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The existence of a "digital divide," or inequalities of access to digital technologies among different American subpopulations, has been hotly debated and contested since the National Telecommunications and Information Administration first popularized the phrase in 1995. The purpose of this thesis is to critically examine the dominant discourses around the digital divide and articulate the existence of counterdiscourses to highlight the complexities of access to digital technologies and the implications of their various uses by African American college students at Oregon State University. After implementing a multidisciplinary approach incorporating interpretive analysis and ideas from cyberculture studies, using qualitative methods gleaned from cultural anthropology, a more multidimensional picture of the "digital divide" emerged. Early individual experiences with digital technologies, age, and location appeared to have a deeper impact on the students' relationships with digital technologies, challenging the dominant discourse's focus on race/ethnicity and socioeconomic status as primary determinants of an individual's lack of access due to their membership in a "disadvantaged population."

A Blank Screen?: Digital Divide Discourses and Practices

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Jasmine Powell, Author

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1 Introduction

The "digital divide" was a term coined in the mid-1990s to describe the different levels of access to digital technologies among different segments of the American population. Those adversely impacted by the digital divide did not have the same level of access to computers, a telephone connection, or the Internet as other Americans, which were believed to have profound implications for the ways that different groups accessed information, as well as educational or career opportunities. It has also become a political buzzword that has resulted in incredible changes in the way that people perceive technology, specifically the social impacts of the use and applications of digital information technologies. The discourses around the divide have proliferated since the late 1990s, and have evoked different responses manifested within government policies and community action. While the digital divide has been constructed as both national and global in scope, my research is strictly focused on conceptions of the digital divide within the United States. The unrelenting introduction of new digital technologies in the United States, along with the increases in computing power and the number of program applications has had a significant impact on the way in which millions of Americans view and use these technologies (Barber and Tait 2001; Chayko 2008; Palfrey and Gasser 2008). Racial, ethnic, and gender "lumping" of different segments of American populations by academics, politicians, community leaders, and corporations allow for quantifications of data that reveal contradictions within definitions and more complex realities of access and perspectives when disaggregated.

However, the digital divide looms large as a problem that is structured around particular ideas of how digital technologies--most frequently the computer--are not being accessed by specific segments of the American population. In this study I seek to examine the nature of the divide as it is constructed in the conversations and practices of African American college students at Oregon State University. The voices of these individuals are important to unpack the divide, which has been constructed as largely racial/ethnic and socioeconomic in nature. This qualitative study represents my attempt to understand how individuals interface with certain technologies and how their experiences and opinions complicate the dominant narratives.

A blank, black computer screen is very much symbolic of the lack of transparency into discourse on the digital divide, and what the predominant discourses actually tell us about the user practices and narratives of White, Asian urban and upper class Americans who are constructed as "digital haves" and the Black, Latino, Native, poor, and rural Americans constructed as "digital have-nots." The term, and the ensuing discourse around it, came into being during the period between the growth of the Internet in the mid-1990s and the "dot-com boom" of the late-1990s (Nelson 2002:1). Alondra Nelson argues that while the "digital divide has been used to describe gaps in technological access that fall along lines of race, gender, region, and ability," it has more than anything "become a code word for the tech inequities that exist between blacks and whites" (Nelson 2002:1). African Americans, perhaps more than any other minority group in the United States, are typically portrayed on the losing side of the divide in the dominant discourses on this issue (Barber and Tait 2001;Mack 2001;Taborn 2006). The

conversations and frameworks for looking at the "digital divide" as a social problem in the United States are structured by the definitions of that divide. Differences in conceptions of the digital divide reveal contradictions and problems that I seek to address in my study by looking at the discourse as it may—or may not—manifest within the conversations and practices among African American college students at Oregon State University.

Martin Kevorkian (2006) echoes Nelson's interpretation of the digital divide, which serves as a "polite shorthand in which race has been omitted in describing the gap between technological haves and have-nots" (2006:39) While he acknowledges that studies on this subject still use other categories besides race (such as geography and income) to measure access among various American populations, "the attempts to depict the access situation in its true complexity run up against the strength of established perception: when people hear 'digital divide' they tend to think in terms of black and white" (Kevorkian 2006: 39).

During the first round of the National Telecommunications and Information Administration's Falling Through the Net studies in 1995, access to the Internet and a computer were included in the information technology category along with telephone connectivity, which had been the traditional measure of access (and would later become necessary for a dial-up Internet connection in the late 1990s) (Servon 2002: 25-26). Servon notes that the first report showed "deep cleavages along racial lines in terms of access to technology" (29). The percentage of United States households with computers between the years 1994-1999 shows Blacks/African Americans lagging behind Asian

Americans, Hispanics, and Whites in terms of computer ownership despite a peak percentage of approximately 33% by 1999. Despite increases in Internet and computer access documented in later *Falling Through the Net* reports, there are still some disparities at the broad racial level. However, the trends interpreted in the 1995 report still structure the dominant discourses on the digital divide even today as the technological landscape has undergone dramatic changes.

While research continues to be done on the "digital divide" and the impacts of digital information technologies in the realm of education more generally, the voices of those impacted by the "divide" seem to be strangely absent. This silence has important implications for my research, which asks: *1) What types of technologies are these students using and what is their quality of access to these technologies? 2) How do African American college students view the "digital divide" within their communities or schools?* For the purposes of this study, I am including mp3 players (such as iPods), cell phones (with Internet access), personal digital assistants (PDAs), and computers in the category of digital [information and communication] technologies. Applications or websites such as MySpace, Facebook, Twitter, and IM (instant messaging) will also be under review as accessories to the aforementioned digital technologies. Computers and the Internet predominate in digital divide discourses as the tools that serve as measures of access for all potential users; however, digital and information technologies also refer to personal digital assistants, cell phones, iPods[1] and other accessory technologies which

[1] While most iPods are not necessarily for communication or information retrieval, they do require access to a computer (primarily for the operating software, also included within this category) and the Internet for the music or videos and photos stored in these devices.

need computer software or an Internet connection to function. By including a broader category of digital technologies used in conjunction with computers in my study, I hope to elucidate new ways of thinking about the digital divide, which may or may not impact the responses of the informants. I also hope to reframe how these users are constructed within digital divide discourses as well as the contributions to counterdiscourses on the divide as one theoretical perspective on the links between race/ethnicity and technology.

There are two major aims for this study. The first is to examine the digital divide as it may or may not manifest within the practices of the African American college student population in Corvallis, Oregon. The fact that the variables of socioeconomic status, gender, and region (there may still be others) are often glossed over highlights the problem with framing the divide as largely racial or ethnic in nature, and ignores the diversity within these communities, particularly when the statistics for White American users of digital technology are always used as the default for comparisons. There is a paucity of research on the divide *within* different segments of the African American population. By highlighting the diversity within an African American subpopulation via the documentation of the voices and experiences of individual technology users, I seek to understand whether African American college students at OSU have varying levels and quality of access to digital technologies that can influence their possibly hidden contributions to counterdiscourses around the digital divide.

My second aim is to provide more transparency to the different conceptions of the digital divide and the stereotypes and assumptions that inform them. The dominant discourses shaped by policy regulations, academics, pundits, and national statistical data,

focus on the lack of access to digital technologies due to structural inequalities such as racism or poverty. This emphasis on gaps in the level of access may be overstated as African American college students consistently demonstrate digital tech savvy via appropriation and innovation of new digital (information) technologies. Given my own personal experience as a fully wired, African American college student, however, the previous statement reflects assumptions on the part of the researcher that will be tested by analyzing the practices and voices of this group of technology users. As a member of the group under study, this study will also be informed by a reflexive approach to the research questions in addition to the analysis of individual practices and voices. By using a mix of qualitative methods, including the use of a brief online questionnaire and semistructured interviews, I seek to better understand the nature of the "digital divide" phenomenon and its impacts, if any, in the lives of the college students participating in this study. *What*, *when*, and *why* the student chooses use while accessing certain technologies has not been as much of a concern to researchers as simply being able to access the machine itself. Furthermore, not enough attention has been paid to the accessory technologies and applications (such as iPods) that require access to a computer, as well as the proliferation of mobile devices like laptops, cell phones, and Blackberries that allow a connection to the Internet without a grounded physical space—the surface and electrical outlet required by desktops, the main focal point of older studies validating the existence of the digital divide. Consequently, the goal of my study is to illuminate what African American college students *actually do* in terms of using technologies, *how*

and *why* they access these technologies and the Internet, and how individual experiences may suggest counterdiscourses about the digital divide.

Larger-scale studies at the university or federal level employ structured interviews, surveys or questionnaires to ask questions about computer ownership, basic access, and frequency of use. Longitudinal studies, like the National Telecommunications and Information Administration "Falling Through the Net" studies (1995, 1998, 1999) (Hill 16-17) have focused strictly on one type of digital technology, the computer, and have relied on socioeconomic indicators such as race/ethnicity, region, and household income to construct a demographic breakdown of the divide. The reports and results of national studies published in the *Journal of Blacks in Higher Education (JBHE)* are largely quantitative, and while useful, the quantitative data only examines the divide as it manifests among African American students in predominantly Black colleges and universities, which are a smaller proportion of the total number of higher education institutions in the United States. In much of the literature on the digital divide, access means different things in different contexts; one of the things that my study will do is to provide a more multifaceted and transparent definition of “access” in the context of this issue. At present, however, I am defining *quality of access* as a reflection of how often certain technologies are used, the purposes of their use, and the type and meaning of the content being accessed.

Following this chapter are three sections which examine the dominant discourses on the digital divide, the problems with certain assumptions in these discourses and the methods used to investigate counterdiscourses to the digital divide as it may or—may

not---impact the way that the participants in this study use and view digital technologies. Chapter II will review the existing literature on the dominant digital divide discourses, outlining the reasons why this phenomenon must be viewed from another perspective in the context of extant literature arguing against oversimplified readings of disparities among digital tech users in the United States and the implications of these gaps for African Americans in particular. Chapter III includes a more detailed discussion of the methods used during this study as well the theoretical framework that serves as the basis of analysis for the my observations and informant responses. This chapter will also highlight the ethnographic component of the research, designed to accomplish the aforementioned aims of this study by drawing on the responses of thirteen African American students at OSU regarding their interactions with digital technologies, six of whom participated in in-depth interviews. Given that I am also an OSU student with my own unique relationship to digital technology, my user experiences will also be compared those of the students interviewed to create a richer picture of how individual choice, background, gender and other social factors play a role in shaping African American interfaces with digital technologies beyond the desktop computer. A reflexive approach and an exploration of individual practices in the context of supporting literature regarding broader trends and subcultural practices will open a space for counterdiscourses to the digital divide. Chapter IV concludes this study with a discussion of the degree to which the digital divide manifests in the conversations and practices of the informants in regards to the results of the ethnographic analysis. The development of other counterdiscourses may offer new lenses on how technological progress is to be measured not just among

one population of African Americans, but among other populations as well, since all Americans are impacted by their degree or complete lack of access to digital technology in some fashion. The dire prognosis for an even wider divide in the future between different populations must be approached with a critical eye that sees the issue of digital technologies and the quality of access to them beyond black and white.

2 Background: A Question of Access

The concept of the "digital divide" had entered the national conversation by 1995 (Banks 2006; Brock 2006; Mack 2001; Montgomery 2007; Servon 2002). The first major studies on the digital divide were conducted at the federal level by the NTIA (National Telecommunications and Information Administration) in 1995, 1998, and 1999. In 1995, determining demographic profiles and rates of computer ownership and telephone service in the United States were the primary focus of the NTIA studies. Since 1998, the focus has broadened and evolved with digital technology itself, with the NTIA focusing on Internet usage and "whether skills affect [broadband] Internet access" (Brock 2006: 357). However, other institutions and media, such as the *Journal of Blacks in Higher Education (JBHE)*, have continued to focus primarily on computer ownership and the availability of computers as a measure of a widening or decreasing technology gap.

According to a 1999 JBHE report based on the *Falling Through the Net* results from that same year, the "good news was that there was no longer any racial gap for computer access for black and white college students *while they are in school classrooms or in college libraries*" (JBHE Autumn 1999:57). Subsequent reports from 2000, 2001, and 2004 continued to herald the closing of a racial gap for African Americans in predominantly Black colleges compared to White students in "mainstream" colleges, while lamenting the disparities between Blacks and Whites in regards to African American students' access to computers in the home. If the digital divide is simply about having a computer available, then at the outset it would appear—according to the

JBHE—that the cause for alarm is overexaggerated since African American college students are roughly equal to their White counterparts, established as the "default" or norm population in these studies. The persistence of different conclusions reached in regards to the survey results (*JBHE* Autumn 1999:57) reported in this journal however further underscore the need to clarify the how the discourses on the digital divide have developed over time in order to challenge the assumption that lie within.

Dominant discourses around the "digital divide" have produced deceptively simple definitions describing it as "the lack of access to IT [information technology] for certain segments of the population" (Servon 2002:1) and alternately as "the growing disparity between the 'haves' and 'have-nots' in the current digital revolution" (Mack 2001: Introduction, xiii). Mack's definition however, reads as an indicator of a more extreme reading of the divide as a trend that has "perhaps the greatest potential to doom the 'have-nots' to the status of permanent underclass" (2001: ibid) African Americans are more frequently cast as "victims" of a crisis that is symptomatic of historical disparities in socioeconomic status and access to education and other rights and privilege in this country due to the effects of institutionalized racism, rather than being viewed as a population of consumers and producers of digital technology and applications. Therefore this study will examine the premise that "access" to different digital/information technologies and how people feel about certain technologies is as much a function of individual choice and motivation as it is impacted by factors such as region, income, gender, level of education and local cultural attitudes that affect those students as members of a larger ethnoracial group.

