

THE DIGITAL DIASPORA IN SUNSET PARK:
INFORMATION AND COMMUNICATION TECHNOLOGIES IN
BROOKLYN'S CHINATOWN

by

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Abstract

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by

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My thesis is that, contrary to expectations that working-class Chinese immigrants would have less access to information and communication technologies (ICTs) and fewer skills in using them, struggling immigrants to Brooklyn's Chinatown are skilled at using ICTs and do so on a daily basis, in ways that enrich their relationships and transnational participation. They are able to do this despite the severe limitations that ethnic enclave employment places on their time and opportunities, in part because of heavy use of affordable internet cafés in the neighborhood. Building on a growing body of literature on new media and diaspora, this thesis explores the implications for citizenship, belonging, identity, and kinship of the adaptive ways that working-class newcomers in Sunset Park find to acquire and use digital technologies. While the access they manage to achieve connects them to a larger circle of news, ideas, people, and learning opportunities than they would otherwise encounter, it does not eliminate the oppressive structural disadvantages they face.

Much of the existing research on overseas Chinese in the U.S. (as well as mainstream media) focus either on elites, especially on their high educational attainment, or, on the other hand, on the economic struggles and systemic obstacles faced by Chinatown residents. These miss some of the richness of the everyday patterns and strategies, the sacrifices and ingenuity that 'downtown Chinese' -- in this case residents of Brooklyn -- use to squeeze more out of their

limited resources and leisure time and to construct new lives that remain connected to the past. The high level of computer use and ownership I found is connected to the emphasis people place on nurturing family ties and ensuring the success of the next generation. The chain migration process links families, and sustaining the transnational ties that made immigration possible is a big part of the communication styles in this community. These include placing voice over internet protocol (VoIP) calls at a higher rate than the national average and even buying computers with that purpose in mind.

This dissertation documents the intensity and sociality of ICT use in Sunset Park, which rarely occurs in the workplace, accentuating the importance of home ownership in the process, and of internet cafés, especially for young men. I also take up the censoring discourse about cafés, its connections to China and to the specter of internet addiction, analyzing the negative imaginary surrounding activity in these public spaces. There is an age and gender divide on evidence in the youth and masculinity of the internet cafés, but this does not reflect actual computer use in the home. That is documented with a ‘day in the life’ portrait of a typical extended, three-generation household, which shows how sharing computers and using them in shared space can create a family bond. Statistical data from the National Science Foundation have previously shown that Asians have the highest rate of computer use of any ethnic group in the U.S., across all income levels, and this ‘portrait’ demonstrates what that looks like by documenting the daily media practices of low-income Chinese in New York.

Levels of formal education in the community are generally quite low; many lacked the resources to complete a secondary school education, yet still learned enough to have a relatively high rate of digital literacy. Reading Chinese-language newspapers was the number one activity people reported doing online, and many read print newspapers as well. Other specific online

behaviors are part of my analysis, including competitive gaming as a social experience and learning opportunity, along with the differences between the first and second generation in the ways they communicate. There are also some important limitations on how Sunset Park residents use computer technology, with more of a focus on entertainment and social media than national averages and less interest in cultural capital enhancing activities. This secondary digital divide is explored, along with related language issues. I found people to be very active on the Chinese social networking service QQ and avid consumers of Chinese language media, which help them stay informed and maintain close ties with friends and family but can also perpetuate a focus on existing social networks and limit development of English language skills. Heavy use of QQ's services may also limit exposure to information not readily offered by this 'gatekeeper' portal, similar to the way that America Online did for English-speaking users during its dominant years in the early days of the internet.

Overall, I conclude with a cautiously positive assessment of the role of the internet in working-class immigrant Chinese communities. Notwithstanding the hurdles people confront in their everyday lives and employment – and the negative discourse surrounding the youthful clients of internet cafes -- my data from Sunset Park, collected in both these cafes and in homes, demonstrate a range of benefits from internet use. Informants reported daily online activities and computer-mediated communication practices that enhance their limited leisure time and personal relationships. This high level of ICT use is no panacea, however, for reducing a structured social inequality that is a fact of life in ethnic enclaves like Sunset Park.

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Chapter One

Introduction

Walking around Chinatown in 2007, thinking about my plans for doing anthropological fieldwork, I was struck by how one type of business seemed disproportionately popular: the internet café. These small enterprises, devoted to providing internet access for walk-in customers, were everywhere. They were sometimes just small shops with a few dented PCs lined up against a wall and one employee there to collect the fee of a dollar or two for an hour's use of a computer. Often they were second-story walk-ups with a handwritten sign in Chinese directing customers to come up the stairs, or were not visible from the street because the store-front window had been made opaque. I wondered, "what exactly are they doing in there?" and seeking an answer to that question was my first step toward this dissertation research project.

As I was to experience firsthand, internet cafés were just one of the places in which working-class Chinese immigrants around New York City were active online, maintaining family networks and shaping their transnational experience with an intense use of information and communication technology (ICT). This dissertation seeks to illuminate some of the special characteristics of their communication practice. Linking them where applicable to related practices and technologies in China, as well as with other immigrant groups in the U.S., it will also demonstrate how much they share with the communication habits increasingly displayed by all of us. We are all part of a new era in information technology, and our practice is continually

being transformed. Internet access, computers, and cell phone use are leading to an intensification of connection among us and our social networks, while leading to isolation and alienation in other ways.

For the new immigrants to the United States settling into working-class communities like the comparatively new Chinatown in Brooklyn's Sunset Park, ICTs are embedded in every aspect of life. ICT use is central for diasporic communities, from shaping the circumstances under which they choose to move abroad and the ways that they build adaptive skills for their new situations, to the intensification of their transnational relationships, which can transcend geographical limitations and time zones. The people in Sunset Park whose lives this ethnography explores have an especially active and compelling pattern of relationship-building via technology use, and the internet café phenomenon is an important part of their story.

Visiting one of these cafés for the first time felt bold and transgressive, and not only because I was usually the only person there who was not Chinese, the only woman, older than pretty much everyone, and apparently the most prosperous (even as a struggling graduate student). There was also a dark and unwelcoming environment in many of them that was apparent to me even before I began to talk to people in their homes and hear of the negative image that cafés held among adults, especially women. That this stigma was due not only to the youth and male-dominated clientele and their fervor for computer games but also to related hegemonic discourse is an argument I attempt to explore in the pages to come.

This dissertation is not just about internet cafés, however, but also about the lives and relationships of Chinese Americans living in Brooklyn and the whole web of communication strategies they have for molding these relationships. There was not much established scholarship to guide my research when my project began. I wanted to consider how new information

technologies were part of the transnational experience among one particular ethnic group, in one particular place, but other anthropologists had written more about virtual or online communities or the Chinese American experience more broadly. Online ethnographies of virtual communities are facilitated by the record-keeping function of the technology, since transcripts of chats are automatically archived and searchable. One article opined that people who have studied the internet “have focused disproportionately on virtual communities, a worthy topic, but not the only one” (Dimaggio et al. 2001:329). They suggested instead that research should focus on “the internet’s impact on inequality, politics, organizations, and culture,” developing “explanatory models that distinguish between different modes of internet use and that tie behavior directly to social and institutional context” (Dimaggio et al. 2001:329). My research explores two elisions mentioned above: the political economy and the social context. Mine is not a study of an online or “virtual” community, but of an actual neighborhood, and the ways that information technology use and ownership affect residents’ relationships and their experience of living, working, and raising families in their new environment in New York City.

Saskia Sassen asserts that technologies “both construct new social dynamics and reproduce old ones, constraining some human activities while providing capacity for others. Part of the solution ...lies in making sure that the study of life online includes the territorial context in which users actually live” (*in* Howard and Jones 2004:10). My research project takes up that challenge, looking at Brooklyn’s Chinatown, and how information technology and life online shape the digital diaspora there.

Diaspora is a contested term, with many meanings, from Walker Connor’s, limiting it to any “segment of people living outside the homeland,” to others that add the meaning of ethnic identity and continued connection, to a more charged connotation of persecution (Alonso and

Oiarzabal 2010:3). Once associated only with the way that the Jewish people were scattered and their oppression, the term has been used more broadly in recent years, adding other less fraught meanings and including other ethnic groups. Robin Cohen breaks it down into several types, from victim diasporas, to labor diasporas (a group that includes the Chinese), to trade, imperial, and cultural diasporas (Alonso and Oiarzabal 2010:3). I use the term in the neutral sense of a displaced group, migrating voluntarily, but in a labor environment that the forces of globalization helped to create. The term diaspora is further complicated in light of communication technology, since it conjures the idea of communities separated from and longing for home, a gulf that may be eradicated by the continuing transnational connection that is possible today and the information technologies that enable it.

The term ‘digital diaspora’ is also slippery, containing as it does the sense of a technology-enabled connection among a group who are living apart, but not in the sense of people who find each other by common interests online. It is different from a virtual community in that the relationship to a country and other people already existed before being perpetuated online, and it is in that sense I use it when I consider the fluid transnational relationships enabled by communication technology that shrink distance and time for the digital diaspora in Brooklyn’s Chinatown.

Writing about belonging and diaspora in relation to the Chinese experience, Loong Wong pointed to the need to consider the identities and experiences of non-elite Chinese internet users. To focus only on the well-educated and affluent could result in “being captive of a homogenising, transnational elite discourse sponsored by global capitalism” (Wong 2003). In exploring the relationships of the working-class Chinese in Sunset Park to each other, to relatives

back home, and to the technology that shapes their transnational experience, I have sought to fill this gap.

Some of the terms I use often throughout this dissertation require some explanation. Although I use the term ‘information and communication technology (ICT)’ throughout, it is with the anthropological understanding that all cultures have had ICTs (for example, writing letters). My primary focus here is on digital technologies, and I employ the commonly used term ‘ICT’ to refer primarily to computer mediated communication, but I will also discuss some other ways Sunset Park residents communicate, including telephone calls. Also, I have used the terms internet café and cybercafé interchangeably, as well as referring to them simply as ‘cafés,’ which I think the context will make clear.

Since ‘working-class’ can imply a variety of somewhat loaded meanings, it is worth being explicit about how I am using the term. According to Erik Olin Wright (1997), both a Marxian tradition and a Weberian one contribute analytical perspectives to our understanding of class, with some overlaps and connections. My informants are working-class in a Marxian sense, as they work for wages and do not own the means of production. I also intend to imply a more Weberian understanding of class difference, including stratification in terms of power, occupational prestige, and education. In their relationships to authority and possession of expertise -- two important markers in Wright’s analysis -- the vast majority of participants in my study are working-class. They are in the main wage-laborers in low-prestige occupations, with enough limitations on their education and life-chances to invest their hopes primarily in creating opportunities for their children. The decision to move to the United States, to lay the groundwork for the next generation to move up in status and opportunity, is an essential part of that strategy.

There is still some debate about whether ‘the Internet’ has become indispensable and taken for granted enough to become just ‘the internet,’ small ‘i’, as new communication technologies tend to do in maturity -- witness television and radio. In order to highlight the multiple experiences and varied ‘internets’ available to users with different backgrounds, needs, interests, and access, I use internet here with a small ‘i,’ hoping to avoid a sense of a monolithic institution or uncontested understandings of what it means. Also I should note that, although I use the word ‘community’ throughout, it is with some reluctance and mostly to distinguish Sunset Park Chinese from other people and other immigrant populations in Brooklyn. The fact that these people have a shared birthplace or heritage does not mean they all see themselves as a community, nor that the adaptations to technology they bring with them to Sunset Park translate to a class consciousness or cohesiveness; their communication practices are also rich and varied.

Communication scholars have observed that the internet is not a single technology, since there are many different ways of communicating online (Thurlow et al. 2004). Computer mediated communication (CMC) is a moving target, with many different technologies and modes that can be considered in it, including emails, blogs, and web-enabled video cameras (webcams). The main factors affecting CMC online are therefore all about context, e.g., the type and mode (including text, graphics, or audio), who the participants are, the length and nature of relationship, their topic and purpose, whether synchronous or asynchronous, whether it is public or private, as well as the attitude and experience of participants (Thurlow et al. 2004:32). There is a great deal of overlap, and CMC has become increasingly multi-modal, with less and less of it being text-based (Thurlow et al. 2004:33). This breadth and overlap will be apparent in my discussion of communication practices in Sunset Park. What I am *not* attempting here is an ethnography of cyberspace, so there will not be much textual analysis of static posts online,

although there are a few transcripts of text chats to be found in the Appendices. My interest lay in exploring the political economy and social context of their technology use by getting out and talking to people in the neighborhood and observing them in the internet cafés.

Some of the language of communications and CMC has an ironic overlap with the people and practices examined in my research project. Those of us who grew up before the age of the internet, who subsequently gained the skills to enter that world, are often referred to as *digital immigrants*. Youth who never knew a world before the internet and the proliferation of ICTs are referred to as *digital natives* (Prensky 2001). My informants are immigrants from China, geographically displaced, and most of them are *digital* immigrants according to this definition as well.

A book by Jack Linchuan Qiu (2009) about ICT use by working-class people in China has been useful in helping me think through the historical context for my own data. Qiu's book considered the unique technological strategies that working-class people use in China to adapt to the mobility and uncertainty of their lives, such as heavy mobile phone use and patronizing internet cafés. A recent collection of essays about diasporic communities and new media (Alonso and Oiarzabal 2010) showed the broad range of disciplines adding to our understanding of this developing field, with contributors drawn from communications, anthropology, sociology, philosophy, public administration, area studies, political science, geography, and international relations.

Work on ICT and the transnational, diasporic experience highlights the fact that technology spurs immigration, for example by providing a glimpse of better standards of living disseminated online, on television, and in film, and that it fuels the globalization process itself, providing the impetus for moves in search of better wages and opportunities, and the need that

corporations have for a fungible, global workforce. The choice to make such a move is not just an individual decision, but fostered by social networks and the family connections that provide a pathway and resources for immigration. Family ties and an identification with home, family, and nation can continue with more intensity than ever before, as new social media and technologies like internet phone calls increase the tendency for time and space to shrink and take on new meaning.

Converging threads from several areas of study helped form my interest in the subjects of this project. I studied Mandarin Chinese and the anthropology of China and Chinese Americans in preparation for doing anthropological fieldwork, and studied for the Certificate in Interactive Technology and Pedagogy as part of my Ph.D. preparation, becoming interested in theoretical models for understanding new media. My own experience as a college instructor has been in teaching a communications course in digital literacy for the City University of New York's online program. As an early adopter and technophile, and as an anthropologist, I was both intrigued by the possibilities of new technologies and conscious of the impact for good or ill on human interaction and relationships that reliance on new media might bring.

After my first visits to internet cafés in Manhattan's Chinatown, discovering the important ways they differed from any wi-fi internet café I had been in previously, I began to explore the other Chinatowns in New York City, where I found the same phenomenon. There were an impressive number of internet cafés for Chinese-speaking customers in metropolitan New York, especially on the side streets off the main business and shopping corridors in Manhattan's Chinatown, in the Chinese section of Flushing, Queens, as well as in the newer Chinatown in Sunset Park, Brooklyn. The computers at the public libraries in Flushing and in Sunset Park also proved to be very actively used by Chinese speaking customers. I chose to

focus my attention on Sunset Park in part since I already lived in Brooklyn, and because scholars studying Chinese Americans had not done as much work there as in New York's other Chinatowns. It helped that many newly arrived immigrants from Fujian province were settling there; these Fuzhounese spoke Mandarin Chinese, the language that I had studied, unlike earlier waves of Cantonese speakers.

Previous ethnographic writing on recent immigrants to New York's Chinatowns had focused on the insecure and often informal labor of this disadvantaged population and their immigration struggles (Kwong 1997, Guest 2003). Not as much has been written about migrants' private lives outside of the workplace: their families, their leisure activities, and their relationships with friends and relatives in the U.S., as well as those in China. Taking the heavily patronized cafés and well-used libraries as a beginning, and with no clear idea of what the result might be, I sought to explore what part information technology plays in the daily lives and social networks of this one group of Chinese Americans, from recent arrivals to the second generation.

I went on to do participant observation in the numerous internet cafés in Sunset Park and around the heavily trafficked public access computer bank at the local library, and talked to library employees, computer store-owners, and internet café managers. Ultimately I also gained access to people's homes, where I conducted in-depth interviews with fifty-five residents, especially regarding their internet use and computer mediated communication.

In order to obtain these in-depth interviews with residents of Sunset Park, I chose to select an area of the neighborhood to focus on, using real estate software to identify blocks where most of the primary residents had Chinese names. I sent an introductory letter to every household on those blocks and then began weekly visits, knocking on every door and asking for a chance to interview residents. Those who agreed to be interviewed were about 65 percent male

and 35 percent female. Elderly women home alone were the least likely to agree to be interviewed, although I was able to talk with a few. Ages of respondents ranged from 13 to 74. I recognize that there are some limitations inherent to this interview sampling technique, and it cannot be considered a purely random sample. It was my attempt to avoid the problem of snowball sampling or self-selection, while still gaining interview access to as many people in the neighborhood as possible.

CMC proved to be a growing part of their lives at home and for personal use, even though most had jobs that did not involve any computer use or access at all. Certain themes began to emerge as I became aware of more facets of my surroundings and delved deeper into trying to understand life in the neighborhood, such as complex age-based and gendered relationships with information technology, and the space in which it is used. There was also the rhetoric surrounding public ICT use in the cafés, the family dynamics, and issues related to education, privacy, and access -- all happening with what I came to see as Chinese working-class innovations in computer mediated communication.

Getting to Know the People of Sunset Park

My first two contacts in the neighborhood represented each end of the generational spectrum. From attending Chinese language computer classes at the Sunset Park Public Library, I got to know the instructor, Ray Wong, originally from Hong Kong but in the U.S. now for more than forty years. A cheerful, friendly senior citizen, Ray taught classes in computer basics to newcomers from China and was very helpful in facilitating my research process. He introduced me to Tami Hsu, another library employee from Hong Kong, my first research assistant, a middle-aged mother of two who spoke Cantonese and a little Mandarin. She went with me on my first interviews, although her sensitivity to people's possible reaction to being interviewed

about things like their exact age made her uncomfortable asking some of my questions. Though fluent in Cantonese, she was not prepared to chat with Mandarin speakers; my hard-won Mandarin was sometimes better than hers, as I discovered in an early interview. She also had her responsibilities at home and at the library, which outweighed the small hourly wage I was able to pay a research assistant, and she soon dropped out of the process.

