hand, has to be considered be-

cause it exerts an influence on the self-perception of hackers. More importantly, it is also the broader background against which a more accurate, scientific understanding of hackers is to be established.

Perspectives, Procedures, and Settings

The Chaos Communication Camp is an international open-air meeting of hackers that takes place every four years and is organized by the Germany-based hacker organization "Chaos Computer Club." The Chaos Computer Club, the largest European hacker organization, with over 4,000 members currently, describes itself as "a galactic community of life forms, independent of age, sex, race or societal orientation, which strives across borders for freedom of information, concerns itself with the risks and consequences technology has on society and individuals, and advances technological development" (Chaos Computer Club 2009).[2] Politically, the club advocates traditional hacker ideals such as governmental transparency, freedom of information, and freedom to communicate as a fundamental human right. The club also supports initiatives for free universal access to computers and technological infrastructure and undertakes active "hacktivist"[3] efforts to realize them.

The Chaos Computer Club was founded in 1981 by Herwart Holland-Moritz (alias "Dr. Wau") and other "Komputerfrieks" who realized that information technology would play a prominent role in societal evolution and as a structural support for personal freedom. The club is widely known for its many publications of large-scale security flaws and risks but also demonstrates an interest in "cyber-aesthetics." For instance, it is responsible for several interactive light installations dubbed "Project Blinkenlights" that turn large buildings in Germany and around the world into giant computer screens (Blinkenlights 2012). Aside from Project Blinkenlights and the Chaos Communication Camp, the club organizes various other campaigns and events, among them the annual Chaos Communication Congress, another prominent meeting of the international hacker scene that provides a point of interaction on technical, political, and ethical issues concerning cyber-technology.

The quadrennial Chaos Communication Camp (CCC) provides a popular forum "for hackers and associated life-forms" for the dissemination of information concerning technical and societal issues tied to cyber-technology, such as privacy, freedom of information, and data security (Chaos Communication Camp 2011a). Talks of various sizes and durations are held in (in)formal areas around the camp. Participants camp at the site of the conference and experience the associated primitive accommodations but also enjoy the luxuries of a fast Internet connection and plentiful power supplies. The present chapter summarizes the participant observations collected at the CCC 2011, which was themed "Project Flow Control" and took place from August 10th to 14th in Finowfurt, a small town near Berlin, Germany. While the time spent in discussion was not formally tracked, it is estimated that between the three investigators approximately 20 hours a day was spent engaged in conversations with other camp participants concerning issues tied to hacking culture. Although the number of participants the investigators spoke with exceeds those that were recorded, a total of 23 interviews were transcribed for potential inclusion in this project (see Lofland and Lofland 1995). All interviewees were white and, with only one exception, male between the ages of 18 to 64 (most were in their 20s to 30s), a composition that closely mirrored the overall sociodemographic composition of the campsite.

While generating and collecting data, Snow and Anderson's (1993 24) ethnographic strategy, the "buddy researcher," or, in this case, the "fellow camper" who adapted to and adopted the conference scene, was employed. The main benefit of the establishment as camp participants was that the researchers were recognized by the others as less- to non-disruptive (see Adler and Adler 1987, 35–40; Wolcott 1995, 100). All three researchers did maintain some role distance in regard to extracurricular camp activities to establish boundaries between their identities as researchers and their commitment to the life of the social group. While regarding themselves as strangers and detached from the group consciousness, the researchers demonstrated competence and bravado while in discussion to fit the general mood of camp interaction and to gain better rapport in the hacking community.

2. The original text on the CCC Website reads "Der Chaos Computer Club ist eine galaktische Gemeinschaft von Lebewesen, unabhängig von Alter, Geschlecht und Abstammung sowie gesellschaftlicher Stellung, die sich grenzüberschreitend für Informationsfreiheit einsetzt und mit den Auswirkungen von Technologien auf die Gesellschaft sowie das einzelne Lebewesen beschäftigt und das Wissen um diese Entwicklung fördert." It has been translated from German to English for this chapter.

3. The term "hacktivism," a portmanteau of "hack" and "activism," refers to the use of legal and illegal digital tools to foster political agendas and ideals. Website defacements, redirects, and virtual sit-ins, to name but a few methods, are commonly used as online equivalents to traditional activism or civil disobedience. They are intended to protest some, oftentimes established and conservative, political agendas and designed to promote other, more progressive and liberal ideals. Many hacktivists manipulate electronic information to promote idealistic agendas centered on principals such as the protest of economic inequality or the promotion of free speech, free dissemination of information, or universal human rights.

Of particular relevance, the campers with whom the three researchers interacted most frequently demonstrated understanding and ease with the duality of the researchers' roles within the camping community. While at the camp, other participants joked with the researchers about their hacking (in)competence, often chiding and challenging them as they would any other computer expert. Such chiding efforts were probably actions motivated by social control processes linked to communicating and establishing status differences between the campers and researchers.

However, most of the campers also knew the researchers as social scientists. When this identity was emphasized, interactions changed noticeably. Other campers ceased making light of the researchers' lack of expertise and showed a good deal of deference toward their identities as university professors. In this context, it has to be noted that in Europe generally and Germany specifically, the status of university professor is one that is accorded even more status than in the United States. Clearly, the deference accorded the researchers was localized to their role as social scientists rather than hackers.