There are other researchers, perhaps most notably Lisa J. Servon, but also figures like Adam Clayton Powell III (Servon 2002) and Benjamin Compaine (2001), who collectively suggest a counterdiscourse to prevailing sentiments about the terrible implications of a lack of access for the "have-nots" aka the "information poor" aka African Americans (along with Latinos, Native Americans and the urban and rural "poor"). While the general consensus within this group is that there is incontrovertible proof of disparities between different social groups in regards to accessing and use diversity of digital technologies, ideas about the severity of the crisis and whether the closing of gaps suggest cultural shifts vary along a rather narrow, but important spectrum. The criticism that the "digital divide" is a simplistic (and often overexaggerated or misused) concept is a valid one, especially when one considers that for the average college student attending a wired college campus, a variety of computer resources exist on campus that are often free and easily accessible.

Benjamin Compaine's statement that there was a "digital divide" before there were the "information haves and the have-nots" (Compaine 2001:3) throws a wrench into predominant discourses that posit the gap between the "information-poor" and the "information-rich" and the lack of access or ownership of a personal computer as one in the same. Whether a group or an individual is deemed "information-rich" or "information-poor" is seen as a function of how connected they are to a particular digital technology, such as the computer (or more specifically, the Internet), and whether they have enough basic skills to use these tools to locate important information—this could be anything from job listings and applications to entertainment content that serves the needs

of a particular individual. Compaine cites the first references to "access" to personal computers fifteen years before the World Wide Web or the first NTIA studies were conducted, by "commentators noting the first school anywhere to install an Apple II in 1980" (Compaine 2001:3). Thus it appears that Compaine is arguing that if access is merely defined as having close proximity to a computer and being able to use it, then the divide is somewhat trivial when one considers that computers and laptops have continued to decrease in cost over the years and that many children are adept at using computers in the home before they even access them at school or elsewhere. However, disparities between the "information-rich" and the "information-poor" are more problematic and merit further study because the kinds of information accessed by individuals, as well as the frequency and motivations behind their practices are what determine the *quality of access* experienced by individual users, which is at the heart of this thesis.

Abdul Alkalimat (2004) takes a somewhat intermediate position in the debate around the validity of the "digital divide" as a real and growing problem in the United States. Like many of the proponents of the "digital divide," Alkalimat argues that African Americans are "disproportionately on the disconnected side" (2004:95). Upon examining the "three contexts in which Americans use computers" however, he also suggests that race is not the sole or primary factor that determines whether an entire subpopulation is considered to be on the winning or losing side of this divide:

> African Americans are behind in the use of computers at home and at work, but are more on an equal par in using public access computers at school, in the library, and the community technology center. There is general equality for African Americans when their household income is over $100, 000 (2004:ibid).

While the first observation references the general fact that African Americans as a whole are still less connected than their White counterparts, it ignores the diversity of access levels within the Black community. Alkalimat's research and listing of over one hundred websites with content created *by* and *for* African American users suggests that there is more to the story of the "digital divide" than previously thought. Since Whites and other groups such as Asian Americans are assumed to have a higher level of access in all contexts, there has been little said about whether the library and other community technology centers are also sites that are used by different segments of the White and Asian American populations, whether or not they own computers or have access to the Internet. This last fact, combined with the mention of "general equality" with an income of over $100,000, suggest that race or ethnicity alone does not explain away the differential levels of access at the basis of the digital divide. Even when socioeconomic status is discussed as a factor in the level of access a particular group has to digital technologies, being African American is also associated with socioeconomic disadvantages, precluding any deeper investigation into trends such the one mentioned above. Since the advent of the Internet, some African Americans have been creating both "ethnic" content that serves the unique needs of African American communities, as well as accessing educational and other types of information created by others (Alkalimat 2004: 95-96). The dominant discourse around the digital divide has subsumed much discussion and critical exploration of these trends, which is due to largely to the issue of "access" being as ill-defined as the larger phenomenon it is at the heart of.

Dr. Appu Kattan and Dr. Laurence Peters discuss the problems within predominant discourses on this issue by positing that the "[digital divide] has become a favorite catchphrase for academics and pundits, educators and politicians. Unfortunately it has been misused and overused so often that it has become just another amorphous catchphrase that has clouded the real and pressing problem it presents" (Kattan and Peters 2002:2). The amorphous nature of the digital divide becomes quite clear when one looks at the definitions of the term itself and the definitions of "access," used an indicator of whether the divide has been bridged or not in certain populations. People of all ages, but particularly youth in K-12 schools and college seem to have access to computers through media labs, elective courses, local libraries, community centers, and at friend's houses. For the American university student, access to the Internet is essential; all personal information and course schedules are increasingly stored in online databases in addition to paper files. Millions of students deemed to be on the losing side of the divide may not have a personal computer, but have friends or relatives who do. The popularity of websites like Facebook and MySpace and youtube.com are testaments to this, as anyone with knowledge of a friend's biographical information and email address can create a profile for a friend or family member.

Any discussion of the digital divide will inevitably include meditations on what constitutes "access," as this is at the core of how the digital divide is constructed in national and local conversations. In the introduction to *Technicolor: Race, Technology and Everyday Life* (2001), Hines, Nelson, and Tu argue that "when attention is turned to the implications of race for theorizing technology, people of color are cast as victims"

(Hines, Nelson, and Tu 2001:3). Furthermore, this is "most commonly witnessed in discussions about the digital divide…which become rationalizations for why people of color fail to have 'productive' relationships with technology, and justifications for the still uneven distribution of technological resources and knowledge." Rather than taking the digital divide as is, the goal of this study is to analyze how prevailing discourses obscure the agency of a certain population of minority users that are cast as "victims" of a widening gap, regardless of their quality of access to digital technologies.

Lisa J. Servon also argues that the popular conception of the digital divide is too narrow, with the technological gap being defined as "a problem of access in the narrow sense of possession or permission to use a computer and the Internet" (Servon 2002: 4). Early studies on the digital divide, most notably the series conducted by the National Telecommunications and Information Administration (NTIA) in 1995, 1998, and 1999, presented the problem of "access" as one where the personal ownership of a computer and/or access to the Internet was the end in itself, rather than a means to an end. Logan Hill's "Beyond Access: Race, Technology and Community" (Hines, Nelson and Tu 2001: 13-33) tackles the myths of the "glorious digital democracy" (13) by examining the digital divide through the context of federal data on information and access gaps. Furthermore Hill examines four "sites" at which a new digital and allegedly progressive politics is manifesting to address and bridge the divide: 1) high-tech labor, 2) universal access (aimed at wiring low-income rural areas, libraries, and schools lack significant access), 3) community technology centers (CTCs; libraries and local computing centers are examples of these) and 4) racial/ethnic content providers (i.e. BET.com and AOL

Black Voices). While this thesis will not address these sites and the politics around them in any detail, universal access and the role of community technology centers are relevant to the analysis of individual user histories and environments of experience.

Citing studies from 1995 through the year 2000, Hill asserts that the divide continues to widen, and that the gap between the "information haves" (the rich, white, Asian and urban dwelling populations) and "information have-nots "(the poor, Hispanic, black, American Indian, or rural-dwelling populations) is growing. While this racial lumping and the use of hyperbole like "racial ravine" by the NTIA and other corporate or government entities to describe the severity of the "digital divide" undermine the fact that "groups that have traditionally been digital have-nots are making dramatic gains" (Servon 2002:4), Hill states that the digital divide "isn't just about personal computers, it's about training, access, education, content, telecommunications infrastructure and more" (Hines, Nelson & Tu 2001:15). This runs counter to predominant discourses suggest that "access" is the defining measure of how large the divide is and whether it continues to remain a problem. If access simply means the ability to use a computer close to one's residence or the availability of computers period, then it would seem that the "divide" is overstated. Thus, the *quality* of access and the *motivations for using certain digital technologies and applications* is equally as important as acknowledging that there are gaps that exist between different subpopulations. Servon acknowledges this by positing: "Redefining 'access' requires shifting the primary question from who has access to 'what are people doing' and what are they able to do,' when they go online" (Servon 2002:6)

Adam J. Banks' model for a "useful definition of meaningful access" (Banks 2006:40-41) critiques the more simplistic definitions of access that focus on computer ownership or local availability of computers and the Internet—*material access*---while acknowledging that access itself is only one dimension of a larger racial divide that is informed by a history of political and economic inequality. Material access is only significant when connected to *functional access*, when users have the training and skills necessary to use digital technologies effectively (Banks 2006:41). On one end of the spectrum, within arguments that suggest a closing of the technological gap, is a lack of discussion of functional access to digital/information technologies. Material access is in this case is the end goal and disregards unequal distribution of resources and trained technological experts and structural racism as impediments particular to African American users in achieving functional access. The last form of access, the most total and meaningful, is *experiential access*, which is achieved once the user has accessed content and resources relevant to their community and individual interests as a result of acquiring the training and skills to do so (2006:42). Achieving experiential access also implies that African American users that do so consistently make personal choices as to the relevance of digital technologies and the content accessed via those technologies.

Another aspect of choice interestingly mentioned by Raneta Lawson Mack can be interpreted as an explanation for a digital divide that continues to grow; in other words, those that do not want or choose to purchase computers contribute to this divide as much as those without access deemed to be "victimized" by disparities in technological access. Mack argues that a common assumption, which may be built into dominant discourses

around this issue, is that "because computers are so reasonably priced and acquired today anyone who doesn't own a computer is simply making a choice not to own one" (Mack 2001:35). While the prejudice that individuals who don't want to access digital technologies are somehow lazy, backward, or detached from technology could be gleaned from this assumption, we cannot underestimate the power of individual choice as it affects both material access and more meaningful forms of access. Furthermore, access can be tenuous; some users may have had functional or experiential access to certain technologies and applications at one period of time, but the quality of access declined or changed in another moment. This processual view highlights the fact that material access is superficial and only one component in determining the *quality* of access for African American users of digital technology. Personal experiences, gender, region of residence and economic status not only influence how individuals attain material access to technology, but shape their view of it as well. The informants who participated in this study have differing levels of access that go beyond the material and are unique to their experiences as African Americans and OSU students.

In *Virtual Inequality* (2003), Mossberger et al introduce "access" as the core of *one type* of "digital divide" in their attempts to rearticulate the problem. Rather than seeing the "digital divide" as a singular crisis, they acknowledge that differential levels of access to digital resources in the United States are the products of "multiple dimensions" of these technological disparities. This schema posits the existence of an access divide, a skills divide, an economic opportunity divide, and a democratic divide as more accurate and holistic measures of digital or virtual inequality (Mossberger et al 2003: 7-9).

While the authors used a qualitative approach to use the divides as "more reliable"[2] statistical measures of access to digital technologies (2003: 17-24), I plan to use interviews to further develop a richer definition of access based out of the experiences and responses of the informants. This approach differs from the one that informed the dominant discourses, which focused only on statistical measurements of "access," defined as simply being near enough to a computer or cell phone to use it or by rates of ownership of these technologies.

[2] Compared to the 1995, 1998, 1999-2000 NTIA studies on the "digital divide," which the authors argued relied on simplistic interpretation and less reliable statistical controls.

3 Observations and Analysis

3.1 Methods

College students, regardless of race, gender, or economic status, have roughly equal levels of material access to computers and the Internet via technological service and facilities on campus—a unique situation in the context of discussions surrounding the "problem" of the digital divide. While the all of the OSU students I interviewed come from different places and walks of life, all share the same basic level of *material access*, while their individual *quality of access* is shaped by a combination of factors unique to each participant. These factors include everything from the individual's birth date to the influence of family and friends shaping their views of and access to digital technology from childhood through adolescence. In the winter of 2008, a preliminary questionnaire was distributed online to African American students via the Ujima listserv; the questionnaire consisted of ten questions asking participants their age, major, place of birth and current residence along with descriptions of their first encounters with digital technologies. While the entire African American student population at OSU has not subscribed to this informational listserv for Black students, a large proportion of students are on this listserv which serves as one of the most effective means of communication and informational networking for the students in general and for this study in particular. Currently Black students make up about two percent (perhaps even slightly less) of the OSU student population, which meant that any systematic sampling for potential informants would have been too time-consuming over the course of this research. Using

email as a way to reach a broader population in the least amount of time allowed me to preview the responses from the preliminary questionnaire to develop a sort of digital technology user profile for each informant.

Out of the dozens of students on the listserv, thirteen students responded, filling out the questionnaire and returning it to me after two mass emails requesting their participation in the study. Given the small size of the informant pool, I decided to request in-depth, semistructured interviews from all of the respondents to develop more diverse [digital tech] user profiles of each student. Six in-depth interviews (one of which was an electronic interview) were conducted over the course of the study, along with one follow-up interview with one of the six in-depth interviewees. These six interviews were the responses of the core informants, whose responses were compared and contrasted with those that only completed the preliminary questionnaire to create a more complex picture of their user practices and perceptions of access to digital technologies. While the reasons for the low response rate are uncertain, the fact that many of these students have daily interactions with digital technology may explain why participating in the study beyond the questionnaire or first interview may have been viewed as unnecessary or could have been taken for granted. Indeed, some students initially had a difficult time articulating a response to the last question on the preliminary questionnaire: "What does the 'digital divide' mean to you? What comes to mind when you read the phrase/hear the term?" This suggests that while each person's user history and quality of access to computers and other digital technologies are unique, there is also a general perception that the divide is not significant, or that there may not be one perceived at all.