Ray also introduced me to Jenny Liu, a senior in high school who had been volunteering at the library, and she became my research assistant and translator during the remainder of my study. After five or six years in the U.S., her English was pretty good, and she also spoke fluent Mandarin and Cantonese, making her invaluable for interviews, since she could back up my knowledge of Mandarin where the informant was a Mandarin speaker and translate for me when we encountered those who preferred to be interviewed in Cantonese. I got to know Jenny well, along with her parents, her grandmother, and her younger sister. Hers was the first home I was invited into, and I practiced my interviewing skills on her and her family. From her grandmother, a retired New York City garment worker in her seventies, who had moved to the U.S. from Guangxi province in late middle age, I learned that there was much to be gained by talking to older residents about their life stories without sticking to my prepared questions.

At first, Jenny was shy about talking to strangers, so the two of us made a curious pair. I was feeling my outsider status, both for not being Chinese and for being much older than many of the young people we approached, especially in the internet cafés. She, on the other hand, was a resident of the neighborhood and hesitant to intrude on her neighbors' privacy, especially if they were old enough to command her deference or if they might be unwilling. Even though I had sent out an introductory letter to each household before we showed up seeking an interview, we still had to knock on nearly eight doors for every one of the interviews we obtained.

Sometimes people were not home, and sometimes they just did not want to participate and turned us away. We soon gained confidence, however, and grew used to encountering an unpredictable combination of rejection and success as we knocked on doors. After we settled into a routine, Jenny and I began to get to know each other as we walked from interview to interview; I told her about my background and studies, while she talked to me about her life at home and school and the college application process she was going through. So I shared in her family's pleasure when her younger sister was accepted to one of the best high schools in New York City and when Jenny herself got into several good colleges and received some scholarship support.

Jenny was surprised to learn from me that other communities have internet cafés; she said she thought it was a Chinese phenomenon. Why do they have so many internet cafés in Sunset Park? My interviews and participant observation fieldwork demonstrate that the intensely social way in which they are used is at least as important as the plethora of action and role playing games they offer or the fact that, at \$1.00 or \$2.00 an hour (customers pay cash before taking a seat at a computer), they are much cheaper to get started with than buying a computer for home use.

Knowing Jenny had never been to an internet café and her mother disapproved of them, I felt awkward that I had chosen a centrally located internet café as our usual meeting place, but I chose one of the brighter, newer ones, directly across the street from the Brooklyn Chinese American Association. Most of the interviews that are a keystone of this research project were conducted in the coldest months of the winter of 2007-2008, and Jenny and I often had to duck into local bakeries to warm up in between interviews. One reason we grew chilled was that many residents (particularly women home alone), although quite willing to talk to us, did not invite us in but kept us standing in the icy foyer while they answered our questions. Some did

invite us in, however, which gave me a chance to see the similarities and differences of peoples' home décor and gave me a front row seat to their day-off activities. We chose holidays and weekends to knock on doors, hoping to find more people available to be interviewed, and often there were several generations at home, grandparents relaxing, and all the younger family members playing in their pajamas.

My interview questions (see Appendix A for interview instrument) asked for a lot of details about people's experience with ICTs, especially computers, but also cell phones, landlines, and old fashioned letter writing. Most of the technology-related questions I posed were at their core a way of finding out more about relationships: those within the family and between friends in the U.S., as well as connections among friends and family members twelve time zones away. "How many people do you keep in touch with in China?" and "how do you communicate with each of them?" were two key questions I asked, as well as how long they had had internet access at home, where applicable. I asked those I interviewed at home whether they went to internet cafés and those in the cafés whether they had computers at home, which is how a pattern emerged: people, especially young men, were not going to internet cafés just because they had no computer at home, not at all, but because they enjoyed the social atmosphere and camaraderie there. It was not just the high number of computer games offered by the cafés that drew them, either; many went to the cafés with local friends in order to participate together in online social networking with distant friends in China. Before doing these in-home interviews, I was not expecting to find so much overlap in the public/private domains and had assumed that café customers did not have a computer at home.

Most, but not all, of the café patrons were Chinese, and although there was a high percentage of young people, there were some grown men as well, especially evenings and

weekends. One group that was hardly represented at all in cafés, however, was adult women. I was generally the only one, unless a café employee collecting fees or selling snacks happened to be female. This gender and generation gap certainly highlighted my outsider status, although I could hardly have helped standing out, since I was often the only café patron who was not Chinese. Eventually they got used to seeing me around, however, and it became easier to “hang out” in the cafés along with conducting interviews there and elsewhere.

An explanation is in order about names. All of the names in this dissertation are pseudonyms, chosen for their similarity to the names that my informants actually used to identify themselves, whether Chinese or English. For those who go by their original Chinese name, I have given them a different Chinese name for a pseudonym; those who go by an English language nickname received a similar English name for a pseudonym. So someone with a Cantonese name got a similar Cantonese pseudonym, and someone who goes by a boyish English language nickname like Bobby received a similarly boyish pseudonym like Johnny.

Those who use an English language name may have originally received it in a couple of different ways. In many families, those who are already in the U.S. choose an English language name for a newly arriving relative because it has a similar sound to their original Chinese name. Often young people pick a different name later, either because they did not like the English name their relatives first picked for them, or as a way to assert their independence as they grow, choosing names they have heard in school, on television, or through other sources. In those cases, the name they choose may not mimic the sound of their Chinese given name at all. My research assistant Jenny [informant #3], whose family is the subject of chapter 4, told me how she decides which name to use with friends. Since her Chinese friends often have an official Chinese name plus at least one English language nickname, she calls each friend by whatever

name they gave when they were first introduced. I have attempted to do the same here in assigning pseudonyms and transcribing interviews.

What Lies Ahead

Some people with insecure jobs reported using their new computers to look for work, and others were using them to support their efforts to learn English in hopes of expanding their opportunities in future. People working in restaurant jobs out of state used the computer to stay close to their families, and the transnational relationships people were able to maintain with their family and friends in China were also sometimes remarkably active. My first interview was with a young man of 31 who left China at 14, but still had text chats online with his school friends in China every single day, seventeen years later. With this range in mind, in **chapter two**, I introduce the people of Sunset Park and the different spaces that they inhabit.

Sunset Park is a working-class community in the borough of Brooklyn, a bustling part of New York City. The focus of my research is the Chinatown part of the neighborhood, which borders another section of Sunset Park that is predominantly Hispanic. I describe and give some comparative data on these two largest groups, and about Sunset Park overall, highlighting some information from my interviews about education, income, and specifics on ICT use. I also introduce some of the institutions and public spaces in the community that are significant, including the many internet cafés in Sunset Park, and the very social spaces they constitute. Blurring the boundary between public and private, and highly popular with local youth for gaming, these spaces also provide a low-cost outlet for people who want to feel connected with others. Besides the young men playing computer games, other newcomers to Sunset Park with no computer access at home can also be found there, doing an online job search, reading a

Chinese newspaper's web version, or leaving a message online for a relative in China to read later.

During my early visits to the cafés in the neighborhood in 2008, I may have unconsciously assumed the popularity of the cafés and the way they were being used was a static situation. Visiting the area again for follow-up interviews in 2011 revealed a constantly evolving web of people, practices, and technologies. Although the number of internet cafés in the neighborhood remained almost the same at the beginning of my fieldwork as it was three years later, the cafés were not the same ones, and the atmosphere was undergoing a slight shift. Some cafés closed while others opened, and there was a tendency for the new cafés to offer more refreshments and to be claimed more fully by young people than the mix of youth and adults I saw in the earlier period.

In **chapter three**, I talk about the struggles of recent immigrants to Sunset Park's Chinatown, which has its more prosperous, long-time residents, but also those who arrived quite recently, many of them Fuzhounese. These newcomers are often living in very difficult circumstances, working long hours at demanding jobs in Chinese restaurants and garment factories. Many of my informants had not learned to use a computer until they moved to the United States, where they began to learn in school, at the library, or through friends, but rarely in the workplace, as most have jobs that offer no computer access. Social scientists have debated whether groups like those in Sunset Park are empowered by or trapped by the ethnic enclave that allows them to find work and conduct all their affairs in Chinese, leaving no time or money to learn English and step outside its boundaries (Guest 2003; Guest and Kwong 2001; Hum 2002; Portes and Bach 1985; Zhou 1992). These debates have not included much consideration of the impact of ICTs, so that is one focus of my discussion. With more and more people in China

being able to afford computers, more residents of Sunset Park find the online arena to be an important hub for maintaining intense and immediate relationships with family abroad, as well as with those in the U.S. Enhancing their children's educational opportunities was often an important part of the decision to buy a computer, and concern about its impact on education is part of the critique of the internet café phenomenon. Two ideologies co-exist – pro-information technology, and con -- and their influence can be felt in every discussion of information technologies in the neighborhood. People in the neighborhood use ICTs in ways that can ease the burden of family separations and enhance their leisure time, but ICTs do not resolve an exploitative economic environment nor erase the limitations that residents face.

In **chapter four**, I give a “day in the life” story of one family in Sunset Park – actually, two days in the life, since it is a portrait of the Liu family's daily experience in the past as well as today. The story of the Lius – the family of my research assistant, Jenny -- is a poignant one, and gives a sense of the sacrifices Sunset Park residents have made to immigrate to America and in their lives since. Each member of the Liu family has different communication practices, and details about them offer a window into how age, gender, and life-stage influence the ways people use ICTs in Sunset Park. Many people use competitive online gaming as a way of being social, even from home, like Mr. Liu, who once played Chinese chess in person in China, but later came to play it on Chinese Yahoo, with whatever online partner he could find, during his limited leisure time and the short time available to him on the family's shared computer. Parents often limit their own use so that homework can come first, but are less self-sacrificing when it comes to children's use for social networking, text chat, and games. The Lius moved up from their cramped apartment in Sunset Park, where I first interviewed them in 2008, to being homeowners in a new neighborhood when I visited them three years later, giving me a chance to reflect on

some of my earlier assumptions and observations. As their lifestyle became more oriented toward home ownership and their children grew older, their communication practices changed as well.

In **chapter five**, I give an ethnographic account of different types of ICT use in Sunset Park: in the library, the internet cafés, and at home. The computer classes at the public library are many people's first introduction to using a computer, in preparation for buying their first one for use at home. I interviewed 55 residents in their homes and in the cafés, and offer some of their personal stories to explore the ways that ICT use is part of their experience as new immigrants to New York. I also visited the computer stores, where managers reported that, for first time purchasers, gaining access to QQ is a major impetus in their buying decision, as it will enable them to network with their families in China. QQ is a dominant Chinese portal, offering instant messaging (like MSN or AIM), social networking (like Facebook), shopping, games, and web browsing, among other services. I also give a tour of some of the neighborhood's cafés. The unspoken ways these cafés have been claimed as predominantly male and youth-oriented spaces are myriad, including loud music, aggressive cursing, smoking, no separate bathrooms for women, and dark and dirty interiors, not visible from the street. After a look at the content of the games people are playing in the cafés and at home, I give some details about other online practices, particularly via QQ, exploring its history and popularity, and the ways that people use it to communicate. I also consider users' digital literacy, and how it manifests, as well as what 'literacy' means when users are placing internet calls and not doing any text-based communication. While designing my study, I believe I made the assumption that whatever communications people were having with their social networks online would be text-based, since that is what CMC meant to me – i.e., mostly email. Face to face chat with a webcam-enabled

computer was not a widely used application when I began, and I was not expecting users to be ahead of the general population. I also did not expect the layers of complication related to text-based CMC, such as that older adults may not be able to read or write English but also have trouble typing Chinese, while young people often can speak but not read Chinese.

Finally, in **chapter six**, I recap some of my findings and draw some conclusions, including offering possibilities for further research. Any digital divide I may have expected to find as a result of people's socioeconomic status was not much of an issue, at least in terms of computer access. I found instead evidence for a *secondary level* digital divide, reflected in the entertainment and social media focus of residents' online activities, and in the fact that their high level of ICT use does not overcome the obstacles they face. As basic computer access has become broadly available, at least within the United States, scholars have begun to examine instead the divide in practice between those with less income and education, who may not benefit as much from internet access as an information source, versus more privileged users, whose online activities tend to further enhance their already bountiful cultural capital. Despite the struggles of the working-class Chinese of Sunset Park, the relationships they maintain with internet access are rich and active, allowing me to end on a cautiously hopeful note.

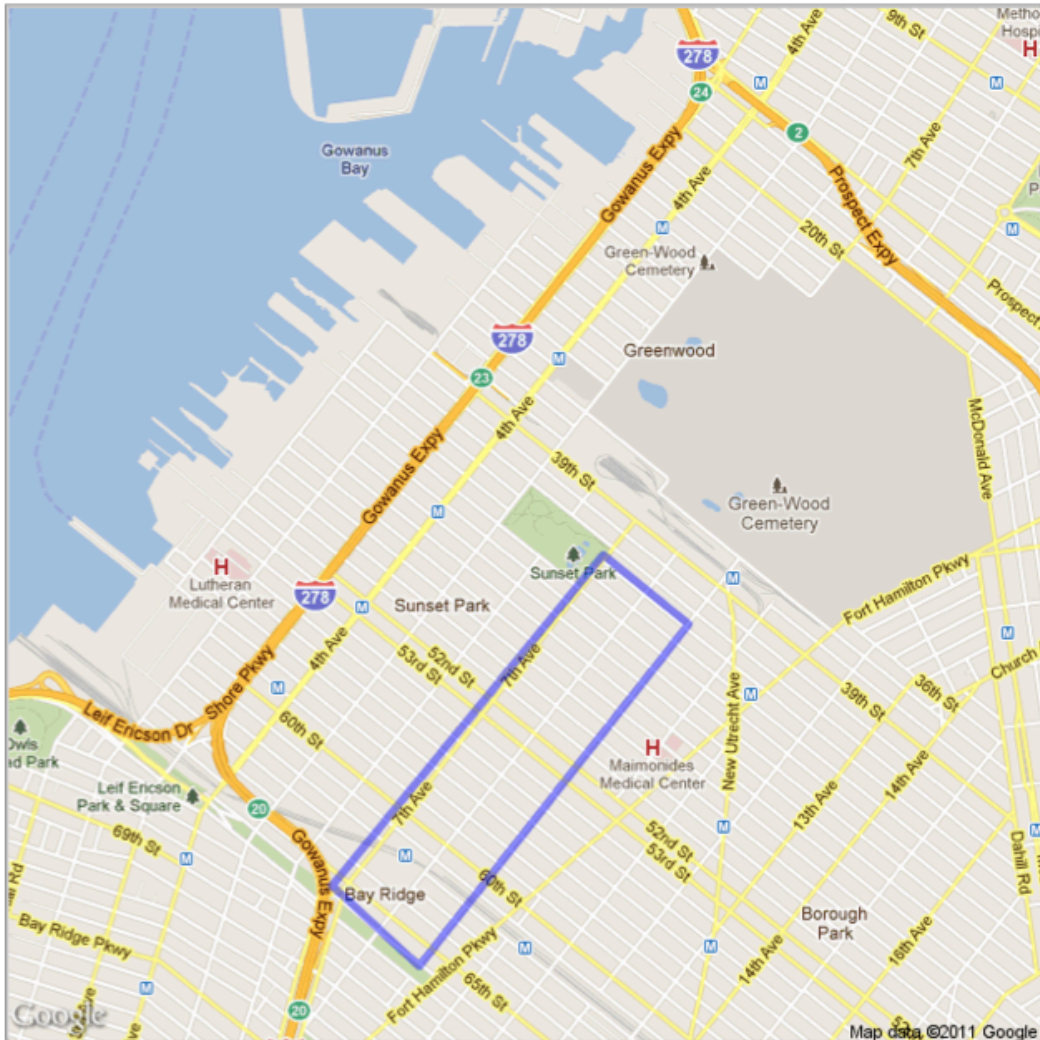
A New Tool in a New Chinatown

This dissertation is about transnationalism and the political economy of an evolving neighborhood of recent and more settled immigrants. It is also about relationships, about communication, and whether new information technologies really offer something *new* to this mix. Why is this important? The following chapters will offer a multi-faceted answer to that question. A couple of thoughts to set the stage:

In writing about how global forces affect transnational lives, Michael Burawoy wrote that, “the telephone, the video, and the computer make living in two worlds easier, but there is little evidence that the dilemmas of duality are much different now than they were a century ago” (Burawoy 2000:9). That was more than a decade ago, and others have begun to show ways in which those ‘dilemmas of duality’ and their solutions, the ways of maintaining contacts, are given a new immediacy and instantaneity -- as well as new consequences -- by information technology. My interviews with Chinese American residents in Sunset Park and participant observation fieldwork in the neighborhood indicate that technology use is embedded in residents’ lives in complicated ways that can nurture insularity and provide opportunities, enhance old relationships yet limit new ones, and can have different affects and appeals for the first and second generations. I look to explore all these issues with ethnographic evidence in the chapters that follow.

Chapter 2

Sunset Park: People and (Wired) Spaces



Sunset Park's Chinatown, Brooklyn, NY

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Sunset Park's Chinatown

Approximate borders of Sunset Park's Chinatown are 7th and 9th Avenues, between 42nd Street on the north and 68th Street to the south, with 8th Avenue as the commercial center.

Sunset Park, bordered on one side by New York harbor, first sprang up during the 19th century, when New York City was a major port for shipping in the U.S. It later became a thriving immigrant neighborhood, populated by Irish, Scandinavian, Italian, and Polish settlers (Winnick 1990; Hum 2002). The area flourished through World War II, when the Brooklyn Army Terminal in Sunset Park was the most important point of departure for soldiers and materials headed overseas (Winnick 1990). The Sunset Park docks employed Brooklyn longshoremen by the thousands, until the decline of waterfront industry began to leave dockworkers competing for fewer and fewer jobs (Freeman 2000). The film *On the Waterfront* is “an only mildly fictionalized account of the harsher realities of Brooklyn’s underemployed docks,” and depicts Sunset Park in that era (Winnick 1990:86).

In the 1940s, the developer Robert Moses pushed through the Gowanus Expressway, an unsightly elevated highway that separated the neighborhood from its waterfront Industrial Zone (Caro 1974). The divide caused by the expressway helped lead to disinvestment and an overall downturn in property values. In the heyday of industrial manufacturing, Sunset Park had been home to large plants like Bethlehem Steel, American Can Company, and Colgate-Palmolive-Peet (Winnick 1990:76). During the 1960s and 70s, many large manufacturing concerns like these left Brooklyn for good; buildings sat empty, and the population of the neighborhood began to decline (Winnick 1990; Freeman 2000). An exodus to the suburbs included many from the formerly Scandinavian population of Sunset Park (Winnick 1990).