As with most participant observers, the researchers confronted the problem of maintaining co-presence within the group, establishing responsive but noncommittal relations with other campers, and projecting ongoing futures with others in specific regard to their hacker roles (see Hessler 1992, 207–221 for a general discussion of these processes). After securing formal admittance to the camp, the researchers worked at informal acceptance into the core group of "regulars" at each given camp site (see Glaser and Strauss 1967; Katovich and Reese 1987; Miller 2000; Ragin 1994, 98–101; Wolcott 1995, 91–95). In the course of gaining acceptance, the researchers observed ongoing interactions at the scenes, interviewed others, and later made written field notes of statements and observations while away from other campers (see Emerson, Fretz, and Shaw 1995; Lofland and Lofland 1995, 89–98). Grounded theory methods (Glaser and Strauss 1965, 1967, 1968; Strauss and Glaser 1970), a specific set of inductive strategies used to synthesize general and systematic propositions from the constant comparing of unfolding observations from both the camp environment and the interviews, were utilized to analyze interview data and observations.

In conducting the analysis, the researchers followed the guidelines put forth by Strauss and Corbin (1990) to 1) periodically reexamine the collected data and the information contained in it, 2) maintain an attitude of skepticism, and 3) to rigorously follow systematic data collection and analysis procedures so as to produce valid and reliable observations and conclusions. Efforts were made to take control of the data by actively avoiding influences of preconceived concepts and hypotheses. Instead, early emerging themes and questions from camp observations and interviews were utilized to direct subsequent data collections. Careful attention was given to coding procedures, the pivotal link between observations and developing patterns and explanations. Rather than relying on line-by-line coding procedures, the researchers predominantly employed focused coding techniques to identify reappearing conceptual codes in their notes (Charmaz 2001).

The researchers made no attempt to conceal their professorial identities to anyone at the camp. In fact, during the observation period they made known their interest in writing an academic paper on the topic of hacking and solicited personal information from participants through questions specifically directed at the subject. Still, the three maintained low profiles as researchers. The researchers and fellow campers agreed to treat all potential analysis as a silent understanding, creating a cooperative pretense awareness in the course of maintaining identities as duelists (see Glaser and Strauss 1964). Such pretense afforded the researchers the luxury of being openly observant and curious about camper activity without causing any noticeable behavioral reactivity in the community.

Identity Assignments within a Grounded Online Culture

Identity assignments consist of various social adjustments related to how participants perceive each other, indicate perceptions, and validate (or contradict) such perceptions (see Stone 1962). Sociologists generally conceive of such assignments as bound to stable tempo-spatial anchors, which do appear in the context of the CCC. One key assignment, for instance, was indicated by the personalized nicknames called "handles"[4] given to "tag" individual characteristics manifest by a particular camper. Attendees continually proffered unique nicknames to each other during discourse. These handles may have also been used as cyber-identities or avatars in other circumstances within the hacker culture, oftentimes for functional reasons (e.g., indication of particular skills, hiding of true identities, or ability to switch between aliases in different contexts; see also Bechar-Israeli 1995; Kilger 2005; Thomas 2003). While

4. "Handles" in the context of computer hacking refers to online pseudonyms intended to mask the user's real identity, while at the same time allowing for the formation of an online identity. Actions performed under one handle can be attributed to one user, while at the same time allowing the real person behind the keyboard to remain anonymous. The term originated in the era of CB radio (Citizens Band radio), where it was used for the same purposes.

such identities marked campers within the general scene, they did not serve to ground any camper in a literal place over an equally specified duration. The authors, heretofore known by their ascribed hacker monikers "War-machine," "Crash," and "Wabbit" adopted their own "handles" for their participant-observation research. It should be noted that all pseudonyms used in this text (beyond War-machine, Crash, and Wabbit) are fictitious but were re-termed to capture, when possible, the sense of the Web or camp name used or given.

In effect, ascription of identities in the CCC symbolized a more rarified acceptance into a community without reference to obdurate boundaries (see Fine and Kleinman 1979). For instance, while specific groups set up dedicated areas called "villages" (e.g., Bitcoin sofa, Freedom-not-fear, H x^2, or W00tstock) in the larger campground to focus on particular themes, interests, projects, languages, or topics, no individual entering into the camp had a "special spot." Also unlike typical spatial and temporal communities in which nicknames make reference to either other places or times (e.g., barroom regulars often have nicknames such as "Tex" or "Smitty" associated with their home states or occupations, a time specific activity) the CCC seemed filled with monikers relevant to emergent acts and arcane descriptions. Name tags such as "Poet," "Slither," and "Raider," for example, were relatively common. These tie signs, understood by those within the collective, emphasized accomplishment or interest rather than temporal or spatial awareness (Goffman 1974; Thomas 2003). The ethereal nature of the CCC community apparently changed the type of emphasis given in personal signifiers.

Some identities resemble adaptations, bridging a gap between what has occurred (and what people understand as having occurred) and what will occur (Sykes 1958). As Thorton (1995) noted in his study of club cultures, indications of belonging to any subculture involve making sense of ambiguous spaces at many different moments in time, none of which are entirely predictable. Such adaptations, then, define the parameters of behaviors in relation to ambiguous circumstances, or involve establishment of identification across time and spaces that lack specified anchors (see Katovich and Hardesty 1987; Schutz 1944; Simmel 1950).