These observations and an analysis of the context from which they were produced are at the heart of this chapter.

Eleven of the thirteen informants were female, while three were male. This sex ratio was not unexpected, however, considering the higher number of women enrolled in college in the United States, and the more specific disproportion of African American women attending universities relative to African American men. Four of the informants were born in Los Angeles, California, although they come from very different socioeconomic status and generational backgrounds. Virtually all of the respondents were born in or have spent the majority of their lives living in the Western United States, with the exception of AR,[3] who is originally from Indiana. The rest of the informants had been born or spent most of their lives in Oregon; only Portland, Hillsboro, and Beaverton were represented in this group. The informants also were diverse in terms of their major fields of study and history of technology use, especially regarding their first experiences accessing the computer, Internet, or other digital technologies such as MP3 players, beepers, and PDAs (personal digital assistants). My decision to broaden the category of digital technology with respect to how different people are impacted by the so-called "digital divide" is underscored in the following statement by Hines, Nelson, and Tu:

> When we limit discussions about technology simply to computer hardware and software, we only see a 'digital divide' that leaves people of color behind. Casting our nets farther and wider allows us to more fully realize the different

[3] All study participants have been assigned initials to protect their identities. These initials and information form corresponding user profiles will be the only information used to distinguish informants.

> levels of technical knowledge and innovation that individuals and communities bring to their work, play, and creative expression (Hines, Nelson & Tu 2001: 5).

Since the ownership or availability of computers and Internet access were the defining measures of access since the original proliferation of digital divide discourses in the mid-nineties, it seems strange that these older measures continue to shape the parameters of how scholars and researchers view access as an indicator of technological progress. How the informants use various digital technologies for "work, play, and creative expression" challenges the predominant discourses as these practices view access and what it mean from a different lens.

Rather than solely being defined as "victims" or "safe" from damaging technological disparities that impair the accumulation of useful social and cultural capital, the informants candidly answered questionnaire and interview questions were designed to elicit individual definitions of the "digital divide" that could run counter to the traditional definitions---if a divide was perceived at all. The notion of a technological gap defined largely in racial terms was rendered incomplete and problematic and the informants listed other factors—some novel—that had been missing in the much of the prevailing discourses. In the following profiles of the six core informants, I examine how their initial responses may have differed from their later responses during the interviews face-to-face with the researcher. For the semistructured interviews, the original ten questions from the preliminary questionnaire were used, but this new questions included additional, more specific questions designed to elicit more in-depth responses during these sessions. By examining their technology use histories individually and analyzing their responses as

a group, an analysis of trends and themes in perceptions of the digital divide will inform counterdiscourses and a new approach to examining access to digital technologies in the concluding chapter. Since I have been acquainted with some of the informants prior to their participation in the study, I will lend my own experiences with digital technologies and my observations to intersections of experiences that could also contribute to a new perspective on the implications of current technological gaps.

While I seek to highlight the diversity of practices and perceptions of African American students at OSU, the responses of these students are still not representative of all African American college students at OSU in particular, and certainly not representative of those of African American college students in general. More longitudinal studies of African American college students at OSU must be conducted before any trends can be extrapolated from such data. In the future, comparative studies of African American college students across different campuses may yield an even more complex picture of how this population perceives and interfaces with digital technologies. While participant observation was not feasible due to my status as a full-time student and the demands of the informants' schedule, this method would be useful in a study conducted over a longer period of time. Samuel Hampton's pilot study of African American women in a community technology center at Cleveland State University involved the observation of African American female college students, which allowed him to "verbalize with subjects" in order to draw out "valuable information regarding the students' feeling, opinions, and concerns, not only relating to technology, but also to being a college student, an African American, and so forth" (Hampton 2004:146). The

practice of collecting tape recorded interviews were the only qualitative methods that Hampton and I shared in common. Since his focus was examining the role of culture in the motivations behind the types of content and class projects these students chose to access and creates, his methods also included reviews of student journals and class assignments, as well as directly observing when and how they accessed the Internet. As I was not privy to the same sort of information for the core informants as Hampton had been for both practical and ethical reasons, the creation of the semistructured interview questions were informed by the responses of all thirteen informants, and left open-ended enough in order to elicit more elaborate meditations on both older and newer topics. Given my difficulty in securing responses to the preliminary questionnaire, semistructured interviewing, "based on the use an interview guide" (Bernard 2006: 212)--and useful in situations where more than one interview with an informant is uncertain—seemed most appropriate.

In addition to using qualitative methods based in cultural anthropology, as well as the social sciences more generally, I decided to implement an interdisciplinary approach to better analyze the responses of the informants and generate emergent themes from their articulations of what access meant to them, as well as my own observations and familiarity of the dominant digital divide discourses. Thus this approach incorporates a descriptive and interpretive framework that combines the ethnographic lens of anthropology with the focus on examining intersections of race, gender, class and technology which has been a significant part of critical cyberculture studies since the year 2000 (Hines, Nelson and Tu 2001; Nakamura 2006). While the existence of a "severe

technological gap" not only evokes the long history of institutional inequality in the United States, the dominant discourse also reduces African Americans as a group that is somehow inherently less able and less advantaged than White Americans when it comes to having meaningful relationships with technology (Banks 2006:31). Although Hines, Nelson and Tu make the argument that people of color in general are cast as victims of structural inequalities or their own cultural pathology when it comes to appropriating digital technology (2001:3), they also acknowledge that not all people of color "share the same relationship, historically or structurally, to technology (2001:5). The authors then list the visibility of "techno-savvy Asian whiz kids" as an example of this. Nevertheless, they position this image as both having a basis in reality, as well as lending itself to stereotypes that suggest *all* Asian Americans are not affected by the same factors that influence a lower level of access to technology among *some* African Americans.

Such generalizations are also hidden within the dominant discourse around the digital divide as justifications for the quantitative data on the still ill-defined measure of "access." For example, Figure 2.2 from a report released in conjunction with last of the *Falling Through the Net* study series (2000), shows Asian American and Pacific Islanders outpacing both Whites *and* African Americans in regards to computers in the household since 1994 (Servon 2002:29). While this should have resulted in a reevaluation of the digital divide as a largely "black and white issue," the focus on the latter aspect remained. Even if Asian Americans were stereotyped as having "more and better" access to digital technologies than Whites and African Americans, African Americans were still the most portrayed as being the most negatively affected group in this scenario. When one

considers that the debates around race and racism in the context of technology emerged long before any discussion of the digital divide, then the value of counterdiscourses around the issue becomes very clear.

Bruce Sinclair has compiled a collection of critical essays suggesting new paths in the study of technology and how it has impacted and been shaped by African Americans; one of his primary theses is that "technology has long been an important element in the formation of racial identity in America" (Sinclair 2004:3) Citing both African American and non African American scholars, he goes on to assert that technological capability, along with masculinity and superior intelligence were associated with Whiteness, with Blackness racialized as the complete opposite of all that Whiteness was supposed to entail, including technological prowess and inventiveness. While Sinclair is focusing on (primarily industrial) technology in general, digital technologies are still a powerful analytic with which to examine these issues. Sinclair argues that the ways in which "white, Anglo-Protestant Americans made technology and the capacity for its skillful management" a part of the ways they distinguished themselves from other groups on the ladder of "progress" are an example of Toni Morrison's concept of "Africanism" (2004:5). Morrison describes Africanism as a trope within literary discourse that relies on a "denotative and connotative blackness that constructs African peoples as both savage and inferior 'Others', as well as the discourses and assumptions that accompany Eurocentric learning about these people" (Morrison 1992:7). While the literary discourse Morrison refers to and the dominant discourse around the digital divide are two

different phenomena, they are still informed by ideas about race, technology and society that continue to inform the ways in which people relate to and think about technology.

However, one must approach the concept of Africanism with caution. There are African American scholars and activists who more or less agree with the prognosis that the "digital divide" will continue to have dire consequences for African Americans without access to digital technologies (Mack 2001; Taborn 2006). Yet they also are operating with the knowledge that race *alone* cannot be used to explain technological disparities and that socioeconomic status and geographic location also play a role in differential levels of access. Nevertheless, perhaps another thread of "Africanism," vis-à-vis virtue the reluctance of historians of technology or cyberculture scholars to discuss race, or at the least examine race as more than an "intrinsic, timeless feature of identity" (Sinclair 2004:156; Nakamura 2006), still pervades our consciousness.

Martin Kevorkian's research on the images of Black people and their interactions with technology in literature and popular culture takes another view suggesting that African Americans are increasingly depicted as "natural machines" and computer experts in films as a way to work out racial anxieties over power, technology, and the changing racial landscape (2006). Africans and poor African Americans, in particular however, have been viewed as the face of the "gap," the digital divide rendered in black and white. In the spirit of Lisa Nakamura's work on race, digital participation, and digital representation (Nakamura 2002), Kevorkian describes a multitude of images published by companies such as Dell, Time Warner, Southwestern Bell, and IBM that feature of images of Black men, women and children, as needy recipients of the benefits of digital

technology (Kevorkian 2006: 39-43). The fact that the "placement of small colored people next to the machines forms an association for the advancement of computers" underscores why he believes that "any attempt to depict the access situation [in the context of the digital divide] in its true complexity" routinely fails. Even in the face of challenges to stereotypes about African American detachment from or "lack" of ability when it comes to technology, these older ideologies buttressed by new images and discourses are still very powerful. The only way to articulate a more complex vision of the digital divide and how various populations of African Americans perceive it (if at all) is to add studies like this one to a growing corpus of counterdiscourse literature that deconstructs the issue from a critical perspective. Lisa Nakamura has posited that "the Internet has spawned a whole new set of vocabulary and specialized terminology…as a tool that has enabled a genuinely new discursive field" which requires "new descriptive terminologies and conceptual frameworks" (Nakamura 2002:1). I would also add mP3s and the new generations of cell phones and personal digital assistants as applicable to this formulation. By exploring the practices and opinions of the thirteen informants that volunteered to participate in the study, the goal of formulating a more complex picture of how individuals shape and are impacted by the changing national digital landscape will become a more concrete reality.

3.2 Everyone has a Computer, Everyone Has a Cell Phone

UU was born in Portland and moved to Beaverton during elementary school. As a freshman at OSU, UU is a member of the Facebook and MySpace social networking sites (like many of her peers). Like several of the other informants, her first experience with a computer was in elementary school, but she accessed the computer earlier than me and the informants over the age of 21, first playing simple computer games in the second grade and using the Internet for the first time in third grade. Born in 1990, UU's first experiences with computers coincided with the Internet becoming a mainstream tool in American homes by the late 1990s. In the preliminary questionnaire she traced her first experiences with digital technologies *later* than she described in the in-depth interview, during which she could not remember when in elementary school (first grade) she first accessed the computer. I expected her to remember this period in the in-depth interview more accurately since this question was intended to cue her earlier response on the questionnaire. However, what she used the computer *for* during the formative years of her childhood was what she recounted in the most detail:

> JP: Do you remember what type of games you played?
> UU: There was this one game it was called "Chip."---
> JP: [Chip?][4]
> UU: "Chip, yeah. There was this guy and you would move him with the arrows, and you'd try and get these different pieces like, it's all these little mazes and you'd watch out for all these little creatures / I don't, I don't---
> JP: That sort of sounds familiar…

[4] The closed brackets indicate overlaps or interruptions between speakers; two consecutive hyphens or the use of a forward backslash indicate an abrupt pause or shift in the subject of the current speaker, respectively. These symbols excerpted from the interview transcripts are partially adapted from the transcription symbol key listed in Bernard 2006:488.

> UU: And then you'd get these different colored keys to open these different doors and then / once you---and it's timed…

This game, along with other "more educational games," was played by UU with her brothers and cousins in the community library. The community library tended to be the site where some of the interviewees first began accessing digital technology, first using the computers to play simple games and type school assignments, then transitioning to working on the home computer or school computers more often for research and homework during adolescence. The latter habits remained relatively unchanged as these informants grew into young adulthood as OSU students. By 2000, computers and Internet access were significantly more affordable than they had been in the nineties, with a greater diversity of options to choose from. This informed the perception of several of the informants, including myself at the beginning of this research, that "everyone had a computer, everyone had a cell phone." However, UU followed these statements with an explanation behind this assumption, a caveat suggesting that, due to our deeper discussion on the digital divide, perhaps the picture of how Americans in general and African Americans in particular access and use is more complex than is generally thought.

UU's current level of digital technology use has increased along with her expanded ownership of digital technologies and her access on campus to the computing centers in Waldo Hall and the Valley Library. The ubiquitous cell phone has saturated America's technological landscape as much as the desktop---and now the laptop—computer has, so much so that cell phones and computers have begun to share many

programs and applications in common, with many being fitted for wireless, high-speed Internet. During our follow-up interview, I asked UU to describe her phone. She seemed a bit puzzled by the question as she held up the silver and gray, 4.5" phone with a sliding cover stating that it had a camera and the "same stuff other things [referring to cell phones] have." The "same stuff" refers to the cameras, Internet access (for an additional fee), games, and texting/instant messaging applications that were once trendy but are now standard in most cell phones. She emphasized that it wasn't an *advanced phone*, however, like those with touch screens, since "it's like, a year old." The breakneck speed at which new digital technologies are innovated and placed on the market has altered not only our perception of what renders a technology "obsolete," but our perception of time in general.