Immigrants from Puerto Rico began to move into the neighborhood as early as the 1950s, and during the 1960s and 70s, Sunset Park began to have a large Hispanic population. Following the passage of the Hart-Celler Act in 1965 that loosened immigration restrictions, the foreign population of New York City grew steadily; between 1980 and 1990, non-Hispanic whites

became a minority in the city (Freeman 2000:300). Hart-Celler proved to have a wide-reaching impact on the revitalization of decaying and neglected parts of the city. The vitality of Sunset Park was refreshed by new waves of immigrants settling in the area, including a growing number from China (Winnick 1990).

Two factors drawing people to Sunset Park were the affordable housing and excellent public transportation. In recent years, high rents in New York City and gentrification of the downtown area have pushed many residents of Manhattan's Chinatown to move out to the boroughs of Brooklyn and Queens. Since September 11, 2001, Manhattan's Chinatown, impacted by the nearby attacks, gradually came back, but very little housing was added to the neighborhood. Comparatively inexpensive housing drew people to Brooklyn instead. As for Sunset Park, it was easy to recognize the subway stop even for those who could not read the English language signs, since it is the first stop after the underground N train rises above ground. The outline on the map at the opening of this chapter indicates the area that is Sunset Park's Chinatown today. The center of business activity is along 8th Avenue from about 42nd Street to 68th Streets, with the residential section of the Chinese community radiating out toward 7th Avenue on the west and 9th Avenue on the east.

In 1980, the Asian population of Sunset Park made up less than three percent of the total (Winnick 1990:208, Table B-2). By the 2000 census, the total had grown to almost 29 percent, far exceeding the 15 percent figure that sociologist Louis Winnick had predicted for the millennium, in his 1990 book about Sunset Park's past and future development (Winnick 1990:183). Winnick was right about the growth trend, merely underestimating the scale of the population shift. He also predicted that family reunification would continue to affect the makeup of the community, since "Chinese, more so than other ethnic groups, extend the chain of

immigration by bringing in parents as well as spouses and children” (Winnick 1990:183). The 2010 census shows that the total Asian population in the area has continued its steady growth since 2000, to a current total of 32 percent (U.S. Census 2010, est.) Note that the population totals by race or ethnicity in Table 1 add up to more than 100 percent, because U.S. residents may now designate themselves as belonging to more than one racial group, a change that began with the 2000 Census.

Table 1
Sunset Park Population by Race or Ethnicity

Sort Order	Variable Group	11220, Brooklyn, NY	ALL OF USA
	Zip Code		
1	# Asian Pop, 2010	31,077	13,906,406
2	% Asian Pop, 2010	32.00%	4.51%
3	# Black Pop, 2010	2,814	37,036,996
4	% Black Pop, 2010	2.90%	12.01%
5	# Hisp. Pop, 2010	46,886	49,511,501
6	% Hisp. Pop, 2010	48.28%	16.05%
7	# Other Race Pop	32,122	35,702,673
8	% Other Race Pop	33.08%	11.57%
9	# White NH Pop	20,474	200,096,886
10	% White NH Pop	21.08%	64.87%
11	# White Pop, 2010	31,098	221,809,059
12	% White Pop, 2010	32.02%	71.91%

Source: United States Census Data, 2010 (Estimates)
from Simply Map database
Geographic Research, Inc.

The Hispanic population grew significantly in recent decades as well, while non-Hispanic whites and African Americans as a share of the overall ethnic mix were declining. The thriving Hispanic community, originally made up primarily of people from Puerto Rico and now including more immigrants from Mexico and the Dominican Republic, made up 46 percent of Sunset Park’s population in the 2000 Census. That number has grown to 48 percent today (U.S.

Census 2010, est.) The Latino part of Sunset Park is adjacent to the Chinatown section, to the west, and has its main commercial corridor along 5th Avenue.

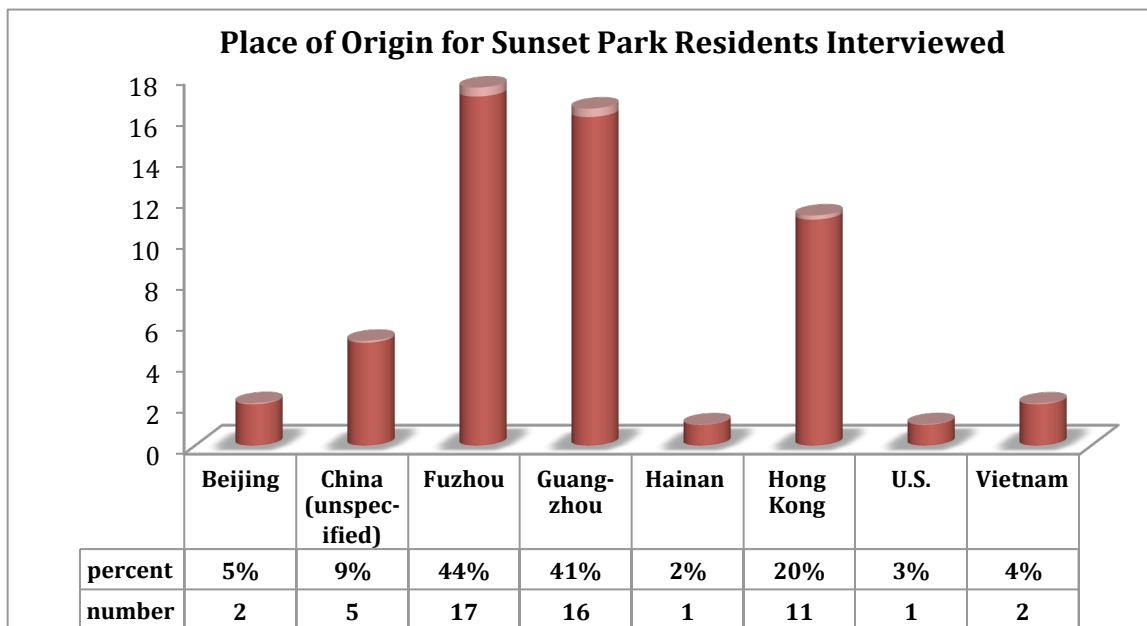
Immigrants from Dominican Republic and from Mainland China are the two fastest growing populations in Sunset Park, with some key differences in their average age and background. Chinese immigrants are likely to be married adults, who held jobs prior to arrival, often as low-skilled labor or in agricultural work. The Dominican population, while also representing a working-class group, is much younger, and many of them did not hold a job elsewhere (Hum *in Vo* and Bonus 2002). The median age among the Chinese population in Sunset Park is almost thirty-seven, while for the Hispanic population it is about thirty (U.S. Census 2010, est.) People in both groups tend to hold jobs in the service industries, in retail, and in manufacturing. There are also other communities represented in the area, for example many Hasidic Jews, with all the groups sharing space in what Tarry Hum calls “multiple publics” (Hum 2010).

Tarry Hum is a Chinese American sociologist who grew up in Sunset Park. She researched the structure of the community board that serves Sunset Park, the most important public institution for neighborhood planning and participation. Despite the fact that Asians and Hispanics now account for the majority of Sunset Park’s population, non-Hispanic whites still make up the majority of the membership of Community Board 7, all of them male and most local business owners. Hum argued that, “while there is token Asian representation, the interests of Sunset Park’s majority working class is clearly absent on CB 7” (Hum 2010:472). She also found that the community board structure divided the neighborhood in a way that was disadvantageous to the population it now serves, with one side of 8th Avenue falling to one board and the other

side of the street to another. So the political representation has not caught up with the constantly evolving ethnic makeup of the neighborhood.

Along with the transition to Chinese and Latino residents becoming the largest segments of Sunset Park’s population, there has been a shift within the Chinese population, from the Cantonese-speakers who first settled and bought homes in New York City, to a newer group of Fuzhounese, who speak Mandarin; 44 percent of my informants were in that category. Fuzhou is the capital city of Fujian province in southeastern China near Hong Kong, and people from all its surrounding areas, not just the city of Fuzhou, are generally known as Fuzhounese. Besides their linguistic difference, people from this newer group of arriving Chinese are often struggling, working-class, and sometimes undocumented, putting the newcomers in an uneasy relationship with their Chinese neighbors, who have more resources and more time in the U.S. Often the established Cantonese population are the landlords and business owners, and the Fuzhounese end up working for them and leasing apartments in the buildings they own and manage.

Table 2



Commercial and Housing Areas

Among the advantages that brought Chinese immigrants to settle in the area, besides the more affordable housing, were the accessible subway lines: the express N at 60th Street and 8th Avenue, the express D at 46th and 9th Avenue, and several local stops for the R train along 4th Avenue. These routes made it convenient for people in the neighborhood to commute to work in Manhattan's Chinatown and other neighborhoods. The number eight being an auspicious number for prosperity and business success in Chinese numerology may have also helped in making 8th Avenue the business center, spinning off from 5th Avenue, which was previously the commercial heart of Sunset Park.

As is the case with other Chinatown thoroughfares like the ones in Manhattan and in Flushing, Sunset Park's 8th Avenue is busy on a typical afternoon and the sidewalks are crowded. It is hard to squeeze past the many shoppers pausing at the greengrocers, fish markets, and other open-air stands, where prices are well below those in other parts of New York City. Small computer repair shops, beauty salons, Chinese bakeries, noodle shops, and Chinese takeout restaurants line the avenue, along with many small stores selling sandals, toys, and other inexpensive goods imported from China. Many of these stores offer some wares out front on the sidewalk to lure in customers. Kitchen stools and small bookcases sit outside of a narrow, crowded furniture store that offers beds and sofas inside; in front of a florist and greenery shop, bamboo and other houseplants attract customers to come inside to see the delicate orchids and potted orange trees sold indoors. Adults in serviceable jackets and blue jeans shop in pairs and family groups, pushing babies in carriages and accompanied by a few grandparents, some among the latter wearing traditional Chinese clothing. The cashiers in the stores are always women, while most other staff are likely to be men, dressed in white coats in the fish markets and grocery

stores. The staff at any given store is mostly Cantonese-speaking or mostly Mandarin, and customers know which stores cater to which clientele.

Every block has one or more bakeries selling the breads and cakes popular in southern China, stores where customers can choose from items displayed along the wall; an all-female staff will then pop their selections into waxed paper bags and ring them up with brisk efficiency. Some bakeries have rows of formica-topped tables pressed end to end, where older men linger to chat and young mothers sit with their children for a quick after-school snack. A filling meal of tea and paper-wrapped sponge cakes, still warm from the oven, or buns filled with savory fillings like pork or scallions, can be had for just a dollar or two, which also buys you a seat at the communal tables, with no pressure to leave. Some bakeries appear to make maximum use of their space by running private mahjongg games in the store's basement, and the clattering tiles of the game are audible from seats inside the bakery upstairs.

The side streets that radiate out from 8th Avenue on either side are primarily residential, and quiet compared to the business district, with narrow townhouses divided up into several apartments apiece, or owner-occupied houses with different generations of a family occupying separate floors. The houses on these side streets are in varying conditions, some blocks occupied by newer immigrants living in more straitened circumstances, and some dominated by long-time residents who own their homes and take pride in embellishing them with highly polished decorative metal on the porches, gates, and front doors. This shiny metal facade distinguishes them from the non-Chinese households on the same blocks, as do red paper decorations hanging on the doors and in entryways.

One house I entered, cold and in poor repair, was apparently rented out to as many different people as possible, with only the kitchen as communal space. The front door to the

house was left open, and I hesitantly walked in to find that every other room in the house was occupied by a separate tenant: like the startled, sleepy man who answered one of the doors but chose not to be interviewed. Some residents in the neighborhood are undocumented and pushed to the limit working seven days a week for very low pay to send home to relatives. Although I did not ask anyone about documentation status, it is likely that some residents also had to pay off the ‘snakeheads’ who helped them get into the U.S. (Kwong 1997, Guest 2003). Other houses indicated greater prosperity; sometimes the occupants were cheerful, well-fed grandparents, caring for small children while the adults of pre-retirement age in the household were out working. Still other apartments showed signs of sharing but with less deprivation. One informant took me into her bedroom to show me her computer. The microwave oven, bunk beds, and dormitory-style plastic bucket of toiletries in her bedroom indicated that she rented just that room, sharing the apartment with a number of roommates. Although she is married, her husband is working at a Chinese restaurant in Pennsylvania, so she is effectively on her own. Busy working people struggling to keep their housing expenses to a minimum often share housing in Sunset Park in this way.

Some apartments are large compared to other parts of the city, and housing costs in the area are well below prices in the city overall for comparable dwellings. Much of the residential construction took place during the boom periods before and after World War I and consisted of attached row houses built for blue-collar home-owners in a style meant to mimic inexpensively the stately homes going up during the same era in more luxurious neighborhoods like Park Slope and Brooklyn Heights (Winnick 1990:79). Besides these modest frame houses along the side streets, there are apartment buildings on the avenue blocks, built during the same waves of residential construction, in the first few decades of the 20th century. Many of the taller brick

buildings are walk-ups with no elevator, while smaller buildings along the avenues include retail space at street level and residences on top.

Most of my interviews took place in the houses on the side streets, almost all of them divided up in recent decades into several apartments, so that the first floor is one apartment, the second another, etc. The average price for an apartment consisting of one floor of a house is \$1,200 to \$1,400 per month, depending on the condition of the interior. The floor-through space usually consists of three bedrooms, a living room, a bathroom, and a kitchen; an apartment of this type offers around 800 square feet. Smaller families with fewer members often share a floor with another family, paying about \$700 to \$900 dollars a month for two bedrooms, with a shared bathroom and kitchen. Prices for a basement apartment, whether shared or consisting of the entire floor, range from \$300 to \$700. Many single people who are newcomers to the U.S. rent just a single room, which can cost from about \$250 to about \$400 a month, with either a shared or a private bathroom. These prices are twenty to thirty percent less than in the more expensive parts of Brooklyn, where a similar floor-through apartment, that is, one floor of a brownstone or townhouse, ranges from \$1,400 or \$1,500 up to more than \$2,000 per month.

Other prices in the neighborhood contribute to an overall cost of living that makes the area a desirable home for new immigrants. Stores along the main thoroughfare of 8th Avenue offer affordable prices on everything from groceries to furniture to office supplies. It was clear from visiting with people in their homes that residents patronize local shops for their purchases; practically every living room featured a black, imitation leather sofa and other furniture sold in the discount furniture stores in the neighborhood.

Vans cruise up and down the avenue supplementing city bus services with low cost transportation to area shops and to Manhattan. Peter Kwong (1997) observed that the mini-vans

that shuttled people to Manhattan's Chinatown for just \$1.75 were an important catalyst for the development of Sunset Park in the 90s, although taking them meant that residents rarely came into contact with anyone who was not Chinese. These 'dollar vans' still create an insular environment for those who patronize them, being outside the city's official transportation system with its main subway and bus lines.

Public Institutions of Significance

Free community services offered at places like the Brooklyn Chinese-American Association (B.C.A.A.) at 50th Street and 8th Avenue enhance the opportunities for those who are new to the United States. The B.C.A.A. offers English classes three or four times a year, covering four levels of proficiency, from introductory, to basic, intermediate, and advanced. Average enrollment is about twenty-six, and competition is so fierce for these free classes that slots are filled via lottery. Those who want to study English for free at the center must fill out an application, which allows them to enter the lottery and then wait for the winners' names to be posted; people can be seen clustered around the center's storefront window at those times of the year, anxiously checking to see whether their names are on the list. Those who are selected must complete registration right away or risk having their admission cancelled and given to the next name on the waiting list. The classes cover typing on a computer, but only those who succeed in getting into the English classes receive computer instruction, as there are no separate computer classes currently at the center. There are, however, computer classes offered at the Brooklyn Public Library.

The Sunset Park branch of the library offers free computer classes taught in Chinese by a native Chinese speaker, classes that introduce basic computer technology to a total newcomer. I attended a series of these free computer classes, which start with the true basics like how to turn

on a computer. Many of the branch's employees speak Spanish and there are computer tutorials offered in Spanish as well, so those library patrons are also well served. Flyers promoting the Chinese version of the course are posted in the library in Chinese and in English. The series of classes is presented year-round, in somewhat structured blocks of three weekly sessions, two hours in the middle of the day on three successive Wednesdays. Recent immigrants who are also newcomers to computer technology are the ones who sign up for the free class, and they can join the course at any point.

Religious institutions are another hub of support for this group (Guest 2003), and there are even more religious centers in the community now than there were when I began this project, such as the bright and open Buddhist center on 8th Avenue at 51st Street. There is also Turning Point on 4th Avenue, assisting the economically disadvantaged from both the Chinese and Latino populations, with services that include health and education, housing, job skills, English classes, and substance abuse programs. And there is the Center for Family Life, focused on support for families and children, and offering employment services and counseling.

Young people have broad access to computer technology through the education system, as all the schools in the area offer instruction and computer labs. The public high schools that have a number of Chinese students from Sunset Park include the High School of Telecommunications: a media-rich environment in keeping with its name, with a television studio, more than one computer lab, and internet access in all the classrooms. All students study web development, HTML coding, and Java. Students also feed into other schools in the surrounding areas of Brooklyn, including Fort Hamilton, Franklin Delano Roosevelt, John Dewey, New Utrecht, and Edward R. Murrow high schools, which offer technology electives and even computer majors. At John Dewey, for example, 100 students a year are selected for the

Computer Science Institute, taking special classes in computer science and programming and attending for a longer school day. The linguistic diversity of the student body is a challenge for these schools and accounts for some of the low graduation rates, as students who are newly arrived in the U.S. and still learning English often take more than four years to graduate. Despite the low four-year graduation rate, the schools have a high percentage of students going on to college or community college after graduation. At the junior high schools in the area as well -- Dyker Heights, John Pershing, Christa McAuliffe, and William McKinley -- students have access to laptops and a wireless network, and receive instruction in Microsoft Office, Powerpoint, and how to do basic research on the internet.

New York State Department of Education statistics (<http://schools.nyc.gov>; <http://insideschools.org>) attest to the fact that many of these schools suffer from over-crowding and low rates of students reading at grade level, as low as 22 percent for ninth-graders at F.D.R. That high school has a particularly diverse student body and focuses on English as a Second Language, offering bilingual classes in Chinese and in Spanish, and classes for ESL students in transition to mainstream general education. For students who enter the system at the grade school level, schools like P.S. 105, with a primarily Chinese student body, offer special instruction for ESL students, and P.S. 69 offers elementary school students a chance to take laptop computers home for research projects and homework. The diversity in the schools presents an educational challenge but is also an opportunity for youth. For Chinese working in co-ethnic operated businesses, there would be little exposure to outsiders, but young people in the school system are exposed to all ethnic groups and much more English than their parents.