Campers, of course, recognize established time and space boundaries and, as do regulars in any context, reconstruct and re-establish their identities within an ongoing social world. In reference to such stable markers, Katovich and Reese (1987) provided one direct application of how habitués in neighborhood bars divided drinkers into five temporal types of participants including *regulars, irregular regulars, regular irregulars, neutrals and non-regulars*. The researchers noted that in the context of the CCC, two of these temporal categories, *regulars* and *irregular regulars*, represented an ongoing commitment to

community organization. This is distinctly different to the ethereal hacker culture where regularity is tied to experience in hacking as opposed to temporal commitment to the camp. "Elites," "noobies," and "script kiddies," for example, are all tied to the general hacker culture by competencies developed through time, not the time commitment itself.

Group regulars at the CCC controlled the action rates at the camp and made a point to emphasize that any sort of identification of regularity involved considerations beyond specific place and time. As one regular said:

> I haven't been to a lot of these camps but these guys still rely on me. I tell them when to drink and what project we are going to tie into.

Similar to the tangible tempo-spatial culture defined within barrooms, CCC regulars also moderated the acceptance of new members to the group, often ascribing a camp name to the neophyte and reveling in the use of the unique hacker lexicon. For example, Crash, who clearly was unskilled in relation to computers and ungrounded in hacker culture, derived his handle from that fact and was called a "virgin." On many occasions regulars suggested that his naïvité might lead to his subjugation by more competent camp participants. Furthermore, it became readily apparent that any demonstration of cultural ignorance of either the ascribed names of the other campers or of the "techno-speak" of the camp further distinguished and isolated the non-regular from those in the know and maintained the boundaries between insiders and outsiders.

Regulars also expected each other to enforce the informal codes that define the camp's symbolic significance and profile. Regulars enforced the routine actions within the camp and grounded the community as a shared collective where the insiders ruled and outsiders were left to react to the regulars' expectations. As one regular suggested in relation to the expected communalism of the camp:

> If you are not going to share you're gonna be outside looking in and left on your own when you want something from us.

Many irregular regulars actively maintained their voice in groups of regulars and their established shared histories with ongoing regulars (i.e., regulars remember them as having been around and they have experience interfacing with regulars). However, the irregular regulars have become pegged as those who have "moved on." Typically, they seem to have accepted life positions (families and employment) and simply do not have the time for hacking as they once did. While absent, current regulars continue to validate the erstwhile regularity of irregular regulars, articulating memories of their past presence. As one regular suggested about one such irregular regular:

> Yeah … Slither used to be here all the time but then he got married and his life intruded on all the fun …

The aforementioned identities do involve standard time markers in this traditional ethereal culture, but more importantly, they also represent strategic validation patterns of behaviors designed to allow regulars to attend to newcomers independent of literal tempo-spatial anchors. Such identities signify the capacity to exploit, tutor, avoid, or accept those new to the scene and to also organize the community. While these identities allow for an understanding of the regulation and construction of long- and short-term relationships and camp organization, they do not explain how regulars or irregular regulars choose to participate in the culture of the camp. In this vein, six prototypical profiles of attendees were identified that together allow for a better understanding of the specific nature of grounded hacker communal involvement (see Mills 1940 for a discussion on typologies in qualitative research and Holt 2007 for a discussion of typological dimensions within hacker culture).

1) Artists. Artists view the hack or the manipulation of technology primarily as an aesthetic expression. As with other artists whose medium is paint, lyrics, or stanzas, the art will be a personal expression that can be evaluated from the perspective of the creator but which is also routinely ascribed value by the viewing public. The value of electronic or technology-based artistry was often commented on by campers. Some felt it was best to judge "the art" by the technical merits of its execution. The difficulty of its execution or the eloquence of its technological application was at least partially the key to its artistic value. Others thought to judge the work as one would commonly judge visual art, through its aesthetics. Several of the campers, for example, created light shows that could be enjoyed by passers-by or those localized to the production. Others incorporated sound with compressed or manipulated electronic music to be enjoyed for their artistry and public presentations. Still others provided a graphic presentation or transient architectural display in tent construction to give demonstration of their artistic intent.

Whether through a technical demonstration or a traditional aesthetic, artists at the camp clearly identified themselves as such and reveled in the viewing of their work. As one camp artist put it:

> I want to show this to the camp … these guys can appreciate what it took to do this and it is a thing of beauty.

2) Dorks. This self-ascribed and self-effacing identity clearly places hacking and hackers into larger networks and communities that are tied together by other related interests, and it also feeds the aforementioned popular cultural

stereotypes of hacker identities and what they do away from their computers. The term also works to establish a micro-community within the larger hacker collective that serves to create insulation from any ascribed diminution about dorks that is overlaid by pure hackers. Dorks revel in other worlds of fandom that are often tied to popular culture. These may include television shows, movies, card games, comic books, and role play. They stand out in the hacking community because they typically assign a stronger emphasis on popular culture icons than do other members of the community, an emphasis that sometimes even exceeds their interest in technology.