UU's iPod Touch, or iTouch, is the most recent digital technology that she has come to own (she shares a laptop with roommates). The iTouch is the newest "generation" of iPods, with more applications, MP3 and photo storage capabilities than previous generations (iPod 2nd generation, iPod Nano, iPod Shuffle, etc.) The iTouch also allows UU wireless Internet access when she is not able to immediately access a computer; since the Internet capability is built into the device, there is no extra cost to accessing the Internet, as there is with her current cell phone. However, the wireless connection is not always "instant" as the connection on the iTouch "takes too long to load." She rarely used the iTouch for Internet connections, preferring the computer because "it's just the thing about the mouse I would rather have that to click around." This emerging theme of preference for a particular design and functionality versus the

speed and assumed convenience of the digital technology is repeated in the responses of older informants that will be addressed later, as it suggests another dimension to the divide as a reason why people may choose not to engage with certain technologies.

JS is an African American male recently turned 30, at the tail end of the "dot-com generation" but could also be considered a member of the younger "iPod Generation." John Palfrey and Urs Gasser would consider JS to be a "Digital Settler," someone born before 1980 and while not native to a digitized environment, has helped shape its contours (2008: Introduction, 3-4). (The difference between "Digital Natives," "Digital Immigrants," and "Digital Settlers" will be revealed later in this section, but the implications of these terms will be discussed in more depth in Chapter 4). He has also spent virtually all of his life in Oregon, born in Palo Alto, California but living in Hillsboro, Oregon since he was six months old. His first experience with computers was at the community library during middle school. However his experiences were unique from those of other informants as his early computer use was, in his words, "completely within the parameters of *school*." Informants often played early semi-educational or simple entertainment games such as "Worm," "Chip," or the popular "Oregon Trail." All of the informants 30 years of age or younger, including myself, recalled fond experiences of either playing or being familiar with "Oregon Trail," which seems to be many students' first encounters with computers in school, regardless of gender, region, or socioeconomic status. Until he began using the Internet more frequently at school and in the library, "Oregon Trail" was JS's only experience with

computer games, as most of his computer use was dedicated to typing papers and homework, all of which had still been handwritten up to that point in his adolescence.

While other informants' parents had varying perceptions of the benefits of access to digital technologies illustrated by their encouragement of educational use of the computer or simply purchasing computers or cell phones for the home, JS' experience shows a developing relationship to technology that did *not* begin in the household. When I asked him what technologies were used in his house and neighborhood growing up, he replied: "Um, not a lot. I mean, we had a TV, we had a radio. As far as like…computers or even game systems, my mom was just not into '*em*." I found this interesting, given that he later mentioned his mother's experience as a librarian during the years that computer programs were first being used to update the way patrons browsed for books (versus using the old Dewey Decimal catalog system). He even mentioned that he didn't even initially have basic access to older tools such as typewriters during his earlier years, let alone access to a computer more than once a week. In fact, he did receive a beeper when he was around sixteen, but this was used primarily to stay in contact with his mother and friends since he was "always out runnin' around, hanging out with friends." I received the impression that his mother bought this beeper for him as a surveillance tool, but it is possible that he also may have wanted this accessory, given its popularity in the mid-nineties. Perhaps even more influential than his developing access to computers, word processors, and eventually the Internet in an academic environment, was his use of a friend's computer system during his junior and sophomore years of high school.

After asking him whether he took an elective class for computer training during his middle school or high school, he meditated on the question for some time finally stating:

> JS: Let's see, did I take an elective class…I don't think I really did, I don't think I really did. I think um, a friend of mine, when I was---when I was around fifteen, sixteen, he had a really amazing computer system and that was like, *most* of my experience with the possibilities of what computers could do. But other than that, just strictly typing up papers and stuff like that.

Some of the other possibilities that JS mentioned were explored in his own household when his mother finally purchased a computer as he became a senior in high school. At this point he began playing a few games, and his mother even experimented with online dating. I personally was not even aware that this was possible during the mid-to-late nineties. I had only begun learning of social networking and dating sites like Match.com and eHarmony.com when I started college as a freshman in the fall of 2003; thus I was very surprised that his mother, who did not seem to view digital technology as a life tool, had begun using it as a way to connect with other individuals across cyberspace. Once JS realized that he could do "*all sorts* of stuff" on the computer, he started to access the Internet and play games on his home computer in addition to the variety that his friend's computer system offered.

JS is currently a senior at OSU majoring in History, and currently owns an Xbox360 game system, an iPod, and a digital recorder.[5] We both laughed as he held up

[5] It was implied that he owned a personal computer during the interview, but he never explicitly mentioned access to computers outside of those used on campus. Unfortunately, I was not able to secure a follow-up interview with JS to confirm if he owned a personal computer (desktop or laptop) or had access to home computer he shared with roommates.

the iPod, as this device was something that many of the informants and I had in common. In each of our lives, we have all formed unique attachments to these devices that allow us to carry all of our music—and for some of us—our photos and the Internet at our fingertips. JS also used to have a cell phone, but he disconnected it when it became a financial burden. However, he has regained the use of a phone by signing up with VONAGE, a relatively new Internet and phone service provider: "So now I'm using VONAGE, which is pretty cool---something I couldn't have done before without having the computer and high-speed DSL. So, now even my phone is connected to my Internet use." This not only alludes back to his commentary on the amazing possibilities of digital technology, but also underscores how interconnected various digital technologies have become, which correlates to many people like the informants in this study, owning a collection of digital technologies. A common triad seems to be the ubiquitous combination of the computer, iPod, and cell phone with texting and Internet capability. While he admittedly started college as an undergraduate a bit "late," his acquisition of new digital technologies over the years had a deep impact on his perception of the "digital revolution," his place in it, and what access meant to him.

JS closed his description of the digital technologies he owned noting that "After a certain point, technology and being able to utilize it just became a *necessary* skill." The skills he acquired over the years were enhanced once he began working as a Quality Assurance Intern at Red Rover Software in Corvallis and as a part of OSU's Student Leadership and Involvement staff. While discussing his current use of technological

resources provided by the university he revealed that his relationship to technology continued to develop further within the parameters of school and work.

> JP: Do you use any of the technological services or facilities provided by OSU like Milne, or the computers here <at the Valley Library>?
>
> JS: Sometimes I use the computers here, definitely, because they're access to databases I wouldn't access to from—er, remotely…As part of my job I'm constantly utilizing or talking to the Graphics Department in the MU <Memorial Union>, and they've got some technologies there that I wouldn't have access to otherwise….my team, we're kind of event coordinators and event advisors for student groups on campus…but sometimes *we* promote events ourselves. And at that time we need to be able to produce professional-looking marketing and different things like that, and so definitely, having access to you know, some of the better technologies helps.

JS seemed excited about the new Apple his team purchased which has a variety of useful applications to help with various projects. While his duties are more concentrated in the scheduling aspect of his work with the ASOSU and student groups on campus, his new level of access and familiarity with the Internet and digital technologies more generally was very much an outgrowth of his prior experience at a start-up company called Red Rover Software based in Corvallis. Whereas many of the informants increased their knowledge and familiarity with computers and the Internet largely on their own with little training, JS' brief stint as a Quality Assurance Intern allowed him the ability to test new technologies and applications, such as Microsoft Excel software as a means of informing better design for all future users of this program. Indeed, he believed that this company had a significant impact on his level of comfort with these technologies, especially with programs like Excel "and those things which (he) never even knew."

Given his rich history with digital technologies, I was curious to know if the digital divide was ever a topic of discussion at Red Rover during the four to six months he worked as an Intern in 2008. Many corporations, particularly behemoths like Apple, Microsoft and Hewlett-Packard have and continue to create programs to address the "problem" of the divide both in the United States and globally, even if these efforts are not as highly publicized as they were doing the heyday of digital divide discourse during the mid-to-late nineties. When asked whether there was ever any mention of community outreach or attempt to reach out to minority or other groups of users in Corvallis at Red Rover, he asserted that he was hired as a product of this outreach, that their attempt to "reach out" was "encompassed in his job." At the time, the company was promoting the Quality Assurance Intern position to local students. Since JS was not a Computer Science major or studying in any other discipline directly involved with the engineering or development of digital technologies, he believed that their willingness to hire him was a reflection of their commitment to reaching out to the community in addition to confidence in his ability to fulfill the obligations of the position. JS left Red Rover with other members of the Intern staff that were laid off, likely due partially to the declining American economy. The only members left at the company were the engineers designing the programs tested by the Interns:

> JS: So by the time we all left, there were about four people that were still working there—so they were a new business facing just *huge* financial challenges and…I have a feeling that community outreach would definitely be part of what they would do once they got established, just knowing the owner the way I did, and he was just a really great guy at OSU, an alumni. And uh, yeah…But no, they didn't have that opportunity when I was there.

Given the small population of African American students at OSU and in the Corvallis community more generally, I was very interested in how or even if his experiences as an African American male employee at the company differed from those of other staff members. However, I did not pursue this due to the fact that race and ethnicity was only *one* of the factors behind differences in technology use and quality of access to digital technologies among various American subpopulations. Furthermore, a pattern seemed to emerge in prior and subsequent interviews with the core informants: little or no reference to race, ethnicity and/or socioeconomic status as major factors in their histories of technology use. In fact, many of the informants only mentioned race and ethnicity in association with the digital divide when they were asked to define the term in their own words. Only the unique factors of their home environment and personal encounters with the computer in school seemed to be the predominant factors that had the largest impact on their relationships to computers, cyberspace, and accessory digital technologies.

This pattern was also evident in my conversation with WH, a 39 year-old employee at Hewlett-Packard in Corvallis, father, and graduate student majoring in Mechanical Engineering. In the preliminary questionnaire, he responded that "he loved mathematics" in response to a question asking majors in computer or technology-related disciplines why they decided to enter those fields of study. A "Digital Immigrant" born in Los Angeles, WH has been living in Oregon for approximately twelve years. He first recalled accessing a computer at a much later age than the other informants, which would be expected considering that the desktop computer was still not a mainstay in American homes until the mid-nineties. WH has had a unique perspective on the evolution of

digital technologies in the United States given his first encounter with the Tandy computer system when he was in junior college in 1988 up to his continued engineering career. His description of the Tandy compute revealed how far advanced and integrated into our cultural landscape digital technologies have become in the twenty-first century:

> JP: Can you remember the first time you accessed a computer? If so, can—
>
> WH: The very first time…I wanna say when I was in junior college, so that was probably in 1988, 1988 time frame—so that was the first time. It was a Tandy computer; it was one of the computers that you can / it only had a keyboard and you can plug it in to your television set, and you turn your television set to "3" <Channel 3> (smiles)---
>
> JP: (surprise) [Oh wow…
>
> WH: Yeah and then you'll have the screen there and you just type / it had its own processor and all that, all built-in. So you connect this keyboard—it was a Tandy keyboard—right into the TV and BAM!, go away.

WH was the most descriptive and enthusiastic out of all the informants in regards to describing his relationship to technology and the nostalgia associated with his first encounters with computers and the Internet. This suggests that the younger in age the informant is, the higher the level of difficulty in articulating one's relationship to certain digital technologies; these relationships are often taken for granted due to an almost intuitive interface with these tools from a young age. Despite being older when he first began to experiment with computers, WH did share some things in common with the other informants: the (Tandy) computer was purchased for him by a parent—his mother. The reasons why each informant's parents purchase a computer are varied, but once a computer is set up in a home, the young user begins to experiment with its capabilities

and later with the Internet in an almost intuitive learning process outside of the academic environment.

Like UU and AW, an African American female graduate student in Public Health, WH first began using BASIC or other programs of a more educational nature. One of the first programs he used helped him solve math problems like "what's the area of a rectangle;" it is possible that his first introduction to computers through one of his great interests—mathematics—allowed him not only to view the computer as a source of entertainment, but as an important tool that he would continue to rely throughout his career. From 1992-1993, WH worked in "the ASMC," or Aircraft Sheet Metal Corrosion Control for the military. While his particular job repairing fighter jets did not require the use of computers, he remembered that the tech sergeants has computers at their desks, which he and his team members would occasionally use to surf the early Internet during the graveyard shifts:

> WH: Back when I was in the military in '92-ish, '93, um, most of the tech sergeants had computers at their desk…I'm assuming they were used primarily for creating spreadsheets, keeping logs on what type of work we were doing; things like evaluations and whatnot, so I'm assuming they used Word processing applications and whatnot just to keep tabs on what's going on on the shop floor, essentially.
>
> JP: Awesome. So as far as the Internet and the webpages you looked at was it chat environments or was mostly just stuff related to interests you had?
>
> WH: (grins mischievously) Yeah, *something* like that….We don't want it to go south!

WH's reaction led me to believe that he and the other "young GIs" were experimenting with more taboo content in chat rooms or particular webpages on the early Internet,

which we did not go into detail about. Some of the informants also did not go into much detail about the content they accessed for reasons to be discussed later. We moved on to discussing his current position as an engineer at Hewlett-Packard on NE Circle Boulevard and the impact that being in front of a computer screen ten to twelve hours a day has on one's social relationships and mode of communicating with other people.