The park that gives Sunset Park its name is on the north end of the neighborhood. It is one of the highest points in the borough and offers expansive views of the surrounding city in all

directions. Once a high crime area, it has been revitalized, like many of the parks in the city, and now serves the families in the community well. The Sunset Park Recreation Center on Seventh Avenue nearby has an Olympic size swimming pool, free to the public, crowded with young people during the hours it is open in the summer. Both the park and the recreation center are at a remove from the central part of Sunset Park's Chinatown and its main subway stop, however, and may be more conveniently accessed by those coming from the Latino section of the neighborhood.

Sunset Park also has a branch of Costco, one of the city's few 'price clubs,' a giant, discount, warehouse store that is heavily used by Chinese American customers who can walk there, as well as by other groups who come from farther away in Brooklyn. Stores like this Costco, and the more distant Best Buy, offer affordable access to major household purchases like flat screen television sets and computers that newly arrived immigrants did not have in China. There are also many small and independently owned computer stores along 8th Avenue. Many of those I interviewed had recently acquired a home computer and were still learning to use it, and the number of small computer stores that sell and service computers has expanded greatly to serve them, even though many customers make their actual purchase at large discount stores and in other parts of the city.

This part of Brooklyn is also served by a large teaching hospital, the Lutheran Medical Center, one of the organizations that helped rejuvenate Sunset Park by finding a new purpose for buildings left empty after the departure of heavy manufacturing. Lutheran is in the former home of American Machine and Foundry, which left in 1968 after a bitter strike and abandoned the building to the city (Winnick 1990:89). Today Lutheran is a major employer for immigrants in the vicinity, as well as being the closest medical center for Sunset Park residents. Health care

workers there offer assistance in Spanish, Chinese, Arabic, and Russian, as well as special services for Jewish patients (<http://www.lmcmc.com/GuideForPatients/LanguageServices/>).

Internet Cafés

The section of Sunset Park that is devoted to shops and services catering to a Chinese clientele is fairly circumscribed, but it includes an internet café on practically every block. Along with grocers and laundromats and small health clinics catering to Chinese-speaking patrons, eleven internet cafés thrive in the neighborhood, including a new one in the nearby Latino section of the Sunset Park. There were nine cafés when I first surveyed the area in 2008, and eleven when I counted them again in 2011, which did not include all of the original nine. Two went out of business, one changed hands and began operating under a new name, and four new ones opened. Some blocks have more than one internet café, yet they are filled to capacity throughout the day and evening, with many open twenty-four hours, seven days a week.

One advantage the cafés share with other Chinese owned-and-operated small businesses in the area is that they are particularly accessible to those who are newly arrived. There is no need to know English, to own a computer, or to have a credit card in hand to patronize these stores. All signs and user instructions are in Chinese. Many of the front desk managers, who collect cash fees from customers on their way in, speak a little English as well, for the occasional non-Chinese customer. Some customers are using the cafés as a place to meet up with friends and to gain access to expensive computer games, or a chance to get out of the house, and those who do not have home access are happy to have an accessible solution.

A map of the internet café locations follows on the next page.

Get directions

My places



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Sunset Park Internet Cafes

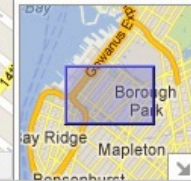
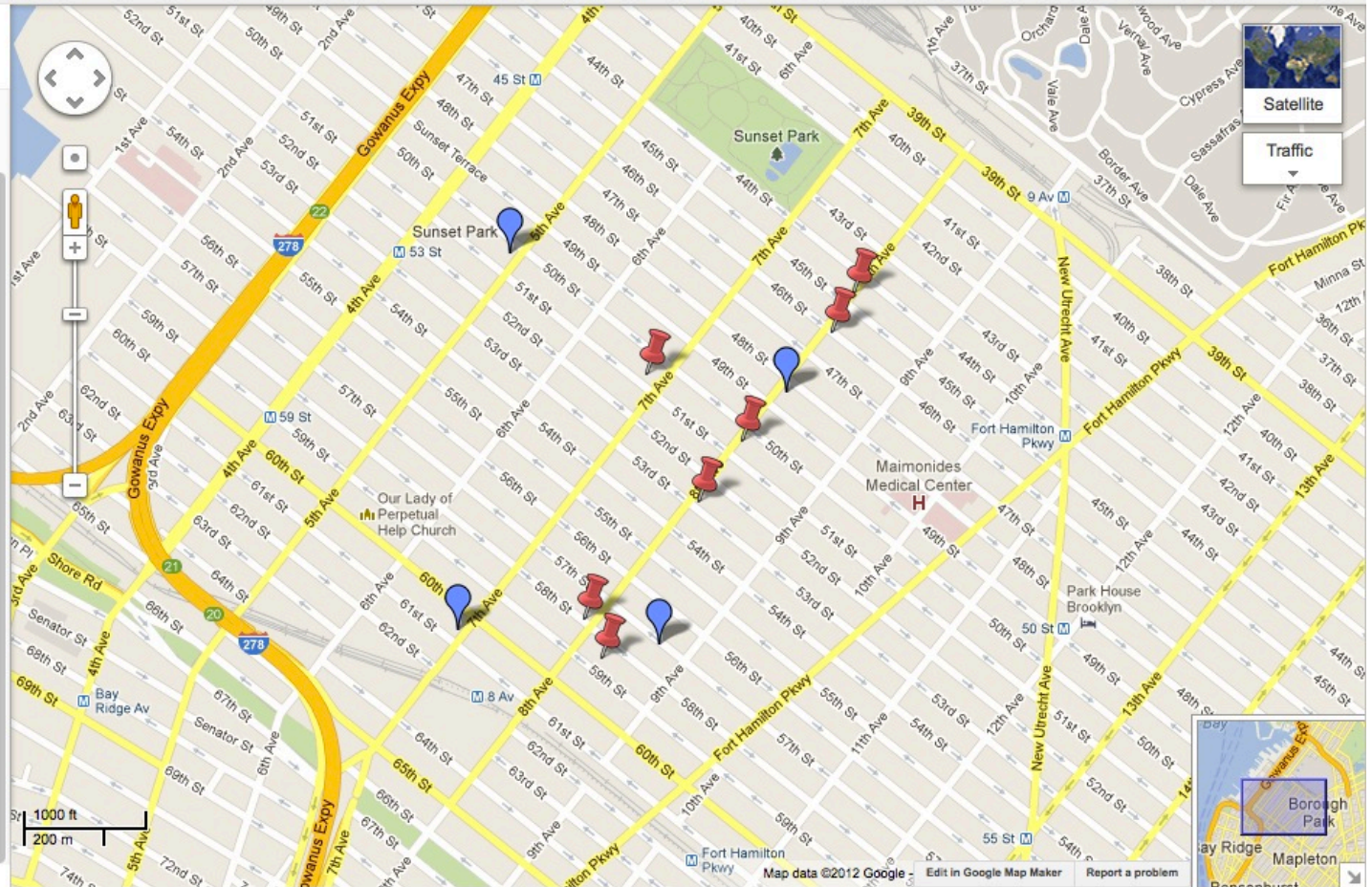
push pin = internet cafe, in business in 2008, still open in 2011 survey (Hang Xing under new name)
bubble marker = internet cafe, new in 2011 survey

Unlisted · 3 views

Created on Jul 20, 2011 · By Wendy · Updated < 1 minute ago

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-  **New Line Internet Cafe**
5001 8th Avenue
-  **Ohio i-Cafe**
811 53rd St.
-  **Hang Xing Internet Cafe**
5112 7th Avenue; was known as Xin Yu in 2008
-  **Hero 2 Cyber Cafe**
4415 8th Avenue
-  **Fiber Internet Cafe**
803 46th St.
-  **Qiyuan Internet Cafe (Blue Moon Bay, Inc.)**
812 58th St.
-  **Forest Internet Cafe**
5824 58th St.
-  **Hot Game Network**
6022 7th Avenue
-  **New Forest Internet Cafe**
57th bet. 8th/9th
-  **PK Internet Cafe**
8th Avenue at 48th St.
-  **e-Game Cafe**
50th St. at 5th Avenue



A typical internet café in Sunset Park is a small, dark room, with torn and mildewed carpeting and as many computer carrels as the space can possibly hold, each one with a computer and keyboard that has been handled roughly and never wiped clean. In some of them, the space is divided into connecting rooms, each open to the next. Inside the entrance is a high front desk, curved and laminated, placed perpendicular to a wall, which serves as a de facto divider between the customers and the person who is sitting there to collect the small fees in cash. Many signs are handwritten and taped to the wall, with apparently complicated pricing, reflecting any membership and time of day discounts the café offers; in fact, however, the cost to a walk-in customer is normally about \$2.50 for one hour. After taking the customer's money, the front desk manager – usually a man, and often young -- assigns the customer a computer, either by handing him a little slip of paper with a number written on it, corresponding to the numbers posted on the wall behind each computer, or else by pointing to where he should sit. Many of the cafés also have a few pinball machines or video game consoles, and they are usually piping in music, which competes with the sound effects gamers can hear through the large, padded earphones that are attached to each computer.

The smaller cafés have about thirty to forty computer stations, whereas some of the larger ones have as many as sixty, in separate carrels that offer delineated space for each user, even though there is no privacy in the way they are used. The cafés vary in what kinds of drinks and snacks they sell – some of them have very few, others are more elaborate. In 2008, many of them had few or no refreshments for sale, so that the word *café* was a bit misleading, but there was a gradual shift toward offering more amenities, especially ones that appeal to young people, like soda, candy, ice cream, chips, and other packaged snacks. Some places also allow outside food; at Hang Xing Internet Café one day I visited, the customers were ordering Chinese takeout

from the restaurant next door. Others provide more services than just computer rentals; Hero 2 Cyber Café, for example, offers other services like PC repair, shipping, faxing, copying, and game card sales.

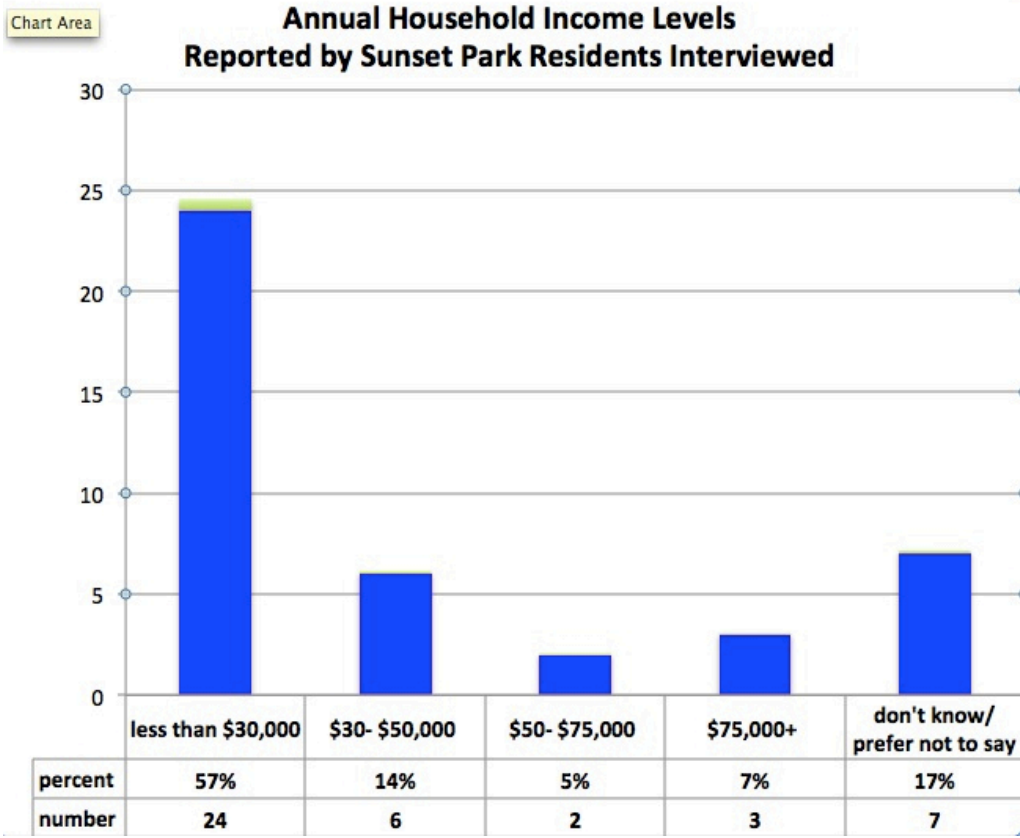
This kind of internet café -- where local residents work, play, meet friends, and create very social spaces -- is a distinctive feature of the Chinatowns in Brooklyn, in Manhattan, and in Flushing. During the year that my fieldwork was conducted, public wireless access (wi-fi) was also on the rise in New York City overall, for the most part in more luxurious establishments serving expensive coffee drinks. The atmosphere in a Sunset Park café is nothing like those other internet cafés, with their rows of quiet cubicles where individuals surf anonymously, nor like the semi-isolation of laptop owners working at café tables in coffeehouse chains like Starbucks.

The cafés are perceived as youthful and masculine spaces, and the majority of customers, at least in the daytime, are teenagers and young men in their twenties, who are avid gamers. They often have younger siblings in tow who enjoy milling about and watching. Even though people talk about the cafés as if they were strictly for youth, adults use the cafés as well, especially in the evening. These are likely to be the newest and poorest immigrants, who do not have computer access at home, and are using the cafés to conduct personal business and communications. Despite their popularity and obvious usefulness as gathering places for poor youth without many affordable places to meet up, and for recent immigrants with few resources to gain computer access, the cafés have a bad reputation in the neighborhood. At best they are seen neutrally, as a place that young men go to play games; at worst, people talk about them as gathering places for truant youth, the ‘bad kids,’ and sites of potential violence or computer game addiction.

Computers at Home

Besides my participant observation fieldwork in the internet cafés, I also interviewed people around the neighborhood in their homes. Fifty-five residents of Sunset Park's Chinatown were gracious enough to talk to me. Most of those who agreed to be interviewed also provided basic socio-economic data (42 out of 55 supplied me with household income), although they submitted it anonymously in a closed container, so the correlations are to whole blocks rather than to individual interview subjects. Almost sixty percent of my informants reported a household income of less than \$30,000, even with two or more adults working. Less than \$30,000 was the lowest category my income questionnaire offered; some appeared to be confused by this, apparently because their income was *so* much less than \$30,000, asking me if there was not any lower category. By the time I realized that my categories might not be well-aligned with the neighborhood, I was already too far into my project to invalidate my earlier data by altering them. Fourteen percent were in the \$30-50,000 range, five percent in the \$50-75,000 range, and only seven percent reported a household income of more than \$75,000. Seventeen percent chose not to answer the question.

Table 3



For comparison, I have the U.S. census data for the neighborhood, with income levels for all groups, in Table 4, on the next page.

Table 4

**Household Income in Sunset Park
(zip code 11210)**

Sort Order	Variables	11220, Brooklyn, NY	ALL OF USA
	Geographic Unit	Zip Code	
1	% HHs w/ Inc. \$15,000 to \$24,999, 2010	14.03%	9.15%
2	% HHs w/ Inc. \$25,000 to \$34,999, 2010	11.86%	9.99%
3	% HHs w/ Inc. \$35,000 to \$49,999, 2010	14.41%	14.37%
4	% HHs w/ Inc. \$50,000 to \$74,999, 2010	16.13%	18.95%
5	% HHs w/ Inc. Less than \$15,000, 2010	23.14%	11.96%
6	Asian HH Inc. Average (\$), 2010	\$46,819	\$81,242
7	Asian HH Inc. High Inc. Average (\$), 2010	\$316,303	\$325,414
8	Asian HH Inc. Median (\$), 2010	\$31,285	\$63,258
9	Asian HH Inc. Per Capita (\$), 2010	\$12,153	\$25,894
10	Black HH Inc. Average (\$), 2010	\$53,860	\$53,240
11	Black HH Inc. High Inc. Average (\$), 2010	\$312,123	\$389,889
12	Black HH Inc. Median (\$), 2010	\$45,102	\$40,110
13	Black HH Inc. Per Capita (\$), 2010	\$17,379	\$19,227
14	HH Inc., Average (\$), 2010	\$51,546	\$74,974
15	HH Inc., High Inc. Average (\$), 2010	\$392,732	\$390,794
16	HH Inc., Median (\$), 2010	\$36,005	\$55,970
17	HH Inc., Per Capita (\$), 2010	\$15,912	\$28,779
18	Hisp. HH Inc. Average (\$), 2010	\$49,625	\$55,958
19	Hisp. HH Inc. High Inc. Average (\$), 2010	\$507,058	\$371,764
20	Hisp. HH Inc. Median (\$), 2010	\$36,963	\$44,015
21	Hisp. HH Inc. Per Capita (\$), 2010	\$15,317	\$15,703
22	Other Race HH Inc. Average (\$), 2010	\$43,990	\$49,970
23	Other Race HH Inc. Median (\$), 2010	\$32,912	\$39,646
24	Other Race HH Inc. Per Capita (\$), 2010	\$13,139	\$14,914
25	White HH Inc. Average (\$), 2010	\$61,058	\$80,859
26	White HH Inc. High Inc. Average (\$), 2010	\$467,203	\$396,120
27	White HH Inc. Median (\$), 2010	\$43,044	\$60,859
28	White HH Inc. Per Capita (\$), 2010	\$22,399	\$32,787
29	White NH HH Inc. Average (\$), 2010	\$59,600	\$80,876
30	White NH HH Inc. High Inc. Average (\$), 2010	\$355,013	\$388,354
31	White NH HH Inc. Median (\$), 2010	\$44,074	\$61,115
32	White NH HH Inc. Per Capita (\$), 2010	\$27,707	\$33,945

Source: United States Census Data, 2010 (Estimates)
from Simply Map Database
Geographic Research, Inc.

Since I only surveyed Chinese residents, my sample included more low-income immigrants and was poorer than what the census figures indicate for the neighborhood overall. It is not possible to track the difference exactly, since I modeled my income categories on other

survey data (Pew Internet) rather than the U.S. Census. According to the census data, 23 percent of households in Sunset Park earn less than \$15,000, fourteen percent earn less than \$25,000, and 11 percent earn between \$25,000 and \$34,999 per year (U.S. Census 2010, estimates). That brings the total number of neighborhood residents earning under \$35,000 in the census to 48 percent. Among my informants, 57 percent reported household incomes in the lowest category I offered, i.e. under \$30,000 per year.