While hacking and computer technologies may be the focus of their current discourse, the other affiliations and vocabularies are not far from their conversation or shared experience. Whether expressed in dialogue, activity, or dress, other "dork" affiliations are displayed and integrated into the camp community. For example, t-shirts adorned with references to the popular movie and television franchises "Star Trek" and "Star Wars" were commonplace on the scene. Other dorks expressed the fetish-like sexual dimension technology entails for them, for instance by wearing t-shirts imprinted with "Penetration Expert," a double play on sexual performance and "penetration testing" (i.e., legal hacking activities under contract). Several tents had campers engaged in active LAN gaming sessions of various types, and ubiquitous references to super heroes were rife throughout the camp. When asked about his participation at the CCC, one self-proclaimed dork answered:

> This is part of my routine … I go to other conferences for other specific things (a comic book conference was later specified) but I go to them all (other conferences he attends) to talk about the things I love with guys who also love them. I used to get shit about this in high school but here it is generally cool … I mean there are still a few assholes … but not as many.

3) Professionals. Contrary to what the identity suggests, most professionals attended the camp to indulge themselves more than to take away intellectually, aesthetically, or communally. These individuals are characterized by their career positions dealing with computers, software design, Internet development or security. They have professional and personal standing that goes beyond what would be considered the norm for many of the participants in the CCC. They attend the CCC as a distraction that might be justified to peers or family as professional development or concern. The informal recreations of the camp, however, seem to be the most significant attraction to this particular group. Drinking, drug use and boisterous talking are far more common to the activity regime of the professional than attending talks, workshops or col-

laborating on projects. They are not attributed any special status by the gathered community but neither do they seem to desire any. Much like the Japanese "suitmen" who work diligently and conservatively all week only to drink with reckless abandon on the weekend, these camp participants are looking for an outlet from or a counterpoint to their more conventional and controlled routines. The CCC, a conference well beyond the pale of typical professional gatherings, provides the perfect vehicle for their needs. As one professional confessed during a late night reverie:

> I don't learn shit here, I spend my time fucked up and away from the wife and kids … I look at this bullcrap enough in company (referring to the business he owns). I don't need more of it for recreation.

4) Deviants. In ethereal hacker culture, "black hats" would be considered a sub-set of the larger deviant subgroup; however, not all "deviants" would be considered "black hats." Deviants differ from black hats in that their outlaw self-perception goes beyond and is not necessarily solely tied to computing attacks. They choose to live on the fringes of normative behavior, adopting a lifestyle that is unconventional in relation to general social norms. Deviants differ from dorks in that they possess no desire to be accepted on anyone's terms but their own. The dork craves acceptance into the normative majority but in lieu of that ideal, uses acceptance in their outsider sub-group as a surrogate. Deviants differ from professionals in that they have no normative life to which they return. The professional may behave as a deviant by using the CCC as a time anchor for such aberration, but they do not continue as the "outlaw" when the camp breaks and they must return home. The deviant, on the other hand, has adopted a lifestyle. In discussing their affiliation to the CCC, deviants do not speak of community in the sense of belonging but rather as a manifestation of collective tolerance. They may be accepted, but it is not the concern of the deviant to be so. Rather, as one "deviant" confided, they simply want to be "left alone to be themselves and compute." As "Flower," a male deviant so tagged by his CCC traveling group for wearing print sarongs and ornate jewelry, elaborated:

> I don't belong with them … we simply arrived here together … it's not to say I don't like them … I just don't care if they like me … I am who I am … they need to deal with it.

5) Politicals. Politicals anchor themselves to hacker culture for identity, ascribing the label to themselves and to the collective as a badge of honor and, most importantly, as a signifier of purpose. This is not unlike the other categories of campers that were observed at the CCC. To the political, however, it is not enough that the collective serves as an outlet for individual purposes that may be commonly shared if not routinely coordinated. For the political, it is the group's existence that empowers, and it is the coordinated and unified collective effort that provides their individual identities to the larger network. Speaking broadly, politicals want the hacker group to "get things done"; they epitomize the "hacktivism" described in the earlier section on general hacker culture. Politicals want to mobilize the community toward larger goals and they revel in the idea that, even despite their communal fringe status, they can achieve goals beyond what is feasible within established and entrenched economic and political institutions. Judging from the researchers' personal experiences with different hacker communities, politicals seem to be particularly prevalent among European hacker groups.

As an example, one needs to look no further than the keynote address at the CCC 2011 to recognize and appreciate the existence of hacker politicals and their general nature. The address, entitled "Hackers in Space: A Modest Proposal for the Next 23 Years," was given by Jens Ohlig, Lars Weiler, and Nick Farr, three such political players, and focused on the group's desire to organize a space program run and manned by hackers. It called for a utilization of the existing infrastructure of "hackerspaces" for the community-driven, gradual exploration of outer space at a time when nation-states are abandoning their space programs (Chaos Communication Camp 2011b).[5] The address was given in an abandoned East German military aircraft hangar surrounded by the rusted artifacts of a by-gone Cold War era. The location of the address affirmed the "outsider" status of the proposed movement, yet the intent was clear: to organize this loosely affiliated gathering toward a practical political end. Other political objectives routinely discussed at the CCC concerned freedom of information and individual right to privacy. As one hacker, "Viking" stated:

> There is real power in this group … a real opportunity to do things … and there are a few of us who are working to make this fact apparent to the morons that come to these things.