When asked about what "access" meant to him, he took some time to contemplate on this "really good question," stating that "*access* is being in touch with people that do use these (digital) devices." For WH, access wasn't just simply about having basic knowledge of how to use a computer, the Internet, or a cell phone, but being a part of a community of people that have the same skill set and ability to acquire such devices. He emphasized that people "*live* on iPhones and *live* on computers," so individuals that want to communicate with others have no choice but to increase their level of access to these technologies, if only by acquiring them and using the most basic applications on these devices. While we both agreed that the fast communication enabled by email and the Internet is convenient, WH expressed some ambivalence about the benefits of instant communication citing the lack of physical proximity and direct social interaction even when both modes of communication are possible within the same time and space:

> WH: Even at work where I work today you know, and it's totally foreign to me…A lot of our communication is via email---even if the person is sitting right next to you, right next to you! And I'm just (pause) I just can't get with that. Usually I'll just get up and go talk to the individual if I want to talk to the person in the next cubicle ---I just get up and talk to them, my manager—I just go walk around to the other aisle and go talk to him…I don't know. I just find that weird when we have to email each other and we're just sitting right across from one another---

Interestingly, he included our attempts to set a date and location for this interview as an example of this problem with convenience, saying that it was easier for him just to call me rather than have me email him and remember to check it. At the time, I agreed with him. Sometimes instant communication is not always so, and there is no substitute for communication aided by a person's tone of voice or cues provided by body language.

Currently WH's job entails "a lot of modeling and simulation, working on CAD (computer-aided drawing files) and doing analyses on mechanical parts." Since leaving the military, computers have only become essential to his daily life, as he sometimes brings work from home to a personal computer. When I asked him whether working at Hewlett-Packard has changed his perspective on technology, he admitted that his job has of the potential of digital technologies has certainly "broadened his previous vision" of the potential applications and spread of digital technologies:

> JS: I never thought that, um, computers and cell phones and/ I never thought that we'd be doing…the things we're doing today with computers *back then.* One of the things when I was growing up back at home is when computers really started coming about, we didn't I would sit there and ponder and say 'Okay—Why do I need a computer in my house? What do we do on a computer, sit there and play Solitaire?' That's another thing we did in the military—play Solitaire on the computers (laughs).

In the last twenty years of his experience with computers, WH has maintained many of the same practices that formed his early interactions with computers. However, he has embraced the convenience of the Internet beyond work and leisure by using it to catch up on current events through Comcast news on broadband as well using Blackboard and the OSU website to download school assignments. As an Engineering student, he also noted

that pursuing higher education at OSU has also broadened his perspective of how to utilize computers.

One of the most surprising things about WH's encounters with technology however, is his initial resistance to purchasing a cell phone, which seems to contradict his earlier feelings about the importance of access. Shifting from our discussion of his desire for a beeper, we started to discuss cell phones, a technology that did not seem to be something particularly necessary or impressive to him until when his wife told him that he needed one. WH joked that his wife primarily insisted he use a cell phone as a means of surveillance in addition to more convenient communication. He admitted that he only uses the basic service (receiving and making calls) so that his wife or "parole officer" as he joked, could keep tabs on him; text messaging and other applications never crossed his mind. WH never "had a desire for a cell phone" not due to any financial burden or hesitation to use the technology, but rather dissatisfaction with its size and difficulty dialing the keys, which seem to grow ever smaller as this device continues to evolve:

> WH: My wife had to force this on me…they're just so small/ Look at the size of my hand! (holds cell phone up in left hand and presses right palm against the other) and look at these buttons, they're just too tiny, you know? So that's why I never, you know, they never appealed to me.

While this explanation was logical, I suspected that the notion of being able to be in contact with other people more than ever before was a bit daunting for WH. The feeling of constantly being "attached" to a cell phone (or any other device for that matter) is a sentiment that is not unique to WH. As JS previously mentioned, access to more digital technologies can be a double-edged sword. What are we giving up when we gain speed,

functionality, access to a variety of information and convenience with these portable technologies, some of which are small enough to fit in the palm of our hands?

The ability to adapt these technologies and manage new challenges associated with being wired, still endow members of certain populations with a shield against the social stigma that comes with being "disconnected" or lacking proficiency with tools that everyone seems to have ---or *should* have. While access remains a central component to each informant's definition of the digital divide, the themes of "peer pressure" or "resistance" to certain technologies were echoed in other interviews, suggesting that the factor of individual choice and the unique rationalizations that inform those choices to acquire a computer, PDA, or cell phone should be further explored in the discussion on why some African Americans don't have the same material access as individuals in other populations. The responses of another informant born and raised in Los Angeles, as well as an undergraduate originally from Houston, Texas reveal that adopting certain technologies is often influenced by our peers and family members rather than a consideration of the functional importance or cost of digital technologies.

AW, a third-year PhD student majoring in Public Health was born in Los Angeles, California, is the daughter of a retired computer teacher and thus has a unique context in which her relationship with digital technologies developed. Like many of the other informants under the age of 30, she remembered "playing Worm" on the computer in elementary school, one of her most important encounters with computers. Even though her father initially worked at an Los Angeles middle school teaching computer skills, AW didn't receive regular instruction from her father when she accompanied him:

"Well, *initially* it was just, 'Oh sit down and play' but after a while 'Worm' gets old and you want to get into type and stuff, and then he started teaching me how to type, how to use the computer." Unlike many students, AW was exposed to computers both at home or community technology centers (libraries fit into this category), as well as at school. In her preliminary interview online, she mentioned that she had access to a desktop in her household, while her parents had pagers and cell phones while she was in middle school and high school; AW grew up with material access to a variety of digital technologies, while many of the other informants acquired new technologies in a phased time period rather than simultaneously. When I asked her about the first time she accessed the Internet, she seemed less sure of the exact time frame in this session than in the preliminary interview; this may have been due to the fact that her memories of her personal experiences may have been integrated with her father's own stories from the students he taught outside of his daughter's school:

> AW: Probably middle school, again on a Mac. My dad was just zipping by: 'Oh, people know how to use the Internet' / I didn't know what Internet was so it amazed me but anyway—I couldn't really use it, of course initially, and my dad was probably getting frustrated that I couldn't catch on. But—yeah it was middle school, early middle school. Maybe fifth grade, actually.
>
> JP: So did you get on the Internet or on the computer / Was it mostly by yourself at school or did you do this with friends?
>
> AW: It wasn't at school---I don't remember having Internet at school. It was at home.

It seemed odd that her father would expect her to catch on to such a revolutionary technology so quickly; however, she was the daughter of someone who had extensive knowledge of computers, and over the years young people have always been assumed to

adopt digital technologies in particular with ease. Having access to the Internet at home would be an advantage in gaining a higher level of experiential access given the limited time constraints present for users relegated to shared computers in libraries and schools. Ironically, AW never used the Internet much due to the slow connection. However, throughout her childhood and adolescence she used the computer more frequently than any of the other informants, playing games or doing homework "in the later years" for *three or four hours every day*. Again, playing Oregon Trail in elementary school (fifth grade for AW and I) was most salient connection between me and the younger informants. Despite the fondness of the memory, AW's more vivid memory was her desire for a pager, not because she needed it or wanted to use it, but because it was "cool."

While WH did have a beeper for "flashin' and being hip," these Los Angelenos seemed to grow up in different areas of Los Angeles. Thus they may have had different socioeconomic statuses that were not explicitly revealed in the interviews, nor further investigated by myself so as not to delve into subject matters deemed off limits by these informants. Apparently, beepers or pagers were "really huge in L.A." as WH mentioned during the interview. These technologies, however, were first seen in WH's environment as tools associated with wealthy drug dealers, and not tech savvy citizens involved in legitimate activities. Soon many people from all walks of life began wearing beepers as part of their attire, even though they weren't "cut on." AW noted that her parents sold beepers to produce extra income when this trend was its peak; perhaps beepers had a deeper significance in Los Angeles than other places where this technology

had proliferated. While we did not explore the significance of the beepers further, this suggests that the importance of this particular digital device as cultural expression, particularly among African Americans in Los Angeles, warrants further study. Samuel Hampton has suggested that cellular phones and pagers [also known as beepers] may not be considered computer-related by some African Americans, but this is based on the problematic theory that some African Americans may view the primary digital technology of the computer as being associated with formal education and the "dominant culture" (Hampton 2004:148). However, nothing in the statements of WH or AW seemed to suggest that they shared this perception. Nevertheless, since I included these technologies in the category of digital technologies from the beginning of this study, the deeper significance of beepers and other accessory digital technologies remains obscure.

From beepers and pagers we transitioned to cell phones, which AW first used in high school and continues to use today. Not surprisingly, her cell phone has Internet capability, but she admitted that was the extent of digital accessories (iPods, Blackberries, etc.) that she currently used, as she was "kind of scared to use iPods." Having hopped on the iPod bandwagon in college due to feeling like a relic for having a CD player as a freshman, I could not comprehend why anyone would *not want* an iPod and asked why she was "scared of iPods:"

> AW: It's just too overwhelming—the circle and the touch <refers to the click wheel used to select songs (MP3 files) to play on the device>, I don't know. I just can't do it. (smiles)
>
> JP: (laughs) That's not too bad.

> AW: And also I'm in Public Health—I'm kind of scared to lose my hearing 'cause I have those buds in my ears all the time from using iPods…so I don't/ Yeah, I'll stay away from them.

Admittedly I was wary of influencing her responses by allowing my personal feelings about particular technologies to reveal themselves so explicitly; however, this only reinforced why examining how and why the informants used certain technologies was so critical to this study. Operating under any assumptions, even if they run counter to digital divide narratives, is problematic without any context. I realized that AW may have been slightly joking about her resistance to using iPods, but nevertheless she had a unique reason for choosing not to adopt a particular technology—health concerns. Besides WH sharing another unique reason why he was not interested in purchasing a cell phone, the other informants' digital repertoires seemed to "naturally" include iPods along with cell phones, computers, and other digital technologies such as GPS systems.

AW is one of thousands (perhaps even more) college students with a Facebook and MySpace profile. Facebook is the younger of the two social networking sites, developed primarily to connect students from universities and colleges across the country. MySpace remains popular as a domain once the realm of mostly high school students but now a powerful marketing tool connected to other forms of digital media such as YouTube; its applications and profile design options have influenced other sites and their design approaches—including Facebook. I and three of the co-informants also maintain Facebook and MySpace profiles. Given the spread of these phenomena, perhaps it is not surprising that AW didn't focus too much on the applications she uses on

these sites since it is often taken for granted as a part of the national cyberspace culture. For the third time during my interviews with the core informants, however, the issue of "choice" and "peer pressure" as explanations for the adoption of a particular technology came up:

> JP: Okay. What made you decide to join MySpace?
>
> AW: (chuckles) *Pressure*. I didn't want to join MySpace, but I heard it was better than Facebook so I figured 'Why not?' And it's just social networking—but again I say, I don't get on it a lot. I don't know the last time when I was on it I actually (pause) it's been so long that I should really just disable the website and just go with Facebook.
> JP: Yeah…I joined MySpace…Okay. So how often would you say---so you go on the Internet every day---but blogs and sites in particular that you go on---
>
> AW: [Facebook—once a day.

It is possible that belonging to these social networking sites has become rather mundane to those who have consistent access to the Internet, thus there seems to be no need to elaborate on them. Beyond Facebook and MySpace, AW also frequents the National Black Graduate Student Association Executive Council website, an "Internet-based organization" of which she is a member. She was also an active member of the Alpha Kappa Alpha Sorority and uses the website to keep up with her chapter's activities. Checking emails on gmail messenger and ONID and reviewing the news and weather on CNN.com constitute the other portion of her Internet activities, along with researching and writing for her thesis and general coursework.

AW has a diverse user profile in regards to her digital practices, as do JS and possibly the other informants.[6] Given her early access to a home computer, it is not surprising that AW still had a personal computer as a student at OSU. However, like another informant, she does have a printer, and thus uses the various computing centers on campus, including the station in the Black Cultural Center that offers cheap or free printing. When I mentioned that there was free printing available in Waldo Hall after hearing this some time ago, she quickly corrected me stating: "There *used* to be. Do you know how much paper EOP <Educational Opportunities Program> students used <in> *a day* when there was free printing? *A lot*." While I realized that she was commenting on the increased costs of printing being as a result of the sheer amount of paper being consumed by "historically underserved students" in that program—(though of course, they are by no means the *only* OSU students who used this service)--this also revealed that students who may have access to personal computers don't necessarily own basic printers, or those with scanning and copying features. This means that some African American students like AW and CM, from a variety of regions and socioeconomic backgrounds are in similar situations as their White, Latino, Asian, or Native American counterparts when it comes to having access to some digital technologies while *choosing not* to adopt or *being unable to afford* extra digital accessories.

[6] While I did not feel that a follow-up interview was necessary for AW and WH, I made several attempts to contact the seven informants that completed the preliminary questionnaire for in-depth interviews. I did not have any further contact with these individuals from that point on during this study for reasons still unknown. UU, WH, and JS were contacted for follow-up interviews; only UU (1-b) agreed to participate in a second in-depth interview.