The census data (Table 4) shows a per capita income for Asian households of just \$12,153. Average household income for all Asians in Sunset Park is higher, however, at \$46,819. That figure includes the Cantonese population that preceded the current wave of new immigrants, residents who are more established and already own homes and small businesses. Average overall income for Hispanics in Sunset Park is slightly higher at \$49,625; that, too, covers the whole neighborhood, and many households earn much less.

My focus was on the private and family lives of these new immigrants, not their work, but I also asked my informants about their jobs, including their usual employment in the case of those who were retired or out of work. I spoke with 19 female and 36 male informants, and found that although few of them had computer access in their jobs, 78 percent had access at home, just slightly higher than the 76 percent that reported having computer access among Americans overall in a 2011 survey (“Who’s Online: Internet User Demographics,” Pew Internet 2011). The 76 percent nationwide figure from the Pew survey includes all age groups and income levels, and those who are able to use the internet at work. A majority of people in the U.S. overall (62 percent) use the internet or email in the workplace (Madden and Jones 2008). The high level of computer use reported by my informants is driven by leisure and personal interests, as most of the jobs that they hold (see chart, below) do not require any

knowledge of computers nor offer any access. About one-third of those I interviewed work in Chinese restaurants. Several reported having worked in the garment industry in the past. Below are the occupations overall:

Table 5

Occupation List of Sunset Park Residents Interviewed*				
	<u>Active</u>	<u>Retired</u>	<u>Unemployed</u>	<u>Total</u>
accountant	1			1
artist	1			1
bank teller	1			1
cashier		1	1	2
college student	4			4
computer store staff	3			3
construction worker			1	1
driver (unspecified)	1			1
electronics technician	2			2
finance	1			1
garment industry		2	2	4
high school student	4			4
high school teacher	1			1
home attendant	1			1
hotel maid	1			1
housewife	5			5
internet café staff	2			2
IT consultant	1			1
library employee	2			2
printer	1			1
restaurant (total=17)				
cook	8			8
waiter/waitress	1			1
unspecified	3	2	2	7
owner	1			1
truck driver	1			1
unemployed (unspecified)			3	3
watchmaker	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
	<u>47</u>	<u>5</u>	<u>9</u>	<u>61</u>

(*includes occupation for parent or spouse, when known, and usual occupation for those who are retired or unemployed)

Tarry Hum examined how low-wage labor from the two main groups in Sunset Park, both the Latino and Chinese populations, provided the cheap labor for a transformation of the

local economy toward a decentralized garment industry to replace the heavy industry that had once thrived there. Referring to Sunset Park's shift toward a high number of garment shops in the neighborhood, in which people labored in poor work conditions, Hum argued that "the rejuvenating qualities of Sunset Park's transformation hence are countered by the reproduction of inequality" (Hum *in Vo* and Bonus, 2002: 38). More recently, with the shrinking number of small-scale garment factories in the neighborhood, that segment of the economy has taken a smaller role as well, while the number of those in service jobs has grown, especially positions in Chinese restaurants. That accounts for the fact that all of the garment workers in my sample were either retired or unemployed. Others do not show up in the garment industry category because they had moved on to other work, like the Lius, whose family life is the subject of chapter 4.

Some of my questions were about daily computer practices, including whether residents used computers for email, reading the news, looking up information, playing games, etc. See my interview instrument in Appendix B, especially question number 19, for a complete list of the activities queried. As residents talked about their usual online behavior, slight gender differences emerged, along with a higher rate than the national average for both men and women in some activities. A complete breakdown by gender of the responses given by my informants, along with a comparison to national averages taken from Pew Internet data, follows in Table 6.

Table 6

Computer Use for Fifty-Five Sunset Park Residents Interviewed

Total Female	19					
Total Male	36					
	55					
	Female Total	Female %	Male Total	Male %	Total M/F %	
Read at least one newspaper daily (online, in print, or both)	13	68%	27	75%	73%	
Reported computer use					Total M/F	Natl. Avg. ¹
News	11	59%	20	56%	57%	45%
Music	9	47%	17	47%	47%	7%
Email	13	68%	15	42%	51%	61%
Instant messaging (IM)	7	37%	16	44%	42%	18%
Looking up info (general)	7	37%	22	61%	53%	28%
Movies	8	42%	9	25%	31%	5% ²
Games	6	32%	14	39%	36%	13%
QQ	6	32%	10	28%	29%	N/A
MySpace	4	21%	4	11%	15%	43% ³
Webcam-internet calls (via Skype, QQ, etc.)	8	42%	9	25%	31%	5%
Facebook	5	26%	1	3%	11%	43% ³
Stocks/finance	1	5%	3	8%	7%	12%
Banking	0	0%	2	5%	3%	24%
Shopping	0	0%	2	5%	3%	6% ⁴

¹ Source: Pew Internet and American Life Project
May 2011 survey, Online Activities Daily

² 5% download videos; 28% watch on sites like YouTube

³ National average total of 43% is for all
social networking sites combined

⁴ 6% purchase; 28% look for info on
products they may purchase

As is apparent from a comparison with national averages (in the far-right column of Table 6), my informants reported higher rates than Americans overall in some daily online activities, especially entertainment-related ones like watching movies, listening to music, and playing games. While nationally only seven percent of Americans reported listening to music, 47 percent of my informants listened daily. Their rates of gaming were also higher than average, among both men and women, as were the rates for watching movies. Having free access to Chinese-language entertainment, like Mandarin dramas, music from China, and the Chinese versions of popular games, were important reasons that my informants gave for their enjoyment of computer access. Although they emphasized entertainment applications in their conversations with me, 53 percent (combined for men and women) also reported searching for information online, much higher than the national average. There was quite a difference between the men and the women on this question, since 37 percent of the women reported looking up information versus 61 percent of the men. I think the response rate for both may be a bit high due to the way I framed the question. I did not separate out people's daily routines from a more general request for a list of what they had ever done online, and so may have included those who had used a web browser only rarely.

Reading the news topped the list of their activities. The majority reported reading at least one print newspaper, even among those with no computer access and little formal education, and 57 percent reported reading news websites. Fully 73 percent read at least one newspaper daily, whether in print or online. Nationwide, 45 percent of internet users report using the internet to follow the news, so it is an important activity for other Americans as well.

Instant messaging was also popular (42 percent), as were games (36 percent), and movies (31 percent). By comparison, Pew Internet reported that, on a typical day, 18 percent of

Americans online use instant messaging and 13 percent play games (“Trend Data, Online Activities,” Pew Internet, 2010). Thirty-one percent in my sample place internet calls, versus only nineteen percent of Americans overall or five percent of all internet users on any given day. The 19 percent nationwide figure falls to only 13 percent for those Americans who make less than \$30,000 per year (Rainie 2011).

Two activities that most Americans engage in much more than my informants are online banking and shopping. Only three percent of my informants reported online banking and three percent mentioned shopping as one of their usual activities -- one informant who frequently purchases books online, and one who shops for clothes. Although this does not seem anomalous in light of the low incomes in the area, the number of people who reported shopping may be artificially low due to the way I framed my questions. Many people reported downloading free content, like getting movies and games on file-sharing sites, and many play games that they may have purchased online and then downloaded, which could also be considered shopping.

The rates for men and women comparatively reported by my sample were very similar in terms of playing games and reading the news online. There were also some gender differences in their online behavior. More men than women reported instant messaging and looking up information, and more women watched movies and made internet phone calls. The women in my sample were slightly more likely to send email than national averages, but the men used email at lower rates; 68 percent of women did, versus 42 percent of men. The total of email users among my sample (male and female combined) was 51 percent, compared to a national average of 61 percent, so overall people in my sample were using email a bit less than Americans overall. Women in my group were also more likely than men to use social networking sites, including sites other than the popular QQ, such as Facebook and MySpace.

Some of these variations are in keeping with U.S. use overall, since online activities vary somewhat by gender. Women spend more time communicating with friends and sharing information, including on social networking sites, while men spend more time looking up information and making online transactions (such as banking) -- although men are certainly active in social networking, and women search for information as well (Fallows 2005). The setting in which the computer use took place was the most notable gender difference. None of the women I interviewed ever go to internet cafés, whereas 16 percent of my male informants do. There was also a gender divide in terms of age group and access. None of the older women I interviewed were online, while some of the men were. With my small sample size, the numbers of elderly people I interviewed are too small to really draw conclusions from that, but it does appear to be in keeping with national data, since older women are the least likely to be online, especially in the lowest income groups (Fallows 2005). Another gender difference was the rate of access at work, as shown in Table 7, on the next page.

Table 7

Computer Access by Gender for Fifty-Five Sunset Park Residents Interviewed

Total Female 19
Total Male 36
 55

Note: Only one of those who reported having home computer access was still using a dial-up internet connection; all others, DSL or cable.

	Female Total	Female %	Male Total	Male %	Total	% Total
	19		36		55	
Have computer access at work						
(not including those who work in internet café, computer store, or library = 10)	5	26%	4	11%	9	16%
Have computer access at home? *						
Yes, and do not go to cafés or library	13	68%	15	42%	28	51%
Yes, and go to cafés but not library	0	0%	9	25%	9	16%
Yes, and go to library but not cafés	3	16%	3	8%	6	11%
Yes, and go to cafés and library	0	0%	0	0%	0	0%
Total	16	84%	27	75%	43	78%
No, and do not go to café or library	2	11%	2	6%	4	7%
No, and go to café or library	0	0%	0	0%	0	0%
Total	2	11%	2	6%	4	7%

* [includes those who did not answer question, so total is less than 100%]

The types of jobs that people are able to obtain for the most part do not include any on-the-job use or training with computers, so they do not have opportunities to gain digital literacy on the job as much as other minority groups. For example, African Americans are more likely to acquire such training (Castells 2001:253). This is influenced by the labor market segment in which my informants participate, not just by ethnicity. More women in my sample had access in their jobs than the men: 26 percent for women, and 11 percent for men. Both rates are quite low compared to the rate for Americans overall, which is 62 percent, according to DigitalLiteracy.gov. The occupations that my informants reported (Table 5) offer some explanation, since some of the most common jobs, like working in restaurant kitchens for men, do not involve computers. Nevertheless, despite the lack of access in the workplace, more than three-fourths of my informants reported having a computer at home, and many of them use computers at the cafés and/or the library as well.

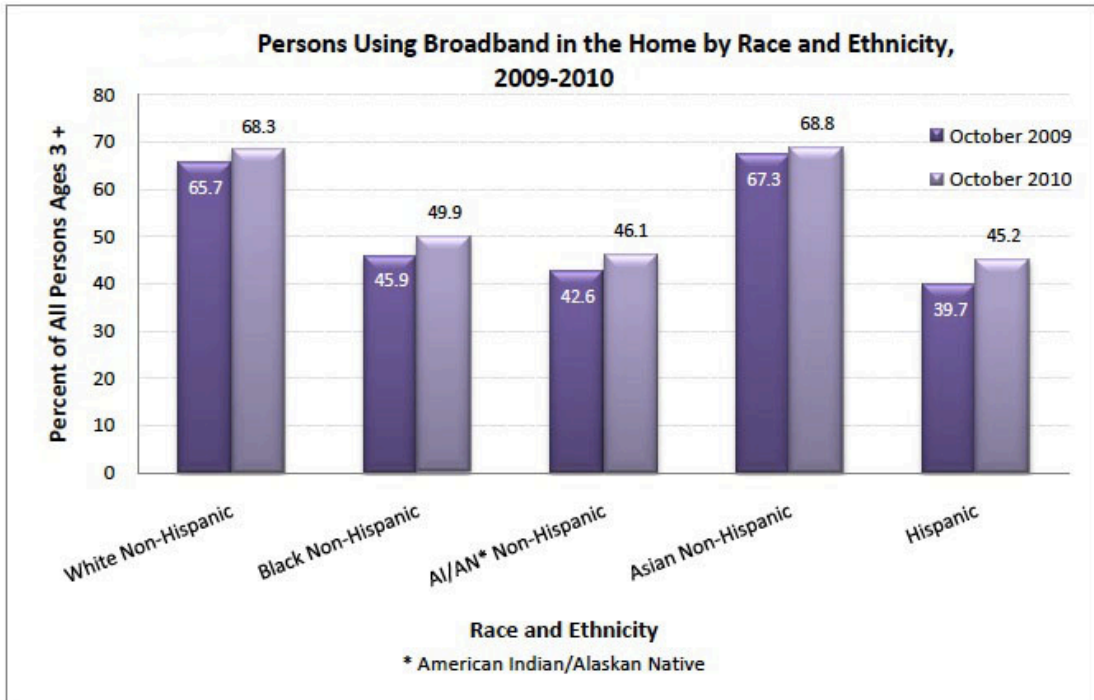
While the types of jobs people have (waiter, cook, maid, garment worker) are unlikely to offer any exposure to computers, unemployment gives people time to increase their computer use. Therefore breaks from the insecure, informal, and seasonal jobs that many people have, as well as their leisure time, are linked to ICT use, rather than the jobs themselves, as is the case with most people in the U.S. Sixty-two percent of U.S. adults reported in 2008 that they use the internet or e-mail at work (Madden and Jones 2008); that survey also found a good deal of dissatisfaction with the spillover of work into life at home occasioned by technological accessibility. The group in Sunset Park does not have that intrusive link to the workplace, although they are more likely to actually *be* at work six or seven days a week. I also found some evidence of people using computers to assist them in *finding* work and in job advancement.

The High Rate of ICT Ownership and Use in Sunset Park

A National Science Foundation study of internet usage in the U.S. found that, although whites were more likely to own computers than blacks, the highest percentage of computer ownership fell to those with Asian/Pacific Islander heritage (“Sociodemographics of Access and Adoption,” NSF 2001). A high level of internet use is to be expected for Asian Americans as a group, because their level of education also tends to be higher than those of the population at large, and education levels are highly linked to computer use and computer ownership. The high level of education for the group overall is inflated by the inclusion of educated elite Chinese who are drawn by the business climate and immigration policies of the United States, as I will discuss in chapter 3. Yet the overall high rate of use and ownership reported in the NSF study is not limited to elites. The working-class Chinese whom I met in Sunset Park, many with only a few years of formal education and most with jobs that do not expose them to computer technology, manifest high levels of ownership and use as well.

The data that I collected in table 6 compare different online activities reported by my sample against the national averages. Since Pew Internet does not report online activities broken down by ethnic group, I drew my comparisons against the U.S. population overall. There is more data available by race or ethnicity for internet *access* than for internet *activity*. Broadband access is the benchmark of computer ownership and use, since it is an essential environment for fast downloads and making the most of online access. National Telecommunications and Information Administration (NTIA) data on broadband usage among different groups in the U.S. show that African Americans’ and Hispanics’ access to the internet are improving, though they are still behind whites and behind Asians, who have the highest rate of all, as shown in Table 8, below.

Table 8



Source: U.S. Department of Commerce, National Telecommunications and Information Administration, Digital Nation: Expanding Internet Usage, February 2011

This high rate of internet usage among Asians is apparent even through a casual observation of the layout of Sunset Park. Internet cafés line the streets in the Chinese business district, in contrast to the Hispanic section of Sunset Park along 5th Avenue. There is only one internet café there, newly opened in 2011, and it is under Chinese management. Since foreign-born Latinos use the internet much less than other groups, the population in that section of Sunset Park would not be expected to have the same high rate of ownership and use as the Chinese (Livingston 2010). Only about half of foreign-born Latinos go online; they also trail in their rate of ownership of cell phones (Fox 2010). Native-born Latinos, on the other hand, are much more likely to go online; 85 percent of those 16 and older in this group use the internet,

and English speaking Latinos are almost as likely to have internet access as whites (Smith 2010b). Place of birth and language proficiency remain the main indicators of technology use for Latinos. English-speakers are more likely than whites to use mobile phones for internet access. The contrast between the communication practices of foreign-born Latinos, attested to by this Pew survey data, and of the Chinese in Sunset Park whom I met, indicates that their different communication strategies are not just driven by English language proficiency. Many people in both groups do not speak English nearly as well as their native language, but the Asian-American population are still the most ‘wired’ of any group overall, while foreign-born Latinos are less so.

Many broad-based studies since the early days of the internet have taken note of the apparent anomaly that Asian households have higher computer use than any other U.S. group, including whites, at all income levels (NSF 2001, NTIA 1997, 1998). Manuel Castells attempted to account for this by positing that “household composition, and a strong emphasis on children's education by Asian-American families, may be factors accounting for this differential” (Castells 2001:249). Certainly some of the families I met are more able to afford luxury items because of the large number of working adults contributing to household income, and most expressed ambition for their children’s education.

U.S. Census data on household composition for all of Sunset Park is in Appendix E. The Census Bureau defines a “family household” as a household inhabited by at least two people related by birth, marriage, or adoption, and a non-family household as either a person living alone or a householder who is not related in these ways to any of the other persons sharing their home (“Population Profile of the U.S.,” U.S. Census, n.d.) While 68 percent of households nationwide fall into this definition of family households, Sunset Park is slightly higher according to 2010 census data, with 74 percent of households categorized as family households. I also

studied some more detailed census data, revealing an even greater contrast between the homes in my study area and the national average. In the area around the main subway stop in Sunset Park's Chinatown that encompasses the blocks where I conducted my interviews (Census Tracts 11800, 10400, and 10600), family households numbered 89 to 92 percent of homes (U.S. Census 2010, estimates).

The data I have on household composition for my sample, where available, is included in the list of informants in Appendix C. While I did meet a few people who live with roommates, most of my informants live with relatives, although not necessarily in traditional nuclear families. Of the 49 who gave me information about their households, 45 of my informants (90 percent) fall under the U.S. Census definition of living in family households. One extended family I met -- admittedly more prosperous than most with many family members working -- reported owning *nine* computers, one for each person in the household. By "extended" family here I do not just mean three generations. I am using the term to include other, more horizontal household compositions, that is, those that include more members than a married couple and their young children, but that may not fit neatly into the three-generation category. Many households I entered, for example, included adult siblings sharing a home along with some of their children. Others consisted of an older couple with adult children who live with them full or part-time, or a nuclear family taking care of newly arrived nieces and nephews in addition to their own children. Fifty-two percent of those I interviewed fit this broader description of an extended family. In addition, quite a few of the households in my study (38 percent) included more than two adults working and contributing to household expenses and/or sharing household responsibilities.