6) Cling-Ons. Cling-ons participate in the community but mostly as peripheral spectators rather than as camp regulars. Whether camping or not,

5. The Hacker Space program proposal was divided into three phases, which "we feel can be accomplished in the next 23 years. Phase one is the launch of an open, free and globally accessible satellite-based network built by hackers as the ultimate defense against terrestrial censorship of the Internet. If that sounds too easy, let's go to phase two: Put a hacker into orbit. This will be the preparation for phase three. By 2034, we plan on landing a hacker on the moon" (Chaos Communication Camp, 2011b).

cling-ons seek out others for interactional meaning and direction. Cling-ons typically less skilled than other groups, arrive to interact with others in an attempt to garner attention that their status does not warrant, much in the style of the social gadfly. However, these attention-seeking efforts sometimes lead to tensions with other attendees, who see cling-ons as not warranting their attention and who consequently deny them the acceptance they so desperately seek. For example, "Joe," an interviewed day participant, attended the camp with no intention of working on a project, just to talk to others. However, his persistent attempts to interact annoyed all others in the observed hacker group in a highly consistent manner. Seemingly oblivious to his lack of acceptance, "Joe" nonetheless continued to engage various people sporadically yet relentlessly. As one regular stated, echoing the sentiments of many others:

> What is with that guy ... why come here and isolate yourself by being annoying? I am sure he can do that at home.

As a sub-group of cling-ons, "groupies"(within hacker culture also more negatively referred to as "scene whores," a term denoting conference groupies whose primary interest does not rest on technology-related themes of the conference, but instead centers on garnering attention from male attendees) are predominantly female companions of hackers, oftentimes tied exclusively to a particular male CCC participant. They signify their allegiance to specific male players through demonstrations of intense attention to "their man" while at the same time displaying a pointed aloofness toward other campers. They rarely talk to anyone in the general gathering and, owing to their detached demeanor, receive few initiators (as would be the case for a very low status individual occupying temporary space within the community by virtue of their companion's status). Although groupies attend to the CCC participant with whom they came, their companions rarely reciprocate to avoid being associated with a lower status individual. Indeed, the participants linked to the groupies appear to studiously avoid their companion except when seeking affirmation. Most commonly, the camping hackers will ask for their groupie's agreement or support in a conversational point or for the acquisition of food. When Crash asked a camper accompanied by a groupie about his companion, he blankly stated:

> She is here to be with me ... the camp means nothing to her personally.

The Emergent Grounded Hacker Culture

Mead (1938) noted that individuals and social collectivities create ongoing repertoires that serve as general guidelines for future conduct. Going beyond the more common notion of "norms as prescribed rules," Mead noted that individuals do not experience ongoing repertoires as static objects. Rather, such repertoires include patterns of conduct that become perceived as problematic and so invite adaptations geared toward the avoidance of unwanted consequences (see McPhail 1991, 193–194). In the world of hackers, potentially problematic consequences are not restricted to events that could disrupt the camp. Many probable unwanted consequences also involve outside attitudes, attacks, and damages.

The hacker community and those individuals who govern camp dynamics continually modify cultural repertoires. Participation in ongoing gatherings allows hackers to notice patterns of behavior whereby particular acts become perceived as so uniform and consistent that an expectation for that routine action becomes ingrained and anticipated. When consensus in regard to such recognition emerges, implicit rules are formed and "insider/outsider" ascriptions are applied to individual participants. Those who know the expectations are perceived as a part of the group and accorded due recognition and interactional opportunity. Those who do not are marginalized in subtle but important ways, and are thereby at least partially removed from the camper community. Some codes appeared campsite specific, calling for particular coordinated acts linked to the specific circumstances of a physical place. Clean-up procedures, for example, varied from place to place, depending on literal physical lay-out, camper priorities, and other site idiosyncratic factors.

However, the grounded theory method utilized in this study revealed particular codes of conduct that appeared more universal in that they were repeatedly mentioned in interviews and frequently observed across the entire camp, regardless of physical definition of place, ownership criteria, or in-group variations. Such codes pertain to three general processes of conduct: 1) technology-attitude response patterns—codes concerning individual perceptions of and reactions to computers and computing; 2) interpersonal action dynamics—codes referring to initiation-response patterns constructed among campers; and 3) looking-glass self-sequences—codes relating to Cooley's ([1902] 1922) highly noted depiction of the self as consisting of imagination (appearance) and judgment (labeling appearance).

Technology-attitude response patterns involve two general identifications, "ownership" and "ambivalence." Computer ownership first and foremost applies to the manifest principle that the collective of campers truly appreciates computer-technology and its manifold applications. Conversation about hardware, software, and their various uses, applications, and advantages were rife throughout the camp. Appreciation of others' computing capabilities and software developments were normative. However, campers also viewed certain ap-

plications and activities as fully proprietary and certain access and inquiries were viewed as forbidden to the extent that the campers themselves sanctioned violations aggressively. Campers who were solemnly concerned with ownership have, with great commotion, escorted recalcitrant interlopers out of the camping area. Despite these sometimes intense displays of ownership toward computing work and equipment, camp regulars also express "ambivalence" in regard to their participation in the camp and their technology. As one hacker stated while modifying his CCC identification badge (a programmable, full-featured microcontroller development board shaped like a rocket ship designed to be hung on the lapel):

> I am sitting here taking pride in the fact I have modified this self-indulgent piece of shit into an even more self-indulgent piece of shit ... hacking ... It gives life such meaning.