CM is a senior majoring in Political Science born in Houston, Texas in 1987. She moved to Corvallis as a freshman and first accessed a computer in first grade playing the Oregon Trail game with other students in her class. She did not access the Internet until middle school, when students were taken the library for an English class. When I asked CM whether she took any elective classes for computer training during her early academic years she responded: "Um, we did have electives---they weren't any for computers, though / but it was just kind of mandatory thing that they took you to the library to kind of get more familiar with the computer." This familiarity with the computer was further enhanced with her use of a computer in her home; it is unclear however, when she first started using the home computer, as her answers to the interview questions in general were very brief. She did mention that: "we didn't have the Internet until like high school, or maybe eighth grade / And it was really *slow* so we didn't really use---and the printer was always kind of bad, so we didn't really use our computer, a lot but—*at home*." The other core informants also shared the experience of initially having access to a computer's basic applications, but not using the Internet on a home computer or a library/school computer until at least three years later in their academic career. Since the printer rarely functioned, she notes that the home computer was just used for "games and listening to music, not for *academic purposes.*" This deviates from the general pattern of early Internet use by the other core informants—most began playing games on a home, library, or school computer in conjunction with academic uses, the latter of which increased as they entered late middle school and early high school. However, she did mention occasionally "using the computers in other places (i.e. the

library)." The content of games that she played with family and friends changed as she grew older, first playing "adventure games like Oregon Trail…where the goal was to learn about pioneers" when she was little moving on to "The Sims and stuff like that" as she grew older. CM is the only informant who mentioned gaming in some detail outside of playing on game consoles such as Nintendo 64 or Xbox 360 (like JS and WH the two core male informants) or games such as Solitaire that come basic to virtually all computer systems. While she did not elaborate on the why she enjoyed gaming, it is significant given the lack of research on African American gamers, particularly those doing so online. However, she does not use her personal laptop for gaming because "they've advanced from like, Oregon Trail to *weird* games now." She also mentioned that she doesn't "have a lot of free time" to play the newer games.

While we spoke at length about her activities on the computer and the Internet more specifically, the cell phone was the technology that seemed to have the most impact on CM's daily life. While her father owned a cell phone, she did not receive her own phone until her senior year in high school. Since then she has used it mainly for communicating with family and friends. When I asked her if she used the same technologies today as she did when she was younger, she stated:

> CM: Now I actually have my own laptop which I got for (high school) graduation, so it's a lot easier to…use my computer---so I do that more. And then I have my cell phone, which is kind of a supply, a staple of my being (laughs) I have to have it with me at all times! And, I have an iPod and stuff---nothing too extravagant in the technology department, so…

It seemed odd that her cell phone, the "staple of her being," did not have Internet capabilities; when I asked if this was the case she mentioned that she didn't know how to

use (or perhaps acquire) Internet access on her cell phone or her iPod. Given her busy schedule (which almost prevented me from securing this interview with her), one would imagine that Internet access on her phone or iPod would be an important tool, compared to UU's less frequent use of her iPod's Internet capability. However, this may be another example of her choice not to use digital devices that come with enhanced Internet capability rather than being a function of her being unable to afford such a device or some other unknown reason explained away in predominant discourses as simply a "lack of access." Like several of the informants she owned an iPod, a cell phone, and a personal computer. Whereas even ten years ago having a computer with Internet access and a cell phone would render a person "fully wired," today this trio of digital are considered the norm, nothing "too extravagant." Whether this is a reality other African American college students at OSU besides those interviewed for this study, or even African American college students in general remains to be seen.

Another paradox revealed in CM's user profile is the fact that while she uses her laptop to listen to music and surf the Web, she doesn't download music. She made it very clear that while her friends download, *she* does not. However, she will select certain music files that her friends have downloaded and then transfer those songs to a CD to put on her own laptop. This seemed strange, as all iPods are essentially hard drives that store downloaded music or other media files, depending on the model or generation. Starting in the late 90s there was considerable controversy over illegal downloads, especially with the Napster case being high-profile in the news media. With the proliferation of iPods and other MP3players, iTunes and other music software that

offer “legal” downloads for a small fee, millions of people could download music without fear of legal action. Napster 2.0 can also be included in this download software category as the “legal successor to Shawn Fanning’s [the founder of Napster 1.0] original business” (Palfrey and Gasser 2008:145). Perhaps when she emphasized that *she* didn’t download, she meant that she didn’t use “illegal” accessory technologies such as LimeWire for example, which charges a fee for “members” to access a vast music library that is populated by files posted by every day citizens—some without a copyright or file license. Downloading individual songs is often much cheaper and convenient than purchasing a CD with songs that the consumer may not want to listen to on their device. There may still be other reasons why CM chooses not to “download,” but I was not able to secure another interview with her to elicit those reasons.

Her peers also played a role in her interaction with another digital application---Facebook. While she did not describe her decision to maintain a Facebook profile as “peer pressure,” it was apparent that her friends that she *should* have a page like thousands of other college students across the country:

> JP: Okay. As far as Facebook, what made you to decide to the join the site?
>
> CM: [I actually *didn’t*. (laughs) My freshman year my roommate made one for me, so when I came home she’s like ‘Oh I made you a Facebook <profile>’ so it was just kind of—*she* made it and I just started using it and it was kind of fun. So I just kept it.
>
> JP: So you mentioned that you were really busy—do you use it fairly often now?
>
> CM: My computer?
>
> JP: Facebook.

CM: Oh, Facebook. I'll probably check it twice a week or so.

CM seemed amused about this profile set up for her by her roommate without her consent considering that her personal name and email address were necessary to register with the Facebook site. However, this information is not as sensitive as a social security number; the same information used register for a profile of most social networking site can be found in OSU online directory where you can 'Find Someone' with their first and last name.

CM (along with AW) was the only person to mention digital television as one of the activities she regularly engaged in. When I asked her to describe her other online activities she mentioned being "addicted to the news sites such as abcnews.com and cnn.com" as well as using TVGuide.com "when trying to figure out what to watch sometimes." She noted that she never used to watch digital television until the present academic term at OSU:

> CM: Sometimes I do, I have been---I used to never—but this term I have been 'cause I'm getting caught up on *Lost* <a popular dramatic series> (laughs). So that's the show that I watch online sometimes because I have an hour or so to spare—I'll just sit and watch it on my computer.
>
> JP: Same here. Do you / Is that a different experience than watching it on the regular <analog> television?
>
> CM: Yeah, I like watching it on TV better.
>
> JP: What about watching it on TV is----
> CM: Umm, just the screen is a lot bigger. I don't have to keep clicking 'Continue' after the little commercials that they show <online> and stuff like that, so…I can fall asleep if I want to and it'll still kind of be playing on the TV; but if I fall asleep on the laptop and wake up I have to click it or something---I don't know, just…

While analog television is more physically efficient to watch for CM, digital television is just as convenient and more agreeable with her schedule and study habits. Digital television is also portable with a laptop computer, while analog television is stationary. By the end of this year, however, the distinction between digital and analog won't exist for television, as all broadcast signals will switch do a digital mode. The breakneck speed with which new digital technologies are introduced, adopted, and even rendered obsolete by even newer devices has forced many people to think about their relationship to technology in ways that they never have before. However while many individuals make deliberate decisions as to which technologies will best fit into their lifestyle and accommodate their needs, others go with the electronic flow and choose to adapt to each new innovation that comes along, such as SB, a female senior majoring in Fisheries and Wildlife. Perhaps most appropriate for the focus of this study, SB was the lone electronic interview of the informants that contributed to this project.

SB was born in Colorado Springs, CO in 1986. While she had lived in Corvallis for two years when she completed the preliminary questionnaire she is currently a distance education student OSU taking courses online from California. Although I believe this study would have benefitted even more from a face-to-face in-depth interview with SB, her preliminary responses were still among the most detailed of all of the informants. She not only remembered the first time she accessed a computer, but remembered which operating systems were in use:

> 6. Can you remember the first time you accessed a computer? If so, can you describe this event in more detail?[7]
> SB: Yes, we had the old school IBMs that only had DOS back in the early to mid-nineties in elementary school. The computer had simple programs geared to help students to do arithmetic and spelling. Nothing too complex.

In her second set of responses, SB added that she also played Oregon Trail on the school's network. She also accessed the Internet for the first time in middle school, but remembered using the Internet specifically for research projects compared to other informants that initially used the Internet as part of basic training to become more familiar with this innovation. She recalled having AOL Internet service set up for a computer in her family home, but noted that prior to this she accessed the Internet at the library as did other informants. The most unique aspect of her experience was the fact "her household and community moved with the times and current technologies." She mentioned that "although we missed some steps, we eventually caught up." I wondered what these "missed steps" referred to, but it is clear that she was not a "victim on wrong side of the divide."

While JS, AW, and CM reported that their middle schools and high schools had differential levels of access to computers and computer training, in SB's community of Colorado Springs, "the schools and library had the most current technology for students and residents." This suggests that SB or at least her community in general may have been upper-middle or upper-class with respect to the abundance of easily accessible digital resources. However, without an in-depth discussion of the demographics of this

[7] This and the rest of the quotes are excerpted from her responses to the preliminary questionnaire and electronic interview questions.

community and more insight into her personal experiences this is only informed speculation. When asked which digital technologies she used growing up and what she used each of them for, she listed:

> 7. Computers—academic, online classes/ recreation/ social networking
> Cell Phone—Communication/ Social interaction
> Portable GPS---navigation, especially for cross-country road trips
> iPod---music storage and for exercising

SB not only continues to use these devices, but personally owns each one listed, using them "every day or every other day." Despite being from different areas of the Western United States, SB and CM share several other things in common with most of the other core informants: they are not heavily involved with blogging nor do they frequent specific blogs, they use the laptops or computers available at the Valley Library or other facilities for completing assignments despite having a personal computer, and are members of Facebook and MySpace. All of the informants come from diverse backgrounds with various experiences that combine to create unique histories of technological use determined by factors that are not easily quantifiable and measurable to produce generalizations about the patterns of digital technology use and quality of access for an entire ethnic group. Regardless of the various experiences and patterns of use the informants had in common, however, their definitions of what constitutes access to digital technologies in the twenty-first century and their perceptions of a "digital divide" were what truly distinguished these OSU students from each other.

3.3 Perceptions and Conceptions of the Divide: Through the Screen

The lay of the digital land is increasingly fractured and experienced in ways both unique to some African Americans and shared in common with many other young adults in this country across race, class, gender and individual histories of technology use. The use of "daily technologies" (Nakamura 2006:35) such as iPods, cell phones, and computers and the Internet by African American college students appears to structure their perceptions of the "digital divide" rather than vice versa. In many cases, defining the "digital divide" was difficult because the divide did not seem to manifest in some of the informants' personal interactions with digital technology. In much of the dominant discourse around the digital divide, "access" refers to a person's ownership of a computer and Internet connection, or at the very least the ability to use these digital technologies in close proximity to one's residence (using a computer and an Internet connection in a school, university, or some type of community technology center). Frequency of use has also been a variable used in national studies of "connectedness" among populations, but less research has been done on the type of content accessed and the reasons why users search or create certain types of content over others. Thus I found it imperative that the informants were asked what "access" meant to them in order to discover if their definitions correlated with the way that they defined the "digital divide," if they perceived one at all.

While the preliminary questionnaire and the semistructured question set both contained questions asking the informants to discuss what the term "digital divide," meant to them, the question "What does access mean to you?" was not present on the

preliminary questionnaire. After receiving initial responses from the informants that framed the "digital divide" as an issue of differential access, I realized that it was necessary to elucidate what "access" means in the attempt to articulate counterdiscourses around the digital divide. During my first interview with UU, I did not ask her to explicitly define "access" on her own terms. Prior to the following question she talked at length about basic access to computers and where people tended to use computers and the Internet the most in her community growing up:

> JP: Do you think as far as people having access to the technology / do you think it's pretty much (pause) more of a level playing field now, or do you still think that there still may be differences, or---what's your take on that?
>
> UU: On getting *access* to it?
>
> JP: On getting access to it if it means being able to, to use it, but also being able to afford your own device, or have a device in the home?
> UU: Oh, yeah. It's definitely changed, nowadays, like everybody—well not everybody, but *a lot* of people have *multiple computers,* every kid now has a laptop, and / I definitely think people have more access to these things, libraries are stocked full of them, so…

UU seemed not to perceive a divide or gap between different segments of the American population, as her definition of "access" may have focused more on the availability and proximity of computers and the Internet for various communities. While acknowledging that some segments of her community had differential access to computers and the Internet during her childhood, this issue has for the most part been remedied. Access defined as having the skills and training to make optimal use of digital technologies, however, is another matter. Today's younger children also seem to be the best evidence

that access in general is increasing for "people" regardless of race, ethnicity, socioeconomic status, gender or geographical distinctions. Indeed, kids not only seem to have more material and experiential access than ever before in regards to computers, but also with respect to cell phones and other digital devices such as iPods not typically included in the category of devices under examination in "digital divide" research. Both UU and AW agreed that children are adopting new digital technologies at even younger ages; UU joked about ten and eleven year-old kids with cell phones "much better" than hers, and AW and I were amazed at the popularity of text messaging among children in the twelve to fourteen age range The theme of *access as availability* of certain technologies to a diverse population of users is recurrent in the responses of CM, TR, and WH.

CM defined access as "having a readily available supply of something, or something that's easy to obtain." In this context, computers may be readily available, but whether they are something easy to obtain is questionable. Computers with an increasing number of enhanced features today are much more inexpensive than they were ten years ago, with "used" computers available for as little as $300. However, the computing power and amount of memory that device often determines the overall price of the computer. To "have" a computer, or any other digital device, one must not only be able to afford the initial purchase, but maintain the accessory programs and applications that are often sold separate from the device. TR stated that the "haves" are the ones with access, and the "have-nots" suggesting that the "have-nots" are aware that these technologies are available, but cannot afford them. While this language mimics that of

researchers that see the "digital divide" as a growing problem, it is unclear that TR's perspective is inclusive of the other definitions of access articulated by critics of the predominant discourses as well as those of her informant peers.