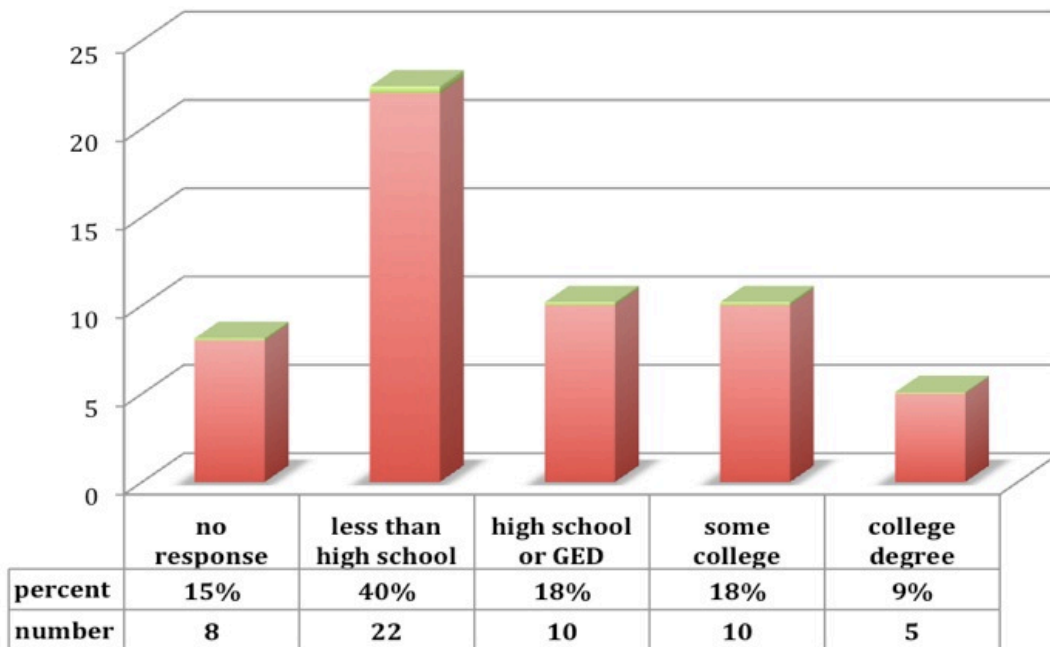
The ways that the people I met in Sunset Park use and talk about computers, and their decisions to buy them and to learn to use them in the first place, are embedded in family life. One man in his thirties with teenage children told me that the family computer enhances his relationship with his children, since asking them for help in using it brings them all closer together. Many others reported buying their first computer to assist their school-age children, and many of those at the library course for first time users were learning to type in English and use a computer for the first time in order to interact with their children's teachers and to assist the children with homework. Several people told me they learned how to use a computer as soon as they arrived in the U.S., because relatives who had arrived earlier told them it was essential to their success here. Often the children learned first, in school, and then taught their parents, or adult children purchased a computer for their parents and taught them to use it. Pursuit of better educational opportunities for their young children was an important reason many people had for buying a computer, but not the only one. Another incentive implicitly offered by the parents I interviewed whose children spend hours at home playing computer games was a desire to indulge their children with entertainment and to keep them safe at home. For parents who see their older children playing computer games and socializing at the local internet cafés, a concern is that the young people may be doing so to the detriment of their education, whether by skipping school or missing homework assignments.

The educational potential of computer technology is not just something tapped for children, however. Many of those I interviewed were excited about how computers were opening up opportunities for them to learn English or improve their facility with it, to look for better jobs, to search for information, and for maintaining ties with friends and family despite their hardworking schedules. Levels of formal education for those I interviewed, shown in Table

9 below, were generally quite low, with 40 percent having less than a high school education. More detailed information about educational backgrounds, including formal education in both China and in the U.S., is in Appendix D.

Table 9

Education Levels for Sunset Park Residents Interviewed



Among Americans overall, the rate of computer ownership for those with limited formal education is normally low. Only 42 percent of those with less than a high school education nationwide own a computer (Smith 2010c). The same Pew Internet report on Americans and their gadgets also shows that only 59 percent of Americans making less than \$30,000 have home computer access. Yet the percentage among my sample with computer access, despite low income and education levels, was 78 percent, slightly exceeding that of Americans overall, at 76 percent. Rather than tracking with other households nationwide with the same socioeconomic

disadvantages, my informants manage a level of computer ownership in line with overall national averages: a remarkable achievement.

Some people reported using a computer to learn English with language-learning software and for reading the online English newspapers with a translation tool they could point and click. Acquiring facility in English was part of the experience of learning to operate a computer for first time users, e.g. those I met at the library, since they had to understand the western alphabet to use the keyboard or to talk about certain software or computer commands. Whether for personal growth for the adults in the family or to stimulate children's academic advancement, education is an important aspect of why my informants purchase a home computer.

Many Chinese immigrants in Sunset Park arrived as adults who had already been working before they immigrated and so are old enough to have missed the education reform in China that since 1986 has mandated nine years of compulsory education (that is, a minimum of junior high). Thirteen percent in my sample reported having less than a junior high school education, and seventeen percent only completed junior high school.

State funds for education in China have been very much directed toward the most developed regions and centered on the cities, and rural residents were often subject to heavy social and economic pressures to drop out before completing the unenforceable nine years of mandatory schooling. This was particularly true for the female population who are elderly today, like Ai Lian Li [informant #48], age 74, who grew up in rural Guangdong and cannot read. Despite the low levels of education in China my informants reported as a group, however, most of them are literate and very active readers, as evidenced by the fact that reading the news is their most common activity online.

Some education in English is required in secondary schools in China today, although most of my informants found it insufficient to be of any real use. One informant complained that what they had studied was British rather than American English; another told me the problem was that the teachers in Chinese schools were not native speakers of English and had no idea how to actually pronounce words in English. Many of them started working at a young age and were years out of school when they arrived, so even though they had taken classes in it their actual proficiency in English was slight or nonexistent. The fact that they are active online without English is also notable, as language proficiency is typically one of the most important predictors of internet use (Smith 2010b).

Although there is no simple explanation for the high rate of ICT use among Asian Americans, at all income levels, some other possibilities besides household composition and the emphasis on education are suggested by what people are actually *doing* online (Table 6), including webcam calls and social networking with friends and family overseas. The 31 percent rate of internet calls among my sample is much higher than the national average, even though my interviews were conducted in 2008, as compared with the 5 percent national figure for internet calls taken from a 2011 survey, after the practice had become more widespread. Computer store managers I interviewed reported that many of their customers were buying computers primarily to talk to their families in China online, now that more and more people there can afford computers. In order for internet calling to be a valued application, even a reason for purchasing a computer, their friends and family members have to be able to make the virtual connection on the other end as well. So the way in which ICT use develops here is likely to be connected to the proliferation of computer technology arising from economic development in China.

Conclusion

Sunset Park continues to evolve, and the Chinatown section of the neighborhood is expanding, its growth driven by those who are just arriving in the U.S. and by those who move to Brooklyn from Manhattan's Chinatown. Fuzhounese represent a growing segment of the arriving immigrant population, and they fill many of the lowest paid jobs in service positions, especially restaurant work, as well as in construction, transportation, and manufacturing. More and more small businesses are appearing on 8th Avenue to fill the needs of this group, including small computer sales and repair shops and internet cafés. Low-cost cafés are a highly visible adaptation, as they line the main avenue and are busy at all hours, especially patronized by young men.

Schools in the area offer computer access and instruction beginning at the elementary school level, and some of the high schools have advanced classes and computer majors. Neighborhood institutions provide many social services, including English as a Second Language instruction and family counseling at the community centers, as well as computer instruction at the public library. All of these services help provide low-cost access to ICTs, even for those who had no prior experience. Formal education and income levels are low, but the residents I interviewed have a rate of computer ownership and use that is on par with national averages and notably high for low-income residents with limited formal education.

Sunset Park residents, even with very limited resources and education, are more active in some types of computer use than the national average figures that include the most prosperous Americans. Reading the news online is the most important activity for those I interviewed, which they do at a higher rate than others in the U.S.; most of them read at least one print newspaper as well. Besides reading the news, other activities they do at higher levels than

Americans overall include listening to music, playing games, watching movies, instant messaging, looking up information, and placing internet phone calls. The comparison to U.S. averages is made more remarkable by the fact that most Americans have access in the workplace, which my informants generally do not. Their high rate of computer use is driven by a desire for social connections and personal development not entirely linked to education level nor to job status. Even those who spend all their time at work in a restaurant kitchen or on the floor of a garment factory, never exposed to computers, often choose to make computer technology use an important part of their leisure time and personal development.

Household size varies, but many of my informants reported several adults working and contributing to household income. Living in extended family households provides the pooled income to pay for computer access as well as a motivation for wanting it: to create an educational advantage for children in the home, and for low cost access to information and entertainment for the whole family. The working-class residents of Sunset Park's Chinatown struggle in low wage jobs but manage a high level of computer access and use during their time off from work. More about the obstacles they face follows in chapter 3.

Chapter 3

New Immigrants' Struggles



Mr. Zhiwei Lin [informant #8], age 32, a Fuzhounese restaurant worker, with his laptop

Introduction

When I was first preparing to do my fieldwork, I talked about my research plan with a friend from Beijing. She has a graduate degree from a prestigious university in China and is now teaching at an Ivy-league school in the United States. After hearing my plans for doing participant observation fieldwork and in-home interviews in Brooklyn's Chinatown, my friend reacted with alarm, and did her best to talk me out of it. Assuming that I was not immediately agreeing with her because I just did not have all the facts, she tried harder to convince me,

saying, “can’t you see that those people are not like me?” Trying to get me to share her vision of difference, and exclusion, she asserted that their face shape, dress, and demeanor demonstrated inferiority. Although obviously I did not agree with her and went on to do my research as planned, that kind of unexamined prejudice against the working-class immigrants who make Sunset Park their home highlights difficulties that they face.

In this chapter, I consider some of the issues facing the new immigrants to Sunset Park, many of them Fuzhounese, and the settlement patterns that keep them isolated not only from elite Chinese like my friend, but also from the English speaking population at large. I also explore the conditions of immigration and some of the unequal opportunities they experience as facts of life. Information technology serves as a tool that workers in Sunset Park press into service but also drives the globalized economic system that uses them as cheap and expendable labor and exploits their co-nationals in China, whose poorly remunerated factory labor is what makes the computers affordable.

Uptown Chinese in ‘Ethnoburbs’ versus Downtown Chinese in Chinatowns

The people that I met in Sunset Park come from all over China (Table 2). The greatest segment are from Fuzhou and Guangzhou, and others arrived from Hong Kong, Beijing, and elsewhere. Reflecting Sunset Park’s growth as a neighborhood of second settlement, people have often lived in Manhattan’s Chinatown before moving to Brooklyn and Sunset Park. I also met those whose previous homes in the U.S. were in Atlanta, in North Carolina, in Pennsylvania, in New Jersey, and in other areas. Some of my informants, like the Lius, were born in the Chinese countryside but moved on to work in China’s cities and special economic zones before emigrating to the United States, and others grew up in cities to begin with. Having lived in an urban environment and being comfortable there is an advantage for new immigrants to New

York City (Wong *in* Foner 1987). While some have the skills and education that time spent in an urban environment gave them, others came from rural areas outside Fuzhou, where the schools receive less funding and opportunities are fewer. They may arrive without the language skills or education that would prepare them for success in the mainstream U.S. economy, having less than a junior high education and little or no English (Guest 2003:31).

Much of the surge in the Asian population of Sunset Park, which I outlined in chapter 2, has happened in the past twenty years, but the numbers of Chinese admitted to the United States each year first began to grow when U.S. immigration law was overhauled in 1965. The Immigration and Nationality Act of 1965 (or Hart-Celler) eliminated the quota from each country that had been in place since the 1920s, allowing a greatly increased number from countries outside of Europe, and it stressed skills and family reunification policy as the prevailing goals of admission (Foner 2000, 2003; Daniels 2002). Professionals, scientists, and artists ‘of exceptional ability’ were among those given preferred status, along with workers in occupations with labor shortages. Many of those who had arrived without documentation were granted amnesty by a subsequent bill, the Immigration Reform and Control Act in 1986, and were then able to bring other family members, contributing to the continuing chain of legal migration (Guest 2003:30). The U.S. government also responded to the Tiananmen Square uprising in 1989 with permanent visas for Chinese then in the U.S. as students, as well as with legalized status for some who had arrived without documentation earlier. The timing of that increase in visas benefited immigrants from Hong Kong, anxiously preparing for its return to the Mainland in 1997, as well as Taiwan’s businessmen and entrepreneurs, facing an independence movement and a tense standoff with Mainland China at home (Kwong and Mišćević 2005).

Besides these ‘push’ factors, the dramatic growth of high-tech industry in the U.S. helped to generate a ‘pull,’ since it was capable of employing many more highly trained engineers and scientists than were available domestically and so drew privileged Chinese toward the United States. Many of the professionals in this group of newly arrived immigrants were employed by multi-national corporations based in Taiwan, Hong Kong, and Mainland China, with jobs that demand frequent travel back to those sites. Bringing their families provides the children with better educational opportunities and allows the ‘astronaut’ fathers (so-called because of the amount of time they spend in the air) to establish permanent residence in the United States (Ong 1996, Ong and Nonini 1997). Jobs in high-tech and other industries pay well enough for these families to acquire luxury homes in prestigious neighborhoods connected to the best public school systems. The rise of multi-national corporations whose U.S. branch offices gave them a way to straddle two cultures and live in two places, caused a surge in what Aihwa Ong called flexible citizenship (Ong 1999). With their high education levels and command of English, they have no need to select insular, Chinese-only communities in the U.S. As they congregate in mainstream suburbs, they create pockets of Chinese in enough numbers for many shops and services catering to them to spring up, a settlement pattern for which Wei Li (2009) coined the term ‘ethnoburbs.’

The growth of the transpacific community working in high-tech industry and finance and living in ethnoburbs in the U.S. caused a shift in the demographics of Chinese Americans, as a prosperous middle class offset the entrenched poverty of others in overall numbers. While two groups of ethnic Chinese have been arriving, and both have grown in number, they are very different in background and opportunity. To delineate them, Peter Kwong suggests the terms uptown Chinese – the professional class immigrants who arrived with the resources to move

straight to the suburbs -- and downtown Chinese. Downtown Chinese are those with more limited cultural capital, who are likely to settle in communities where poorer, Chinese-speaking immigrants are concentrated (Kwong 1987; Guest and Kwong 2001) -- like Sunset Park's Chinatown.

Regarding downtown Chinese, some with family members who have preceded them in earlier waves of immigration use family reunification policy to secure their visas and enter the country legally. Others who enter the country illegally are drawn by the availability of jobs in the U.S. and wages that are often comparatively much higher than what they could earn in China, arriving already saddled with heavy debt incurred in securing their voyage. Their debts and their lack of command of English force them to move to places where they can find work quickly and manage without English. Many find work in the lowest paid and least secure jobs, however, in restaurants, sweatshops, and the informal sector, such as street-corner sales of small goods. Working long hours in jobs like these, with Chinese management and co-workers, downtown Chinese may have little opportunity to engage with their new surroundings in any substantive way.

When they do interact with others, they may experience prejudice like that expressed by the friend who urged me not to associate with them. The way arriving immigrants are perceived can depend on their cultural capital and economic resources as well as how long ago they immigrated. Aihwa Ong argues that the hegemonic conflation of race and class that existed in the U.S. historically is now applied to new immigrants, including those from Asia:

This racializing logic of class attributes is applied even to current flows of immigrants from the South and East who seem obviously nonwhite; discriminatory modes of perception, reception, and treatment order Asian immigrants [to the U.S.] along a white-black continuum. (Ong 1996:739)

The divide that Ong observed is not so much a racial one, but in fact quite class-based. Those Chinese immigrants with education and professional status who can move straight to the suburbs or other desirable locations are on one end of the continuum. Vulnerable newcomers, working as cheap labor in restaurants, construction, and factories, are on the other end.

Sunset Park as Ethnic Enclave

The ethnic enclave model and its tensions and counter-arguments are helpful in understanding the position that these newcomers find themselves in when they move to Chinatowns like the one in Sunset Park. The concept began with Portes and Bach's (1985) research on the two waves of Cuban immigration to the U.S. After Cuba's revolution, a large number of elites settled in Miami, starting businesses that later employed a second group of poor refugees. The ethnic enclave they created had a distinct spatial location, with its main characteristic being a high percentage of people working for companies owned by other immigrants. This business arrangement created a dual labor market of high paid, secure jobs in the monopolistic sector and low paid, insecure jobs in small companies. As Portes and Bach point out, the arrangement enabled those with little cultural capital to find work easily without learning English -- jobs that could ultimately lead to advancement and business ownership of their own.

Min Zhou (1992) applied the concept to Chinatowns, finding the ethnic enclave empowering to both the ethnic Chinese business owners and to the newly arrived immigrants who work for them. In Zhou's formulation, ethnic enclave employment, while low paid, was still better than what could be found elsewhere, since it offered a familiar environment in the workplace, the opportunity to find work right away, and protection from discrimination in the secondary labor market, i.e. low-paying, temporary jobs with a high turnover rate (Zhou

1992:115). In order to gain training and experience, Zhou posited, people were willing to be exploited, while employers benefitted from paying low wages to a non-union workforce.

Workers made the choice in exchange for the advantages offered by an understanding co-ethnic employer, such as time off for mothers to pick up children from school, permission to bring the children to work in the after-school hours, and no need to learn English.

Kathleen Bubinas (2005) also found benefits accruing to those who participated in an ethnic enclave economy, in her research on Asian Indians in Chicago. Over a period of years, they re-configured a part of downtown Chicago into an Indian business district, where a shared sense of Indian identity could be enacted by visitors, shoppers, owners, and employees. Bubinas wrote that these diverse groups all found a sense of community and political empowerment through working in and patronizing the cluster of Indian owned and operated shops. Although they tended to live in heterogeneous neighborhoods, their participation in the vibrant Indian business district gave Chicago-area Indians an experience of belonging that helped overcome the loneliness and stress of feeling different. Kasinitz et al. (2004) also found a positive aspect of the ethnic enclave experience, particularly for the young people they interviewed. They argued that for 1.5 generation -- those who immigrated before or during their early teens -- and second generation immigrants, an ethnic enclave can protect them against the worst aspects of Americanization, since they have strong networks of social ties that may help them find jobs, as well as reinforce the authority of their parents.