Another hacker, while trying to get his portable mainframe working, expressed a familiar cry of exasperation that would resonate with anyone who works in computer-technology:

> God ... I hate computers!

Interpersonal action dynamics deal with hackers' reactions to other hackers and include at least three processes relevant to overall group functioning, cohesion, and the economy of the camp. First, hackers perceive a strong sense of communalism among themselves, despite their oftentimes competitive relationships. Deep feelings of obligation among campers represent an overall desire to share the responsibilities involved in creating and maintaining the camp community. To some degree, the apparent communalism stems from shared histories that were developed prior to and independent from the camp. Even so, during the CCC, the participants exhibited commitment toward the common good of the group and imposed standards of commitment by which each attendant was expected to abide and expected others to abide by.

For example, while looking for a place to plug in a phone charger late one night, Crash was offered an outlet by a stranger and was then invited to sit and talk at the campsite while the mobile's batteries replenished. During the conversation, the sole adjacent tent opened and a third party came to join the discussion. While the initial offer in and of itself demonstrated a drive toward the common good, the appearance of the third camper made this point even more salient. As it turned out, the tent's inhabitant knew neither Crash nor the person who gave Crash the opportunity to charge his phone. The gathered group were all strangers to each other: one who had a need, one offering resources that were not specifically his to offer to meet that need, and another

completely comfortable that his resources were offered without his permission in the transaction that occurred. Laissez-faire communalism was manifest in purest form and highest expectation. The cohesiveness of the group was preserved and enhanced as new relationships were formed. The communal functioning of the camp was further confirmed as technological resources were replenished and campers were supported in their private agendas when, in following the manifest economic traditions of the camp, Crash went to buy beer to share with the interloper who invited him to recharge and the owner of the outlet by which his goal was achieved. As indicated by this example, communalism is a key component to hacker conventions and is often one of the social forces that helps keep the cohesiveness of the temporary local community together.

Secondly, campers also demonstrated overt interactional acknowledgements of authority, both formally in relation to camp organizers and informally in regard to emergent communal standards. While camp organizers imposed few rules, expectations about parking, campsite propriety, and event admissions were observably enforced and willingly acknowledged. The informal standard seemed to be an acceptance of these few restrictions in order to enjoy the peaceful unfettering of other types of restrictions. Much like America's "Burning Man" art festival, tolerance from formal authorities was the norm within the confines of the camp as long as legally questionable activities were kept within the gates. As one camper put it:

> It is like Woodstock man ... We can do what we want because we are all in it together ... no one will bother you because you are not a bother.

Informal authority was of two types, both of which were derived from a consensual acknowledgement and a willingness to accept and adhere to the negotiated will and inter-subjective reality of the gathering. The first of the two types rests in established reputation or accomplishment of the individual camper. The three researchers met several individuals who, because of their efforts toward the camp, the Chaos Computer Club, or their general hacker credentials, were deferred to in conversation and yielded to in choice of course of action. While it is not unusual to give special credence to those "with clout" in any social, professional, or political gathering, it was, nonetheless, surprising to see the fervor with which these individuals, due to their status that was derived primarily from their technical knowledge, were supported. Establishing themselves within the online hacker community prior to the camp appeared to augment their capacity to exert their agendas on the larger group within the confines of a specified geography or defined temporality. The sec-

ond source of authority came from the will of the group itself. Despite the general informality, unofficial expectations nevertheless abounded and were openly enforced by the collective. As one camper put it:

> The most important thing is the group … it will take care of itself … it will define what the camp will be and what it won't be …

The third code of conduct observed at CCC 2011 is associated with demonstrating a competent looking-glass self-concern about how one contextualizes him/herself within the camp. The researchers observed a consistent display of self-demonstration in the course of camper participation in the collective. Campers developed both self-aggrandizing and self-deprecating styles as they immersed themselves into the emergent culture. Displays minimizing self-worth seemed especially common in the group of regulars. Statements such as, "I play with computers way too much" and "This isn't a life, it is an obsession" were routinely uttered and were evidenced across all visited camp sites. At the same time, emasculating attacks were commonplace. Calling another male attendee a "bitch" or "gay" represented standard jibes and, in relation to specific camp sites, served as an important ascription for the establishment and maintenance of alpha status, even though most campers recognized the dominance as occurring within a very small pond of success. Apparently, the status processes involved in face-to-face communication at hacker conferences helped to mitigate status conflicts that arise online due to the limitations imposed on the ability to communicate verbal and non-verbal cues that signal status among parties engaged in face-to-face communications. Such emasculating assails worked to establish the individual's ascendancy both in relation to his peers and to his own self-identification. As one camper uttered to Crash when "Viking" began calling out for more beer:

> Someone is going to get raped and it won't be me …

Two ascriptions were manifest in this simple statement. The first recognized "Viking's" dominance in his larger group of listeners and the second, "the camper's" own looking-glass self-concern and implied feeling of personal status.