WH's definition reveals another slant on the idea of *access as availability.* He focuses on being able to communicate with others that also own these devices:

> WH: I guess that's the way I define it: a means of communicating with today's / with people today because a lot of people are—they do find these devices, they *live* on them. They *live* on laptops, they *live* on iPhones, they *live* on computers, and if I want to access those people or communicate with those people I have to communicate by these means via cell phone cell phones and laptops and whatnot. So that's what I consider access.

In order to join the community of people that *live* on these devices, one *must* adopt those same technologies or run the risk of being "left behind." However, this doesn't necessarily mean that an individual needs extensive training or competency with these devices, nor do they need to be able to afford them. WH's wife gave him a cell phone; he did not purchase one for himself. While his wife uses multiple features on her iPhone, WH acknowledges that he plays games on his wife' s iPhone from time to time rather than purchasing the same device. Rather *living on* digital devices, WH chooses to live *with* them. JS, MK, AW, AR, and SB however have generated more dimensional definitions of access that form the basis of an emergent counterdiscourse around the "problem" of the technological gap.

JS and MP both acknowledged that an awareness of new technological developments was as much a part of total access as being able to take advantage of the availability of digital technologies. While both informants were interviewed at different

stages in the study, *access as enhanced knowledge and competency* emerged as the most salient theme in the responses of almost half of the informants more generally. It is even possible that another dimension of "access" would have been gleaned from in-depth interviews with more of the preliminary questionnaire participants. JS believed that he had "limited experience" in this context due to the fact that he only used some computer programs at school, without more frequent access and training offered at home. While he believed that access was "availability" of digital technology at the most basic level, he also noted that the other component was "whatever knowledge you would need to actually utilize it." MP revealed that generations were "digitally divided" via differential levels of awareness of new technological developments. This can be interpreted as a commentary on the importance of basic competency with a computer and the Internet. "Certain age groups" or "people who haven't had access to it" might experience more difficulty when it comes to fully utilizing other technologies such as PDAs, iPods, or iPhones, without the basic computer skills. AW and AR both posited that functional knowledge of these devices is central to viewing digital technologies not only as prized possessions and commodity but as tools that expose individual to other resources and modes of expression. Consider AW's definition of access:

> JP: So this question is a kind of word association: what does "access" mean to you?
> AW: The availability of resources—not just, 'I have a computer' but do I know how to use it? Can I access Word or Internet, or can I get to it.

AR's concept of access was embedded in her discussion of the digital divide as a response to Question #10 in the preliminary questionnaire. AR's discussion of which

individuals are on either side of the divide echoes the emphasis on *access as availability*, but her definition of what constitutes competency and full utilization of the technology is very different from the responses of the other informants:

> 10. What does the term "digital divide" mean to you? What is the first thing that you think of when you read this phrase?
>
> AR: I do not really know. My guess would be that (the) digital divide is the difference between those that have access to digital technology, i.e. laptops, cell phones, etc. and those who cannot afford it. Another definition is those maximize digital technology to game, trade stock, etc. vs. those on the mere fringe of reading email and typing a report.

The mastery of certain digital technologies goes far beyond the level of basic competency that the other informants describe as a fundamental indicator of an individual's level of access. However, many of the informants, whether they contributed to this project via email or in a face-to-face interview, have illustrated that they are *not* on the "mere fringe" but rather at the center of an ever-expanding community of digital tech users that have complex views of their personal relationships to technology and engage in a variety of online activities with and without a computer. These activities take up enough of their time at work, home, and school to the point where the "digital divide" is of little significance on the individual scale; the "digital divide" in this sense becomes a floating signifier until one is asked to conceptualize the term as a "real issue."

The last question on the preliminary questionnaire[8] generated a range of responses. BP is a junior who was born in Portland, and her response to this question

[8] Question 10. "What does the 'digital divide' mean to you? What comes to mind when you first think of the term?"

revealed an apparent lack of familiarity with the concept of the digital divide: “Not sure what it means to me. I think of digital technology when I hear the word.” Another response by CW, an undergraduate senior in Industrial Engineering rather surprisingly gave an answer in this same vein: “The first thing I think of is digital cameras. But to me a digital device is something that is electronic and has some sort of digital display.” PY, a Los Angeles native and 1st-year PhD student, who seemed reluctant to participate in a face-to-face interview, left the question blank. Without any further communication it is difficult to surmise whether she felt that the question was irrelevant or whether she perceived a digital divide at all. Her statement that “Everyone has a cell phone” in response to a preceding question, however, suggested that she was commenting on what seemed to be universal access to digital technologies such as cell phones and computers. If acquisition and a basic understanding of how to use these tools is representative of total access, then any talk of a “digital divide” might seem irrelevant, or at the least, a minor issue in that respect.

As mentioned earlier, access as a fundamental element in digital divide discourses was key to the perceptions of the majority of the informants, however, who all offered various interpretations on the scope of the technological gap and which populations or groups were the most adversely affected by a lack of material, experiential, and functional access to these technologies. TR, a female sophomore majoring in Interior Design offered definition of the “digital divide” that was strikingly similar to the verbiage used in predominant discourses espoused by the NTIA and researchers: “I think

of the divide between those who have access technology and those who don't. I think there's a major split between the haves and the have nots." This statement however, was not specific as to whom the "haves" were versus the "have- nots." Quite tellingly, neither race nor ethnicity was mentioned as the indicator that referenced to whom she was referring in both of these groups. TR, like most of the core informants, also never explicitly identified herself as belonging to either category. The identification of those affected by technological disparities becomes clearer in the responses of the several informants who explicitly discuss the nature of access in relation to the divide.

Both AW and MK, a male sociology major and OSU senior, argued that a *generational divide* was significant, in addition to or perhaps irrespective of those defined by socioeconomic status (class) and race/ethnicity: "This[9] means that people are digitally divided through generational knowledge such as new technology development being difficult for certain age groups or people who haven't had access to it." The "people who have access to it" continued to be identified through terms both euphemistic ("underserved communities") and more explicit ("those who cannot afford it"). AW also believed a lack of access significantly impacted "older people;" however she also believed that "people in lower-income communities were also affected by differential levels of access to digital resources, including perhaps most importantly, the Internet. Thus any "digital divide" was both along the lines of age and class—or more specifically, "income"---to some degree. The most interesting thing about AW's commentary on "older people" was her refusal to see them solely as left behind by the digital revolution;

[9] A reference to MK's response to Question #10 on the preliminary questionnaire.

seniors may not know how to use a computer simply because “they haven’t had to and probably don’t really need to at this point.” While many people have basic familiarity with what the computer is and does, there are individuals that have determined that some digital technologies are not essential to their lifestyle. Furthermore, not owning a computer does not preclude someone from owning a cell phone instead.

In virtually all of the cases, except the responses of AI, a professional student in Pharmacy originally born in Eritrea but raised in Portland, “I” and “we” were never associated with the “have-nots” unless prompted by questions during the in-depth interviews that delved into their personal histories of technology use. AI never revealed whether she was referring to Eritreans, Eritrean Americans, or African Americans as Black people in America more broadly when she said “So essentially we are not as advanced when it comes to communication because of our limited resources.” The correlation between a lack of funding and resources and “schools and communities” being underserved remained salient across the interviews conducted online through the questionnaire as well as the in-depth interviews with the core informants.

Since elementary and middle school is the point of first contact with computers and the Internet for virtually every informant under thirty, it is logical that the most vivid encounters are also the first time when the differential levels of access becomes at subconsciously apparent. In my own experience, I always relied more on computers and the Internet in the household rather than in a community environment such as the library or at school. However, some of the informants’ hesitation to personally identify themselves as victimized by a lack of basic access to digital technologies may also be

impacted by deeper stereotypes of African Americans and the alienation caused by subjection to those. JS' retrospective description of how the digital divide was present in his community is one of the most complex examples of this:

> JS: When I think of the digital divide I definitely think of it in terms of access like we were talking about before, people…not having the training or availability of technologies. Especially I think of that in terms of like, *demographics*. Definitely areas/ I know there were different school districts when I was growing up, (that) had far more access to computers and computer training than mine did. I also know there were ones who were trailing behind *my* school. So just the concept of that divide is just, it's definitely tied to (pause) demographics. Growing up in Hillsboro, the town was kind of divided into White and Hispanic, and I was kind of the odd man out (laughs). But definitely for part of my school career I was in a predominantly *Hispanic* school that had *limited* access to resources, and then for the junior high portion of my school I was in a kind of preppy, White school and it had *ample* access to resources—and also teachers who could provide training as far as that went. So…I mean, that was essentially that was the 'digital divide' played out, right in front of me."

Even though JS used the computers at these schools and was for a time, a member of a group of students that had limited access to computers, he still distanced himself from the "problem" that was "played out in front of him." The fact that he had access to a computer in household by age seventeen and had relatively frequent access to a friend's computer system suggest that a lack of access was less integral to his experience as a functional user of these technologies compared to his increasingly complex relationship with computers and the Internet into adulthood. AW and CM also discussed differential levels in access in the context of their experience as students in high school, but did not necessarily characterized the divide as impacting African Americans in general more severely than any other American subpopulation.

When I asked AW whether noticed any gaps in access in regards to the digital habits of people in her community growing up, she stated "not so much in my neighborhood." Since she did not elaborate on the demographics of her community it is impossible to speculate on the factors that may have contributed to a community of relatively wired individuals. However, as an Honors student in a Los Angeles high school her experience with one teacher in a Biology class suggested that access to digital resources was being used to determine whether "certain students" would succeed academically--and by extension financially, as an adult with a certain amount of desired cultural capital:

> AW:…In school, I was taking a Biology class, it was a two-year series; and I don't really know, this was kind of retarded / But the instructor didn't have a set amount of points that he had in the class (JP looks confused) Right, right. *Confusing*. So if you typed a quiz you got double the points, so if the quiz was worth ten points then you got *twenty points*. But if you wrote it out you only got ten points. So he based the number of points on *that*—so automatically, if you don't have access to a computer then you're going to get a 'C' right?
>
> JP: Is that even *legal*? Can he do that?
>
> AW: He *did*! And I remember thinking 'That doesn't make sense!' You don't have (a) computer in this class, you don't have computers in the library, so what are they supposed to do? And if they don't have a computer at home, they're automatically getting half the points that everybody else typing is getting? I don't know.

I could not comprehend that a teacher would enforce such a policy on his students considering that it seemed that students were being penalized for not having access to a computer. Ironically, the school didn't have very many computers, neither in the library nor in many of the classrooms. Fortunate enough to have access to a computer at home,

as well as a father who was more computer literate than most at the time, AW was faced with little choice to protest the situation: all of *her* quizzes were typed. The demographics of the school also provided clues to factors that would determine differential access among AW and her peers:

> AW: The school was in a predominantly White area—a predominantly upper-income White area, but the school was more than 50% Black, maybe 20% Latino, and the rest White, Asian, and whatever else. It was odd. I was in the Honors Program and there were more White students in the program, and in the Magnet program there were more White students. In the <regular> program, there were more students of color…I didn't have any classes that were not Honors.
>
> JP: So back then…you guys still didn't have a lot of computers in the library?---
>
> AW: [The Magnet Department had computers in some of the classrooms, but the other Departments—the Honors Departments and the regular school—didn't.
>
> JP: What is the difference between the Magnet and the Honors Department? I'm not clear—
>
> AW: I'm not really sure how that differs from Honors because some of the Magnet students *were* in Honors Classes, but I know I wasn't in Magnet and I didn't have computers in my class. That's really all I can tell you.

The fact that very few computers were accessible to the general student population suggests that despite the school's location in a wealthy, predominantly White area, race and class did not necessarily correlate with a greater array of digital resources. The mystery surrounding the lack of computers in the Honors classes (with very few students of color based on AW's testimony) compared to a higher level of basic access in the Magnet classrooms (with virtually no African American or other non-white students), suggests that institutional racism was *possibly* one factor among several unknowns that

resulted in “technological gaps” within the school as opposed to perhaps the broader community.

High school was also the first time that certain patterns in regards to access to computers and the Internet were visible to CM, albeit her narrative is somewhat different:

> JP: So do you think there is a divide / Do you think there are differences in access in the United States, *within* the United States?
>
> CM: Definitely. I think it depends on the different / The *schools* that you go to for your elementary, middle, high school, they definitely, I think / Even in Portland, I went to Wilson which is in the Southwest <part of the city> which is—it wasn’t a nice school, per se, but it had a lot more access to things like that. I know that schools in kind of the Northeast part of Portland didn’t have the same kind of access we had to computers and things like that.
>
> JP: Do you remember what the demographics were like in the Northeast <of Portland>?
>
> CM: Yeah in the Southwest where I went to school there was only like, four Black kids and in the Northeast it’s pretty all African American and Black people, so / And then the other schools located around there were mixed: half-White, and then there were a lot of African Americans and Latinos as well.
>
> JP: Okay. Awesome. So you said you went to Wilson—was this for high school?
>
> CM: Yeah, high school. (pause) I guess the digital divide for Portland was like the river, I guess. Dividing the Southeast from Northeast, yeah.