For Kenneth Guest (2003), one problem with applying Portes and Bach's work to Chinatowns was that Chinese elites had the freedom to choose not to live near their unskilled workers but to live elsewhere, in ethnoburbs or in heterogeneous communities. Guest argued that the ethnic enclave model also depended on the possibility for upward mobility within the system,

an opportunity that was no certainty for workers in Chinatown. In other words, for Kwong and Guest, Portes and Bach's work has its uses and stimulates debate but is "not easily generalizable" (Guest and Kwong 2001:263). In particular their model shows new immigrants being supported until they are acclimated enough to find better jobs and a path to upward mobility, which is not reflective of the Chinatown scenario. Guest and Kwong also did not find corroboration that work in the enclave pays better than jobs in the secondary labor market.

Illegal immigrants are the most exploitable, since they have high debt and legal vulnerability and lack the opportunity to learn English, working long hours in an ethnic enclave. According to Guest and Kwong, it is in this context that employers promote the idea of ethnic solidarity to their staff, telling workers that they are better off working for fellow Chinese than facing bias in the broader labor market. In practice, business owners and landlords control support systems and networks like family and village associations and groups offering mutual aid, employment, and credit. The larger political community in New York City tends to work through them, too, which "completes the elite's monopoly of the political, economic, and social structure of Chinatown" (Guest and Kwong 2001:262). In the end, Chinese workers who were drawn by the global labor market may not find any possibilities for advancement or business ownership, but remain stuck in the low-wage and dead-end job sector inside the ethnic enclave.

Writing about Sunset Park, Tarry Hum (2002) considered the ethnic enclave model and examined its usefulness in the current era of globalization and economic restructuring. She questioned whether an earlier understanding of the ethnic enclave and its beneficial aspect as a safe haven for new immigrants still applies, relying as it does on the idea of the enclave as a temporary way-station on the way to assimilation and upward mobility for ethnic groups in succession (Hum 2002). Hum's concept of "multiple publics" (Hum 2002, 2010) focused on the

impermanence of different ethnic groups occupying the same area, which in previous eras happened in successive waves, and today is seen in overlapping and fluid sections of a neighborhood, like the adjoining Latino and Chinese sections of Sunset Park. The upward and outward model of immigrants moving on to heterogeneous neighborhoods is not as apparent in this configuration, the neighborhood “of origin” already including many different groups. In Sunset Park, that means not only the large numbers of Latino and Chinese households, but also a significant Orthodox Jewish population and young, white residents priced out of Brooklyn’s gentrifying neighborhoods.

Kenneth Guest (in press, n.d.) argues for a more complex model for understanding the ethnic enclave economy, with his latest research on a nationwide network of Chinese restaurants, and the steady stream of temporary employees sent out to staff them by employment agencies in New York. Guest observed that Fuzhounese men in search of work review the listings at employment agencies in Manhattan’s Chinatown, then talk to an agency staffer, who gives them information about a job out of state. The agency sets up a phone call on the spot, for the job seeker to agree to terms with the restaurant owner, then gives him directions on where to catch a special Chinatown bus to his new job. Sometimes the job seeker heads out with no more information about the final destination than an exit number on the interstate, where he will wait for pickup by his new employer. The restaurant provides housing for the man to bunk in during his few off hours, and he never has any opportunity to make his way out into the community the restaurant serves.

In Guest’s analysis, all facets of the network are integrated into a closed-loop system, including the buses. An employment agency entrepreneur expanded on the earlier system of New York-Boston Chinatown buses, which had become mainstream and used by other budget

travelers. The bus company now provides service to other areas that have established this pattern of hiring workers from Chinatown. A worker sent out for a distant restaurant job thus ends up isolated in a small U.S. town by a lack of English; without local transportation or friends, he will often find the boredom and loneliness intolerable. After a short period of work and with a little money saved, he makes his way back to New York City, to the goods and services and social support available in Chinatown. After a period of rest and relaxation, he heads out again to the next temporary position, with no real exposure to the place he has worked. Guest argues that men caught up in this loop remain in the ethnic enclave economy, albeit one that is no longer geographically bounded.

Many of my informants have been in the grip of this cycle of work, or have men in their family who are away working at restaurants out of state, in lonely and isolating jobs like these. For many of them, internet access is a way of filling solitary leisure time as well as keeping in touch with family, although they do not have any access on the job. Taking a computer with them on the road gives them something to do to fill their time off, and to keep in touch. Having internet access helps them sustain family relationships via QQ Talk's internet calling function (like Skype), which I discuss in detail in chapter 5. By making the isolation bearable, it also facilitates the flow of workers in a relatively closed system, one that allows small town America to have a Chinese restaurant but does not give the people who work there a chance to participate in the broader community.

Although I agree with Kwong, Guest, Hum, and others who observe that those who work in an ethnic enclave neighborhood and live there for decades suffer from the isolation that goes hand in hand with the safe and familiar, I also contend that the transnational connections, and learning possibilities that computer access brings, counterbalance some of the social isolation.

Despite shifting settlement patterns and a neighborhood economy that may not lend itself to upward and outward assimilation into a diverse middle class, my interviews with people in Sunset Park support the idea that internet access mitigates some negative aspects of this ethnic enclave insularity. Many of the personal stories to come in this and later chapters show examples of how people in Sunset Park use computer access to create a bigger space for themselves intellectually and socially than the limitations of their work lives would otherwise permit. Often any benefits go primarily to the next generation, however, as the parents are too busy working.

Despite the economic stratification of the uptown and downtown Chinese and the way that it is demonstrated spatially by their settlement patterns, it would be a mistake to see them as having no overlap in their networking strategies and transnational participation. Guest argues that work on the new Chinese transnationalism associated with flexible accumulation, for example Ong and Nonini's (1997), does not "account for class stratification within the Chinese diaspora" (Guest 2003:64) nor does it recognize the agency of undocumented immigrants. While they may not be able to fly back and forth nor to participate politically in either place, poor immigrants do have transnational participation, e.g. through religious networks, sending remittances to family and building temples and halls in China (Guest 2003), and, as my interview data reveals, via ICT-enabled communication with family and friends abroad. Their networks also assist them in finding jobs and places to live in New York on arrival.

People on the Move

The chain migration process that brings people to Sunset Park is an integral part of their transnational experience. Chain migration describes immigrants coming from the same town, as many do; it also applies to the process of one family member who has immigrated offering

sponsorship and support for another to follow, who later helps another, and so on. New generations of cousins, nieces, and nephews follow those who came before and have established themselves in the U.S. Meanwhile, those who stayed behind give assistance to those in motion, helping them through their ordeals of upheaval and separation, such as when relatives in China cooperate in childcare and support on their end. A culture of migration develops in which life is organized around the fact that everyone is going, something Nancy Foner calls cumulative causation (Foner 2000). This process shapes the history of many families in Sunset Park. In chapter 4, I tell the story of the Liu family, and how the web of connections that they work hard to maintain both grew from and fortified their own family's process of chain migration.

The Fuzhounese who are making up a growing percentage of the Chinese population in New York City come from all over Fujian province, in a coastal part of southeastern China, and have a long history of seafaring and outmigration (Guest 2003). Some Fuzhounese come from a background of making their living through fishing, others from inland villages, although the amount of farmland is limited in this mountainous province (Guest 2003). Like much of China, the city of Fuzhou has experienced rapid economic development in recent years, but for those outside the city there is not as much opportunity. Wages are low enough that many make the calculation that they can earn much more in the U.S., even in the lowest paid jobs and taking into account the cost of paying smugglers to assist them in entering the country without documentation. Remittances coming back to towns and villages in China from those who left are put into building nice homes for the recipients. That display of wealth encourages others to try their hand at taking the same path, into southeast Asia and to the United States. Kenneth Guest argues that outmigration in Fuzhou is “seen by many as a form of family economic diversification necessary after the instability of the past thirty years” (Guest 2003:58). Guest also

finds that one of the most striking features of the current wave of outmigration from Fuzhou is the organized system of human smuggling that enables many people to enter the U.S. without documentation. Guest found whole villages in China emptying out, as Fuzhouese immigrants follow their friends and neighbors to the opportunities they expect to find in America.

Once they arrive in the U.S., immigrants face challenges beyond the struggle to put food on the table, like ones of image and identity. Andrea Louie's research explores the process of Chinese identity construction conducted by Chinese Americans, Mainland Chinese citizens, and their governments via projects like 'In Search of Roots.' Run by organizations in Guangzhou and San Francisco, the program aims to connect young adults of Cantonese descent with their ancestral villages. Louie observes that "willingly or not" Chinese Americans "are defined within U.S. society through their Chineseness," which may cast them as perpetual foreigners (A. Louie 2004: 24-5). At the same time, American society demands a symbolic display of multiculturalism through parading ethnic identity, and so may observe their lack of Chinese cultural competence and find them to be in effect not Chinese enough. Louie argues that English language terms like Chinese, overseas Chinese, and Chinese American do not "reflect the complex racial, legal, and political subtleties" contained within the many different terms the Chinese language offers for those who have emigrated (A. Louie 2004:15).

Nina Glick Schiller considers the ideological assumptions in the classic push/pull theory of migration (Lee 1966) and uses the term 'methodological nationalism' to describe "the assumption that the nation/state/society is the natural social and political form of the modern world" (Glick Schiller 2003:113). She submits that such a point of view leads to research that narrowly focuses on how well people have assimilated into their new nation state; in her view, both push/pull theory and its critiques carry the assumption that staying in one place is the norm.

Glick Schiller (2003) urges ethnographers of migration to reject this notion of stasis and ask a corollary question: not, “why do people move around?” but “why do they maintain ties with home?” I tend to agree with Glick Schiller that the degree to which people are assimilated is not as notable as the intensity of the relationships they nurture with family. For many of the immigrants I met, their ties with China are tangible evidence of what Guest calls a family economic diversification strategy, and are continuously strengthened by phone calls, e-mails, instant messages, and talking face to face online.

A large number of the residents I interviewed talked about the interpersonal connections and educational opportunities that the internet offers. The low cost of the local internet cafés, and to a lesser extent free public access at the library, make those communication channels available to even the least advantaged new immigrants, including those with no home access. While life in a community like Sunset Park may not lead quickly or seamlessly to upward mobility, my informants’ experiences suggest that the affordable internet access it offers to even the poorest residents reduces the insularity of the ethnic enclave in certain limited ways like these.

David Harvey points out how the flexibility and mobility demanded of workers in contemporary times has its constructive side, “precisely because education, flexibility, and geographical mobility, once acquired, become harder for capitalists to control” (Harvey 1990:187). The internet enables a global, information-based economy but also information sharing, so some of the squeeze on today’s flexible worker is offset by benefits like access to free communication, via e-mail, chat, and internet calls (VoIP), and free information available to anyone who knows how to use a search engine. People in Sunset Park are using the tools that are

available to them, but still face certain difficult realities, like the impossibility of protecting their children from all the issues they will face.

Challenges for the Younger Generation

Immigrant youth face particular challenges, in terms of identity and conflict. In looking at the racial position of second generation Asian Americans in New York City, Philip Kasinitz, John Mollenkopf, and Mary Waters assert that “becoming an Asian (as opposed to Chinese, Filipino, or Korean) may be the most profound form of assimilation” since they must “internalize the racial definitions of the dominant society” (Kasinitz et al. 2004:9). They also find that the greatest conflict is that between groups that are spatially close and compete for jobs, yielding such stereotypes as Cantonese are rude but open, Taiwanese polite but officious, Koreans snobbish, etc. (Kasinitz et al. 2004:10). The authors found that college educated Chinese were more likely to have a pan-Asian identity than those working-class who had ties to Chinatown; for that group, which would include young people in Sunset Park, outside contact was “more likely to be with Latinos” (Kasinitz 2004:11). Those who reported prejudice tended to be more well-to-do and have more contact with the white community, e.g. to shop in upscale stores. Asian respondents in their study reported bullying at the hands of blacks and Latinos in New York City, especially in school. None of my own informants discussed this problem with me; they may have avoided conflict by limiting their friendships to other Chinese young people, who face similar stresses, such as the demands and expectations placed on them by their parents.

Vivian Louie (2004) investigated how the drive for educational success can come into conflict with the actual life chances of ‘downtown Chinese.’ Working-class parents, who lack the resources to ensure their children’s success through tutoring, private lessons, and constant attention, nevertheless instill the same academic aspirations in their offspring as professional and

managerial class immigrants. Louie's research among college students at Hunter College, part of the City University of New York and a highly selective although inexpensive public school, documents the students' conflicted feelings, resulting from their inability to live up to outwardly imposed but internalized ideals about the 'model minority' (V. Louie 2004).

Young people in the 1.5 generation and the second generation have gendered expectations placed on them as well, and boys and girls may face different challenges. Asian American girls are expected to take on more of the traditionally female chores in the home, while the boys may be placed in charge of babysitting their younger siblings (Danico 2004). Both take on many responsibilities and complain that they miss out on having a childhood. Danico and Vo (2004) conducted focus groups at cybercafés in suburban California as part of a larger study on at-risk youth. They found that the elementary school children in the cafés were there with their older brothers who were expected to take care of them after school while their parents were working. I observed similar groups of older boys with pre-teen children in the cafés in Brooklyn. Gendered expectations are part of life for their parents' generation as well, though patriarchal notions of family must sometimes be set aside in consideration of the importance of women's work to the family, and gender roles can also be challenged by men's experience of unemployment (Pessar 2003).

Kasinitz et al. (2004) found that the second generation differs greatly from their parents by being, for example, more religious. Although their parents grew up in China, where active religious practice was opposed by a secular state, Chinese youth whom I met can take the opportunity of growing up in the relative freedom of the U.S. to experiment with religious expression as a way of being more American. The Liu family, for example, had a Christmas tree at the behest of the youngest daughter, even though they do not practice any religion themselves.

The second generation also differs from mainstream society by being more connected to New York City. Since they may not have spent time growing up elsewhere in the U.S. like a high percentage of other groups, they “may see themselves more as 'New Yorkers' than 'Americans'” (Kasinitz et al. 2004:17). Alex Stepick and Carol Dutton Stepick (2003) argue that children of immigrants also face conflicting demands that cause them to shift allegiances over time. Young people feel pressured to act like American kids; when they adopt American ways of speaking and acting, their parents feel they have rejected old-world values. As they mature, however, these youth can tend to swing back more to their parents' values.

Working-Class Computer Access in Sunset Park

The cafés in Brooklyn are used by working-class youth as well as by some new immigrants who are adults. There may be a few outsiders there, other ethnicities, but there is no visible presence of any more prosperous and established Chinese. It is notable that the cafés attract a Fuzhounese clientele, as well as a lot of disparagement, generally framed as criticism about addiction, crime, or truancy. The cafés stand at the nexus of several factors that tend to engender a negative response from the community: youth, concern about addiction (to games and to internet use), the class conflict between earlier waves of Chinese immigrants and the newer wave of Fuzhounese, and fear of crime. Bernard Wong writes of what he calls Chinese immigrants' “new orientation to the law” and law enforcement (*in Foner 1987:251*), observing that Chinese immigrants hate gangs. At the same time, gang activity has sometimes been attributed to the cafés in Brooklyn, whether or not that link was legitimate. In 2009, for example, local papers reported a stabbing outside of one of the Chinese internet cafés in Sunset Park suggesting it was gang-related, although that link was later found to be false (Seville 2009, Tracy 2010). An aversion to addiction appears to be at the root of some of the distaste I heard

expressed about the cafés. Irene Liu, whose story is told in chapter 4, frowns on cafés and says that young people get addicted to games there, since they're open 24/7. It is her view that people could be doing drugs there.

In their article on cybercafés in California frequented by Korean, Vietnamese, and Chinese youth, Danico and Vo (2004) observed that many of the games played and the café phenomenon itself had originated in Korea, but later became popular with Asian American youth in the San Francisco Bay area. The cafés they visited in California were replacing an earlier wave of more upscale internet cafés that had gone out of business after PC access at home became common. At one time the price had been as high as \$5.00 per hour, but that later dropped significantly, and the California cafés became a more working-class space. In California's car culture, Danico and Vo found people in their focus group to be working-class because they arrived on bicycles, rather than in their own nice cars. Car ownership in Sunset Park is less common, but based on income reported, it seems that people in my study might be slightly less affluent than Danico and Vo's focus group, though the young people they interviewed faced some similar issues as those in Brooklyn. Their research was part of a study of at-risk youth, and they found that the youthful clientele used the cafés as a place to get away from the struggles they faced at school, as ESL students, and in their crowded homes. The authors found that there were not that many things to do in the area that did not cost money or were as low cost as gaming. Youth built a sense of community there and even referred to the cafés as a "second home." This feeling of home was something that I also heard described, e.g., by Vincent, Ken, and Johnny -- three young men I interviewed in their favorite café for meeting up with each other.

Vincent and Ken [Informants 18 and 19] both have computers at home with cable internet connections, but they come to the cafés as often as possible, sometimes even a few times a day, to get together with each other as well as a wider circle of friends. Ken [#19] was quite clear that he came for the socializing and because there are more people there; he told me he comes to the café because it is “lonely at home” and “to meet girls.” Girls make up a small minority of café clients, though there are a few more there in the evenings, and he was probably also referring to the opportunity to meet girls online via QQ. Vincent went further, saying that “this is our home,” gesturing to include himself and his friends, and indicating the café where we were sitting. At ages eighteen and twenty-one, these two are a part of the crowd that is most prevalent in the cafés, i.e., young men, but they do not really go to cafés for the computer gaming. Along with their quieter, twenty-year-old friend Johnny [informant #20], they are heavy users of QQ, which can be used for real-time chatting as well as a way to meet new friends...and girls.

All three young men are recent immigrants from Fuzhou, living at home with their parents and not yet employed or in school and not proficient in English. These three men in their late teens and early twenties laughed self-consciously while telling me that they do not have jobs because they are “lazy.” That was said with what appeared to be self-conscious bravado, as they were no doubt feeling the pressure from their parents to achieve. Without a comfortable and inexpensive place to go to meet friends, the lives of these three could be somewhat isolated, since they do not have school or work to keep them busy and are heavy internet users at home as well. This is not a neighborhood of basketball courts and green outdoor spaces; the large park that gives Sunset Park its name is many blocks northwest of the area where most Chinese Americans live. More engaging for these three friends is their multi-faceted communication strategy – instant messaging distant friends while sitting with their pals in person at the café.