The Vocabulary of Motives

Joining the hacker culture at the CCC is unlike becoming a member of a mainstream organization or interest-based club (e.g., Toastmaster's, Cub Scouts, fantasy football leagues). To self-identify as a hacker is more akin to becoming part of a lifestyle subculture as opposed to a simple affinity group. This being the case, like with street gang members, outlaw motorcyclists, or cultish parishioners, a vocabulary of motives emerges that distinguishes and categorizes the individual within and in relation to the group. Jankowski (1991) describes such a vocabulary for street gangs that has been echoed by various researchers across the years (e.g., Skolnick 1990; Vigil 1988). In relation to hackers, seven distinct motives for camp participation were consistently and repeatedly observed and identified across various times and settings throughout the CCC. These motives would often set into motion the types of personal interaction the individual hackers would have with each other and frequently provided the basis for "tags" assigned to individuals in terms of their hacker handles or camp identities.

1) Material Resources. A quest for material gains and/or networking opportunities was the most consistently sited reason for attending the camp. The CCC provided an excellent occasion for participants to establish contacts that might lead to employment or paid consultantships, and it also gave campers an ideal venue to sell specific items to the collective of camp participants. As one camper put it,

> Some of these dudes would pretend otherwise … but it is a market here … we all are pitching something …

2) Validation. From the perspective of the general public, "hacking" is oftentimes naïvely or one-dimensionally defined as illegal or at least counterproductive computer use or data manipulation. The contrasting perception that hacking is the exact opposite—a socially valuable activity that advances both society and technology—was an important and affirming reason for participants to attend the camp. This was most profoundly apparent at the keynote address that centered around the speakers' dream of putting a "hacker in space." The presenters fervently emphasized that the hacker collective could do what the world governments could not or would not do—reinvigorate the manned space programs (Chaos Communication Camp 2011b). With each pronouncement, "We can launch a hacker satellite," "We can put a hacker in space," "We can put a hacker on the moon!," the gathered audience would cheer wildly for the encouraging potentialities of hacking and hacker group activities.

3) Belonging. The feelings of aloneness and of being a social isolate in life outside the camp were palpable in many of the conversations around the camp. While a sense of belonging can certainly be garnered though online means of social networking, and while it is recognized that affinity is becoming more commonly established in cyberspace, there is still a need for face-to-face human contact, even in a predominantly online-based community such as hackers. As one camper suggested, "Man, it gets me away from my screen … out of the

dark ..." During the conversation, Crash joked and said in a voice meant to imitate the main character in the classic film *The Elephant Man* (a story of a disfigured man outcast by society who seeks emotional connection and personal contact), "I am human!" The respondent laughed and confirmed, "You got that right."

4) Creating. It was generally acknowledged across the collective that the act of creation was actively encouraged and facilitated throughout the camp. Whether through group brainstorming leading to an evolution of shared ideation or because of individual inspiration sparked by the experience of the collective, creation was a prominent theme describing a motive for camp attendance. The creative process was commonly expressed through the development or reapplication of software and hard technologies. Campers also involved themselves heavily in the creation of art for specific aesthetic expression. Light boards, music manipulations, organic camp artifact displays, and even tent designs all emerged for the camp's enjoyment and as a hacking art outlet. When asked about the aesthetic aspect of hacker culture, one hacker suggested,

> Hacking is art ... math is art ... technology is art ... you just need the right audience to appreciate the expression.

5) Self-identification. While the broader self-identification as a hacker is manifest simply by attending the camp, there are more nuanced identities that are expressed within the collective and serve to give definition to self and to one's outlook on hacking. Whether a partier, an artist, or a political, these motivations become integral to the individual's identity as a camp participant and as part of their reputation after they have left the camp. As one participant suggested,

> This place tears down all that avatar (a term referring to adopted hacker handles) shit and lets or makes you show who you are ... yeah ... whether you want it known or not.

6) Time to resist. The camp provides the individual an opportunity to take a different path from others whose lives or life choices they view as objectionable. Padilla (1992) discusses this in relation to juvenile gang members and suggests that, in this case, the resistance is primarily against their parents and what they perceive as a limited existence of work and struggle. Thompson (1965) alludes to the same motivation in outlaw motorcycle gang members in their attempt to break free from the "square" middle class lifestyle that serves as an anathema to their individual existences. The point of resistance to the hacker and as displayed within the camp can be political or personal or both. The politics of hacking are evident and expressly discussed in terms of libertarian attitudes and progressive views on freedom of information as a fundamental necessity for any truly democratic society. Personal resistance focuses on a myriad of issues concerning middle class expectations, others' judgments of personal looks or status, or occupational doldrums. As one camper stated, "I am not just a programmer ... this is my cool." As another pointed out while referring to a "celebrity hacker" who had brought a camera crew with him to record his camp experience,

> That guy wants to prove himself more than he is ... filming it makes him think he isn't mediocre in what he can do.