CM’s narrative suggests that the “divide” manifested in Portland schools along a racialized and geographical divide, rather than a product of intersecting factors such as race/ethnicity and socioeconomics that created JS’s educational context. One of the most interesting things in CM’s narrative of her almost objective use of the terms “African American” and “Black people” in association with the demographics of Portland public high schools. Perhaps not including herself in the group with the other

"four Black kids" that went to school is trivial, but it may suggest a way of distinguishing herself as someone not affected by a "digital divide," whether local or national. Like most of the informants, CM had access to a computer and Internet in the home in addition to resources at school or her community's technology centers.

SB's definition of the concept encompasses those of her peers. These definitions align not only with a racialized reading of the "technological gap" in the United States, but also conceptualize the problem as multidimensional and connected to other inequalities in American society:

> 16. What does the term "digital divide" mean to you? What comes to mind when you hear the term?
>
> SB: I truly believe that when there is a polarization in technology competencies there is a divide. There is sometimes a divide in technological exposure for those in rural and socially/economically depressed areas and Caucasian versus African Americans and other ethnic groups. I also believe the digital divide ties deeply with the educational system and how here are inequalities with technologies and tools between school districts and states in within the US.

SB also states that there may be also be differential level of access across wider socioeconomic and geographic units such as states, an observation that was neither explicitly mentioned by the other informants nor much of the research that has attempted the establish the digital divide as a "crisis!" Most importantly, however, she identified a "polarization in technology competencies" more generally as validation for the existence a digital divide. This formulation can also be applied to a *global digital divide*, which was mentioned first in the responses of CM and WH and revealed as perhaps more significant a concern relative to technological disparities within one of the richest and most "wired" countries on the planet.

When I asked her what came to mind when she heard the term "digital divide," she immediately thought of "China with all of their brand-new, high-tech stuff" and then other countries with "*less* technology, like India and Africa" (she quickly corrected herself remarking that Africa was a continent, but also seemed to hint that differential levels of access could be continental as well varying from nation to nation). She went on to assert that places with "less access to digital technology" would suffer from a corresponding lack of opportunities for its peoples, and well as "business opportunities" within those places. Societies with "more current and up-to-date digital technologies" were thus at more an economic advantage than others in the context of global trade, at the very least. WH also associated "Africa and a lot of the Third World countries" with having "less technology" or differential levels of access to technology. However he was more explicit in describing the factors which seemed to prevent most of a continent and "other countries" from communicating with the people that do have access to digital technologies ("us/U.S.," for example):

> WH: Like I can think of maybe perhaps people like in Africa, a lot of the Third World countries you know, they don't have maybe the infrastructure in order for these devices to work…(quietly) Let's see what else there could be (pause) That's what I'm thinking: money, training, and the lack of infrastructure.

CM and WH's projection of "lack" onto not only "Third World" countries but onto the entire continent of Africa was surprising but not completely unexpected. With little mention of race—or more specifically, Blackness—it is possible that the old racial ideologies that still pervade modern society have wormed their way into our perceptions of technologies as Americans. While the informants are not "white," Morrison argues

that the term "American" carries this connotation, and that "Africanist people struggle to make the term applicable to themselves with ethnicity and hyphen after hyphen" (Morrison 1992: 47). Thus the "whiteness" assumed with American citizenship in this case is not necessarily a comment on racial or cultural superiority, but one on technological superiority, despite the fact that many immigrants from those same countries make up significant parts of science and technology industries in the United States. While this is only an interpretation and is not representative of the perceptions of the population of OSU's African American college students as a whole, it may merit further consideration in a comparative study involving a larger pool of participants.

With the exception of the last factor, WH was inadvertently describing the same issues that affect what he *imagined* were differential levels of access to digital technologies in various sectors of American society. He recalled a memory where one his friends asked him what "dot.com" referred to after seeing it mentioned in television advertisements. WH seemed amused and surprised at his friend's inquiry, as I had been once he recounted the story to me:

> WH: Yeah I guess some people are just maybe used to cell phones, telephones and they're not really accustomed –they don't really readily access computers. I imagine that's the reason why he didn't know what the dot.com was…There are people out there that actually---
> WH & JP: (in unison) do that. (both laugh).

We both acknowledged that while everyone differs in their quality of access to digital technologies, it is fallacious to assume that the people who don't have basic access to computers, the Internet, or other digital technologies are "victims" of what is likely more than one "digital divide"-- nor are they more likely to be African American.

4 Conclusion

The thirteen informants that participated in this study have come from a variety of backgrounds that inform their equally unique relationships with digital technologies. Their responses generated novel articulations about the scope of the "digital divide" and the impact of technology on a diverse community of African Americans users that are not behind the times when it comes to adopting and adapting to a growing body of digital devices. By using an interpretive and descriptive approach to examine the practices of these students, I have attempted to "move beyond the binary logic that insists that race and technology are always at odds with each other" (Hines, Nelson & Tu 2001:3). Their interactions with technology have been foregrounded against a discourse that both reifies the "digital divide" as an ongoing problem and "race" as an "intrinsic, timeless feature of identity, a fixed attribute whose 'impact' is then used to explain the use of rejection of specific technologies" (Sinclair 2004: 156). Although the "digital divide" is not a complete *myth*, there is no linear way to conceive of technological disparities that manifest in multiple dimensions. There exist multiple divides (Mossberger et al 2003) that vary in their significance as to their impact on why African American college students at OSU and perhaps nationally more generally choose or choose not to utilize certain technologies. The idea that technologies are "rejected" by African Americans constructs the logic that technological "progress" is somehow anathema to some members of an American subpopulation who are culturally "backward" in some way. While I did not focus specifically on individuals that come from low-income

backgrounds in this study, along with Mossberger, Tolbert and Stansbury I echo the perspectives of other researchers formulating counterdiscourses around the digital divide in their advocacy of more research into the skills, attitudes and experiences of those members of "disadvantaged groups." The observations and emergent themes discussed in the previous sections can be summarized into key finding that will form the beginnings of a counterdiscourse around the digital divide phenomenon, along with the research and critiques of scholars and activists outlined in Chapter II:

- African American college students at OSU generally did not see themselves as adversely impacted by the "digital divide," as most have material and functional access to several digital technologies.
- Most of the informants owned a cell phone, iPod, and personal computer but still used the technological services and facilities offered by OSU for various reasons, namely convenience and access to cheap/free printing.
- Race/ethnicity, gender, and class seemed to have no significant impact on which digital technologies the students chose to adopt.
- Individual perceptions of the digital divide varied, from one informant not commenting on the issue at all, to several definitions citing the divide as primarily *generational, class-based*, or *global*.
- When asked to generate definitions of "access," the responses were varied similar to their perceptions of the divide. However, "access" defined as exposure to new technological developments and basic competency was

fundamental to several informants' rationale for possible reasons behind any existing technological gaps.

- Some African Americans are aware that the "digital divide" is shorthand for a paradigm that views access to digital technology as partially determined by race/ethnicity in combination with socioeconomic status. It also evokes the legacy of other inequalities in American society that affect one's quality of access to digital technologies. However, it is also understood that these factors are confounded by the significance of individual experiences and early exposure to certain digital technologies.
- The "digital divide" in the United States is *multidimensional*.

These points illustrate that the older discussions around the "digital divide" as a problem of access via lack of technological penetration into certain communities are incomplete and make generalizations that are challenged when the practices of individuals are investigated. Thus more research into how different groups *within* the African American population view and utilize digital technologies is necessary. Since the late 1990s the sentiment that "increasing numbers of racial minorities and women are acquiring access to the Internet" (Nakamura 2002:9) has been at the center of a powerful argument that not only has the "digital divide" been blown out of proportion, but that the predominant discourses around the issue—particularly in the context of being a relevant object of study in critical cyberculture studies—are "tiring fast" (Nakamura 2006:31-33).[10] The

[10] Nakamura's creation of a "wired, tired, and expired" list mapping the most relevant issues in the objects of nineties (and early twenty-first century cyberculture) examines how the field of cyberculture studies might create a "rigorous critical methodology" (2006:31). The "digital divide" is still a "wired" issue as

informants that contributed to neither this project nor their personal experiences with digital technologies are *not* representative of all African American college students at OSU, or African Americans over the age of 18 more generally. Their stories instead reflect the evidence of an emerging counterdiscourse to the trope of the digital divide.

The definition of the literary and cultural movement known as Afrofuturism (which incidentally owes much of its development to its roots in cyberspace), offers a rationale for why more research is needed on this subject—"African American voices have more stories to tell about culture, technology, and things to come" (Nelson 2002:9). Cultural anthropology, in dialogue with other humanities fields, can participate in this conversation and provide a forum for such stories via virtual ethnography (Hine 2000). By engaging in participant observation online, interacting with an informant not as the researcher but as a member of the same cyberspace community, one will be able to gain new insights into questions about access and perceptions of the digital divide as well as the motivations behind engaging in certain types of gaming and other online content. With a more balanced power dynamic between the researcher and the informant, a rapport may be easier to maintain over a longer period of time, without the bias of face-to-face interaction and the lack of anonymous protection afforded by a computer screen.

Gaming, particularly online games linked to large themed communities such as MMORPGs (massively multiplayer online games) was not mentioned by any of the

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much of the scholarship reinforces the victimization paradigm that casts certain populations as victims left behind in the digital revolution. However, a shift to the study of the implications of the experiences of (cont'd from 10.) *individual* tech users and innovators in communities of color and low-income communities, largely the goal of this smaller study, should open up new directions in this kind of research for the social sciences more generally.

thirteen informants as one of the activities they engaged in online. While I am familiar with online gaming and MMORPGs such as World of Warcraft and Final Fantasy, I also have never participated in this activity. Edward Castronova cited general statistics from an Interactive Digital Software Association consumer that listed the "average game player in the United States" as 29 years old, and more than half the time, as male (Castronova 2005:57). One wonders whether African American gamers form some portion of this percentage, or whether race and ethnicity were measures used in the survey tool at all. In popular culture, I have personally observed that the representation of active online gamers tends to align with the general stock representation of the techno-savvy individual or "nerd" figure: virtually always a White American male between the ages of eighteen and forty. These images would suggest on the surface that perhaps these synthetic worlds do not have the content that is culturally relevant or interesting to African Americans on the Internet (Brock 2006:358).

As Martin Kevorkian pointed out, however, popular images are often used to reinforce certain ideologies or privilege certain realities over others. The techno-savvy African American student, whether male or female, is not a solitary figure, but the dominant discourses of the digital divide would render them almost invisible. Many of the informants hardly mentioned race, ethnicity or socioeconomic status as factors that played a large role in shaping their unique relationships with digital technologies. As "Digital Natives," eleven of the informants have grown up with digital technologies. While all of them did not have access to the computer or the Internet at some point in their early childhood, they are a part of an generation that has at the least a familiarity

with how to access and develop content online even if they don't personally own a digital device (Palfrey and Gasser 2008:4-7). Perhaps it is logical then that these students chose to identify themselves as part of social networks such as MySpace or Facebook rather than by their membership in a particular racial or ethnic group—*if* they choose to identify themselves as "haves, have-nots," or anything else at all. Since the Internet age "is prompting another shift in what it means to build and manage one's identity" (2008:19), our membership in "portable communities" (Chayko 2008) allows us to come into contact with other African American college students with their own unique technological profiles. Thus the digital divide is only *one* part of a more complex narrative in the exploration of identity and innovation in America's technological landscape.

5 Inbox (1): Epilogue

I first accessed a computer in 1996 at home in my birthplace of San Francisco, California. Like many people that grew seeing digital technologies with little comprehension of how widespread they would eventually become or what they were used for, I took it for granted as something of a newfangled toy. That changed once I used Internet for the first time in 1997; I was online from that point on as much as I could be for a student in the seventh grade. *Encylopaedia Britannica* on CD-rom helped me through school projects from 1997 to 1998 than I can count. Educational achievement was always a priority in my family and we always had at least one computer in the house ever since. I have become quite adept at juggling multiple passwords and screen/user names—some of which I abandoned and are still floating around in the cyberether. As much as the static scream of a slow-loading dial-up connection irritated me, I loved being online.

In 2003, the iPod invaded my consciousness. O Brave New World with such tools in it! I thought that my CD-player was suddenly a marker of my being attached to the nineties. My favorite TA from my Introduction to Cultural Anthropology as a UC Berkeley undergrad introduced a perspective that made me think more critically about what it meant to have access to a device that contained music from all over the world (and various sociopolitical contexts) at my fingertips that drowned out the world once those ear buds were in. Three iPods, and three cell phones, and three personal computers later (this study was temporarily interrupted by a laptop motherboard malfunction!), I

must say that the "digital revolution" has inspired feelings of ambivalence. Time and communication have sped up to an almost frightening degree; I'll *never* have an empty inbox and will likely always be waiting for a call or text message on my cell phone. Granted, my middle class upbringing in the San Francisco Bay Area, not too far from Silicon Valley has definitely played a role in my exposure to these tools.

However, I never imagined that I would be considered less likely than a White or upper-class college student *not* to have access to digital resources. This whole "digital divide" business seemed ludicrous; my experience and the experiences of my family and friends seemed to contradict the very idea of it. I visit more blogs than I can count; most created by anonymous African Americans. I decided to investigate further, lest my assumptions and biases prove equally problematic. I wanted this research to contribute to a growing body of counterdiscourse literature around the issue of the digital divide, but also to suggest new directions in the way that we think of race and technology. More and more people are connected *to* and *in* cyberspace than we think, and there are many more stories to be told about our relationships to an expanding corpus of digital technologies.

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