7) Fun and lulz. Finally, attendance at the camp was arranged purely for fun, for the enjoyment of the community, and for the company of likeminded people. Like any conference, old relationships were reaffirmed or rekindled and new ones were established. Conversations, laughter, drinking, and drugs were all abundant in the scene and made for a festive atmosphere, as were pranks played for the generation of "lulz" (i.e., "the joy of disturbing another's emotional equilibrium" (Schwartz 2008)). When asked why he was attending, one camper looked at Crash as if he were asking a question with such a self-evident answer as for it to be absurd:

> Look around man ... who wouldn't want to be here ... this is fucking fun.

Conclusion

In a broad sense, the CCC is a professional, yet affinity-based gathering that relies on emergent rules, cooperative associations, and recognizable roles to function. As with other such gatherings, the rules and roles within the CCC change and emerge over time. Still, and as in other, more conventional gatherings, there are some consistencies that exist and persist to allow for stability in the group and ultimately for the collective's fundamental existence.

However, beyond broad similarities, the particular differences between the CCC and other organizational conventions stand out as points of interest to sociological investigators. In the context of the CCC, ethereal association, before, after, and even during the gathering, must be considered in the full understanding of the emergent culture. Who, as a participant, one becomes, how one becomes recognized as a specific type of participant, and what factors contribute to the acknowledgement of such identification, contribute significantly to the dynamics of the camp.

The process of attaining recognition as an authentic regular entails the sharing and integration of complex repertoires rather than being principally tied

to space and time. Indeed, the regularity ascribed and achieved, derived from prior connections to and understandings of a predominantly cyberspace-based community, is then transposed and translated to the particular space and time of the camp. While sharing many commonalities, from the researchers' personal observations it is also apparent that obvious differences exist between different hacker conventions (e.g., ShmooCon, DefCon, SyScan, Chaos Camp, etc.). Future studies should further compare and contrast these different conventions (see Bachmann 2010; Holt 2007).

As increasing numbers of people utilize Internet-based social platforms and other electronic means to connect to each other, and as their sense of community becomes less linked to time and space anchors, the process of becoming a regular is becoming more detached from the markers that other ethnographers have traditionally observed in established places and at discrete times. The idea of anonymous regularity, while more applicable to Internet-based interactions and the various means of social networking they offer, nevertheless becomes readily apparent in both the face-to-face encounters and the cultural patterns observed at the CCC. Thus, the need to understand collective identity as a fusion and transformation resulting from the collision of the ethereal with the more traditional forms of regularity becomes the task of the modern-day ethnographer and sociologist.

The social Web, oftentimes termed Web 2.0, has noticeably affected social life in innumerable ways. Its most popular platform, "Facebook," for instance, was launched in February 2004 and as of September 2015 has more than 1.55 billion active users. With their availability on many mobile devices, Web 2.0 platforms allow users to continuously stay in touch with acquaintances worldwide wherever there is access to the Internet. They also work by uniting people with common interests and/or beliefs. Although some argue that these platforms can be beneficial to one's social life, others maintain that they can cause increased antisocial tendencies because they substitute for direct, face-to-face communications. It is against this backdrop that the subculture of the Chaos Computer Club and all similar associations must be evaluated. It is simply no longer possible to view emergent participant identity and group cultural reality as happening in the vacuum of spatial and temporal confines. The anonymous regularity of social networking is important to the understanding of both and is increasing in its influence on the definition of any group or personal experience. Hence, rather than fitting the stereotypical perception as a loner dork, hackers almost appear as social innovators and many aspects of more ethereal hacker culture will soon become, at least gradually, incorporated into more traditional groups and cultures.

Woodstock Art and Music festival, billed as "An Aquarian Exposition: 3 Days of Peace and Music," was held at Max Yasgur's farm in New York's Catskill Mountains from August 15 to August 18, 1969. During the weekend, 32 musical acts played outdoors to the cheers of 500,000 concertgoers. It is considered one of the most pivotal moments in popular music history and a turning point in youth culture. Given the large attendance and the primitive conditions of the camp, the festival was remarkably safe and peaceful. And, meeting with the idealism of the 1960s, Woodstock fit the motivations, goals, and expectations for attending. It was the sense of social acceptance in the crowd that makes it one of the most important cultural events of its time. Ultimately, Yasgur saw it as a victory of peace and love. It was an amazement that such a large number of people could spend three days with only music, love and peace as sole personal foci. The CCC has often been referred to as the Woodstock of Hacker Conferences and indeed shares a similarity of atmosphere with the historic music festival. However, the ethereal nature of the CCC that is derived from the fact that the camp is a metaspace gathering of a predominantly online-based community eliminates the true communal nature inherent to the "happening" of the 1960s. The ties of regularity drawn from the ongoing past, present, and future online interactions of the conference-goers disallows the organic freedom of collective social evolution that typified the real Woodstock. The Chaos Computer Club community and camp both exist in cyberspace first and foremost and must adapt themselves to a face-to-face reality. As one CCC participant noted while hunched over a laptop and simultaneously monitoring his network card for potential intrusions:

> Look at it man, we came out of our caves, we will go back into them soon and we sit as if we were in them now … Whatever you are looking at in terms of the group, it started existing before we came here and what this group does will be decided long after we leave … hackers are tied continually on the web.

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