Sherry Turkle, an MIT researcher with training in psychoanalytics as well as sociology, wrote in her most recent book that “leaving home has always been a way to see one’s culture anew. But what if, tethered, we bring our homes with us?” (Turkle 2011: 156). She made the comment about the use of public space in general, however, and not about immigrants being more connected to their sending country than their new home, nor about youth in cafés. Finding herself at a conference where seemingly everyone was engaged with a smart phone or a laptop rather than anyone around them, including the speakers, Turkle wrote that, “it was clear that what people mostly want from public space is to be alone with their personal networks” (Turkle 2011:14). In Sunset Park, the private cocoon people construct in the public café space where they are using the ICTs is not nearly so isolating. Young people are actually there in groups, even if they are also staring at individual computer screens. This could be a function of their youth as much as their social class, yielding practices that contrast with adults and professionals in other areas.

A slightly older man who uses a computer at home instead of cafés talked to me about what home computer access means to him. Kevin [informant #28], age 27 and in the U.S. for about five years, told me that he felt “computers were for rich people” when he lived in China. A slim, soft-spoken Fuzhounese man, Kevin completed high school in China and now attends community college while working full-time as a sushi chef. Although computers were not that common among people in his hometown, he did take a month-long computer class in China before he left because he was interested in computer technology and hoped it would prove useful for the future. Computer ownership has exploded in China along with the country’s rapid growth in prosperity, and Kevin sometimes uses a webcam to talk to his parents in China, since they now have a computer as well.

Kevin and his brother share a PC and a laptop and have had DSL access to the internet for four or five years now; before he could afford computer access at home, he sometimes went to internet cafés, and his 22 year old brother still sometimes uses them. Although he uses wireless internet with his laptop at work when he can, computer access is not really part of Kevin's restaurant job, so computers to him are about making the most of his leisure time. He likes that when he is free he can spend his time more efficiently with computers, looking up information on things he does not understand well, downloading music, and studying English. For the classes he is taking, Kevin uses books as well software he was able to download for his English studies. He reads more than one Chinese language newspaper every day, and would read English language papers but finds it too taxing since his English level is not high enough yet. Stuck working long hours in a restaurant kitchen, he has little opportunity to learn English, except during his time off.

ICTs in the Ethnic Enclave: A Case Study

I met Alvin Fung [informant #39] at his home on a cold day in December in 2007; he had been on his way out with a friend when I arrived and he kept his baseball cap and black down jacket on as we sat in his chilly living room for the interview. His apartment was very plain and the furnishings were worn, but he had two flat screen television sets on the living room wall, in addition to the computer in another room, and a couple of lively small dogs. Alvin came to the U.S. from Hong Kong in 1987 and had been in New York since then, living first in Manhattan's Chinatown and later moving to Sunset Park. He raised his two sons in New York, and one of them gave him his old computer after upgrading and taught him how to use it. His older son had recently gotten married and moved out, but his twenty-two year old son was still living at home and using their computer for hours at a time for online gaming, apparently for Counterstrike,

since Alvin described what he saw his son playing as “shooting games where you fight terrorists” [*kongbu fenzi*]). (More about computer game content is covered in chapter 5.) Alvin reported that his sons both play games for hours and hours, spending almost all their free time on the computer playing.

Alvin does not have any friends or relatives in China with whom he keeps in touch anymore. His sons use the webcam on the computer to talk to friends locally, but he does not use that feature himself. When asked about how technology affects relationships, he observed that spending all your time on the computer makes you less close to people, referring to his sons spending their time at home playing computer games. But he also said that people in this neighborhood do not get to go outside the community much because they are just too busy working, and that “the internet is how they can do it.” His own case is a good example of what that looks like. After many long years of working hard in Chinese restaurants in the neighborhood, which gave him no exposure to any language or culture but Chinese, he saw the internet as the way to go outside the insular community in which he has lived and worked.

After more than twenty years in the U.S., Alvin was only now finding the time and opportunity to really learn English, and that was only because, at fifty-five, he was unemployed and having trouble finding a job. His usual work has been as a cook in Chinese restaurants. Alvin graduated from junior high school in Hong Kong, where he learned the western alphabet, and he took some English language basics there in a night course. He was taking the free English classes at the community center when I met him, and using the computer a lot to help him with what he was learning. He reported being online everyday for more than an hour, and liked having translation software to point at unfamiliar words, which helped as he tried to read

the *Daily News* and *New York Post* newspapers online. He read the *China Press* newspaper regularly and listened to Chinese music online a lot, on Kugou.

To do the homework for the class he was taking, he reported searching for information about American history online, and e-mailing the teacher and his classmates in English. The course taught him how to set up an e-mail account, as he had never used e-mail before. Alvin wanted to try to use English for all his online activities, but found that he still mostly used Chinese. By accessing the Brooklyn Public Library databases from home, he read the Chinese magazines and newspapers for free, and saved money on buying the print newspaper. He said he did not mind that library databases are slow and that some require a password, as he had the patience to stay on there all day long to get the magazines and newspapers he could read for free. Alvin felt that the information available on the internet kept his life without a job from being boring.

For those like Alvin who have time to grow in this direction, access to English language software or adult-learning materials can be a very helpful resource. It is worth noting, however, that he himself had only found time to grow as an autodidact because he was unemployed. The grueling work schedules endured by so many adults in this neighborhood impede taking steps that offer long-term advantages, like learning English, either online or in a classroom. ICT use may make individuals like Alvin feel less isolated but cannot change the facts of a socio-economic system that is stacked against them.

Pros and Cons of ICTs, in Practice and in Discourse

The positive way that people like Alvin described their ICT use to me were in contrast to another, more negative, viewpoint about other aspects, like gaming. In Alvin's case, the two points of view came out in a single conversation, when he described his own life as being

enriched by ICT use while expressing concerns about computer games keeping his sons from leaving the house. Such pro and con labels placed on technology represent two divergent ideologies in tension, which are expressed by people in general, not just in Sunset Park.

Sherry Turkle has been writing about technology for decades. As her point of view has evolved, she has expressed more concerns and reservations about technology's impact. In her earlier writing, such as *Life on the Screen* (1995), she focused on issues like identity formation online, in an era of self-constructed avatars and anonymous chat rooms. In that work, Turkle observed that, like television, the world of games and virtual reality can be a form of resistance, since they are "enriching for people whose possibilities for fulfillment in real life are seriously limited" (1995:241). ICT users can build worlds of meaning and order online, as Alvin Fung has done with the imposed leisure time of unemployment. In her edited volume, *The Inner History of Devices* (2008), Turkle continued the exploration of identity, with careful observation of the complex relationships people have with technology and how their inner thought processes and identities are shaped by and also construct their attitudes toward these devices. She observed the necessity in ethnographic work on technology to look beneath the surface of people's narratives, "because people find it difficult to talk about technology in ways that don't follow a standard script" (Turkle 2008:4).

The 'standard script' I heard in talking to people in Sunset Park tended toward a pro-technology stance with "convenient" [*fangbian*] being the most common word people used to talk about their ICT use. This response came up so often that I was concerned that it was an artifact of the way I posed the question, but Jack Qiu (2009) found it used with great frequency as well in his study of ICTs in China. Qiu concluded that the term was reflective of an ideology in China somewhat favorable to information technology, although with strong class distinctions,

since the working-class people he interviewed in China generally cannot afford home computers and so rely on mobile phones and internet cafés. The cheery enthusiasm with which ICTs were branded ‘convenient’ in Brooklyn may also reflect attitudes residents absorbed while still living in China. A pro-technology ideology is part of China’s determination to achieve a modern image and a dominant role as a nation, to get away from a ‘backward’ agrarian past, and Qiu observed that there was generally an "easy acceptance of informationalism as ideologically desirable" (Qiu 2009:90). As China pushes toward rapid development, the ideological appeal of technology, research and development, scientific endeavor, and a place among nations is apparent in public discourse. For example, the language is loaded with pithy aphorisms or *chengyu* extolling the virtues of science and knowledge, and criticizing all that is backward as shameful.

In talking about young people mingling in cafés, however, the discussion in Sunset Park tended toward a more judgmental position and the presumption that youth were playing games to the point of addiction and not participating in work or family life while they are out socializing in the cafés. In this negative stance they are not alone; beginning in the 1990s, a great deal has been written about whether or not internet addiction is a genuine psychological disorder and how prevalent it may be. Communication scholars Crispin Thurlow, Laura Lengel, and Alice Tomic point out in their guide to CMC that emerging technologies tend to excite such moral panics (Goode and Ben-Yehuda 1994), and that the internet is no different (Thurlow et al. 2004:150). Tom Standage (1999) gave a powerful example of this in his book *The Victorian Internet*, about the social consequences of the telegraph in the 19th Century and the unsettling speed with which information suddenly traveled.

Within a positive discussion of the role of ICTs in their daily lives my informants sometimes mentioned reservations about computer technology with this ‘moral panic’ overtone,

an uneasiness that cropped up in the occasional negative word or phrase. The most common objection had to do with time: about computers potentially taking up too much of their time, or about not having enough time to use them due to work and family responsibilities. Another related complaint, especially from older residents, was that ICTs were too hard to understand and could take too long to learn. These statements express the conflicted feelings of hard-working people juggling very long work hours, a strong commitment to their families, and very little free time. Two female informants (both not coincidentally pregnant) spoke of concern about the radiation emitted by a computer and its harmful affects on a fetus. Others mentioned anxiety about the potential for computer viruses, about the expense of owning and maintaining a computer, and about the influence of ICTs on young people, at home as well as in cafés. It is notable that most of these concerns have to do with family life and an avoidance of anything that could be harmful to young people, or could interfere with parents' ability to be hardworking and productive. Despite some concerns, however, much of the language informants used in interviews extolled ICTs as a valued modern convenience.

Along with an acceptance of all that is modern and progressive about information technology that they may have grown up with in China (with the few reservations mentioned above), my informants also have their own connection to objects they purchase here and what ownership means to them and their families. Having a computer in the house can serve as a tangible affirmation of the ways parents in Sunset Park are providing for their families and for their educational goals. In their complex attachments to the ICTs in their daily lives, they are not unlike the rest of us, who find that ICT tools have more meanings than just a list of things we actually do with them. Sherry Turkle's work on information technology often considers the relationship people have with their objects -- how ICTs make us feel. Of one of her informants,

who had felt like a failure before he found a new feeling of possibility from tinkering with computers, she writes that “what is important about having a computer at home is not what the computer might do, but how it makes him feel” since “he has come to see himself as a learner” (Turkle 2008:28-9). The comment might just as well have been made about Alvin Fung.

Three Stories from Sunset Park

To illustrate further how Sunset Park communication practices relate to the struggles and challenges faced by working-class immigrants from China, I end this chapter with three of their stories. The first two illustrate how workers in the ethnic enclave restaurant system used ICTs to sustain their family relationships, within the U.S. and transnationally. The third concerns a café manager in Brooklyn whose efforts to maintain his social network in China were so successful that he felt closer to friends there than to any he might make in the U.S.

Mei-Yue Wu [informant #12], age 29, was almost nine months pregnant at the time we spoke. She is Fuzhounese, and came to the U.S. four years before I met her, spending two years in Pittsburgh before moving to Brooklyn. She was managing without her usual income, since her husband was working in a Chinese restaurant in Pennsylvania. Mei-Yue called and instant messaged him every day; he used their PC, and she had the laptop. She also chatted online with friends and relatives every day, using a webcam with QQ, and she sometimes called them on the phone. In the past she had spoken to her family in China at night, because of the 12-hour time difference, but when we met and she was not working, she called them in the morning. Waiting at home for her baby to arrive had given her an opportunity to explore the possibilities of her new computer, and an incentive to use it to break out of her isolation and to sustain relationships, those with her husband working out of town and with her relatives in China.

She had only had cable internet access for about one month when I met her but was already used to spending six hours a day online, playing action games and mahjongg, listening to music, and talking to her relatives in China and to her absent husband. She also used the computer to look up information about possible jobs, for herself and her husband. She had cut back her computer use to about three hours per day when we met, due to her concern about how the radiation emitted by her laptop might affect her unborn baby. Like many people I spoke to, she was learning the computer and English at the same time.

For Mei-Yue, having computer access was an important tool for her family's economic strategy. Her husband was working out of state in the kind of restaurant job that is still within the ethnic enclave economy, even if it was not geographically in Chinatown. Having the internet connection helped make the separation tolerable, so that her husband could endure working in a job with little opportunity, while she also used the internet to try to find better jobs for them both. By serving as a personal adaptation that made their lives bearable, ICT use helped support the ethnic enclave restaurant network system, with its dead-end jobs. Sustaining the transience and flexibility of that network also ultimately benefitted the owners of the restaurants, the bus line, the employment agencies, and the people who eat in the inexpensive Chinese restaurants they serve.

The network of restaurants and the services and workers that supply them that Guest describes has become routinized, but further in the past parts of the system were in place. One of my older informants, Ray Wong [informant #2], who conducts the library computer classes I discuss in chapter 5, spent his whole work life in the restaurant business, from dishwasher to waiter to manager. He should have long since retired, but he now works full-time at the local public library branch, for the health benefits. Ray acknowledged that there was never any need to

know how to use computers when he worked in the restaurant business. During the years that he worked at a restaurant in Maine, however, when he could only come home to Brooklyn once a month, his children bought him his first computer as a present. They taught him to use it, so he would have something to do in the evenings. That was about thirteen or fourteen years ago. Today he uses that knowledge and experience to teach the Chinese language computer classes at the library.

Ray, a thoughtful, humorous man, did not give his age, but he did tell me that he already had a wife and family of his own when he moved to the U.S. in 1964, and that his mother was over one hundred years old. He still relies on his kids when he has computer problems. Ray grew up in Hong Kong and studied English from grammar school on, so his English is very good; his native dialect is Cantonese, and he only learned Mandarin from movies and television. But the e-mails he exchanges with his children, all three in their thirties, are only in English, since the children do not read and write Chinese. He tried to send them to Chinese school when they were little, but they cried because it was so hard, and so he did not force them. E-mail is the main way he keeps in touch with them now, but his wife's command of English is only very basic, so the kids address e-mail attachments intended for their mother for him to open. The gift his children gave him years ago -- buying him a computer and teaching him to use it -- continues to pay dividends. It strengthens their ongoing relationship as well as giving him skills he parlayed into a job with health benefits, after he grew too old to keep up with the travelling and physical work demanded by the restaurant economy. Although his ICT use in the past was just part of making life on the road endurable, it is now a skill that cannot be taken away from him -- part of the education, flexibility, and mobility that Harvey (1990) argued becomes a tool that cannot be taken away once it is acquired.

The third person is Ben [informant #1], who left Guangdong for the U.S. at 14 and was 31 when I met him, working at the front desk at one of the most popular internet cafés. A quiet, thoughtful man in his early thirties, he is an avid reader. He happened to be reading the bestseller *The World is Flat* by Thomas Friedman when I interviewed him, a very pro-business view of globalization, which takes the view that workers just need to be more flexible and adaptable to the world economic system as it is. Ben lived with his parents and two siblings. His mother was working in a garment factory, while his father was disabled and could not work. Ben had the job in the internet café, plus his household had *six* computers, a PC and a laptop for each of the three adult siblings. He had first learned to use computers in the U.S., in his high school's computer lab. Having immigrated to the U.S. at 14, Ben was among those who faced the challenges of the 1.5 generation. Because of the difficult transition of immigrating in ninth grade, and the language difference, he did not graduate from high school, but he later earned his G.E.D.

Ben told me he still maintained very close ties with the childhood friends he left behind in China sixteen years ago, contacting them every day. He reported using Skype to talk to friends in China face to face, and sending them instant messages using MSN. Talking to his friends via webcam had become easier, now that a high percentage of them have notebook computers of their own. He did not IM much from home, however, saying he would rather spend time with his family, chatting and watching Chinese movies. At the same time that computer technology facilitated his maintaining close ties with friends and family in China, staying in the comfort of those transnational relationships kept him from interacting locally, and he was self-conscious that his English was not better. It was therefore not much of a surprise, when I went back for a follow-up interview, to find that Ben had moved back to China. The long distance ties he

maintained through the years with China proved to hold a stronger bond for him than the ones he developed here in the United States.

Conclusion

Although incomes are low, people in Sunset Park manage to have a high rate of computer use and ownership, with family life and education as important driving factors. The ICT practices in Sunset Park show the complex way in which technology is embedded in the economic system that acts as something of a trap to the ethnic enclave worker. They use these communication technologies in ways that help them to cope with their circumscribed lives and disadvantages, such as to study or look for work online or to keep in touch with absent loved ones.

The people of Sunset Park face many systemic obstacles, but they do so with tools, including the network of transnational relationships that sustained them through the immigration process. They make active use of ICTs to maintain those ties, even when that means going out to a low-cost internet café seeking cheap computer access. They find jobs, housing, and services in the ethnic enclave without knowing English, but they make a tradeoff for those advantages. Dead-end and low-wage employment with no chance for advancement is common in ethnic enclave settlements like Sunset Park, and may afford no interaction with the English-speaking community. An ethnic enclave can also be extensive and not geographically bounded, as in the national network of Chinese restaurants supplied with a steady stream of labor from Chinatown. Workers in that closed network find the same ethnic enclave isolation out of state. With no local network beyond their few co-workers, their isolation may be even more complete, without the social contact and support offered in New York. Their co-ethnic employers and other Chinese elites represent an entirely different group of immigrants, who settle in more upscale suburban

communities or ethnoburbs, and look down on them in a class-based prejudice tinged with racism, like my elite friend who did not want me to do research in Chinatown.

In the next chapter, I focus on one family at home in Sunset Park: the Lius. Although each family is unique, their personal story brings home some of the struggles and sacrifices of new immigrants in Sunset Park.

Chapter 4

The Liu Family, Then and Now

Introduction

Hard work for low wages is the central fact of life in the Liu household. Despite the pressure this has put on their family, the Lius draw strength from each other, and from their relatives, both in the U.S. and back home in China. The mother, Irene, has concentrated her efforts on improving the family's lot through steady sacrifice and hard work, even when those efforts have meant that family members do not get to be together. When she first immigrated to the U.S. in 1998, she had to leave her husband and small children behind, and it took three and a half years before she could arrange for them all to be reunited in the U.S. Her life in China, her life alone in the U.S. before they joined her, and her life since then have all been characterized by toiling at difficult and low-paying jobs, which she does energetically and without complaint, keeping her family's best interests in the forefront of her thoughts. Her husband and their relatives on both sides have all had the same kind of struggles, but when they talk to each other – which is often – it is always to share family news and milestones, and not to grouse about the hardships they endure with work.

I was able to visit with the Liu family three years after conducting my fieldwork, and see and hear about all the important changes in their lives. The shift in their circumstances, and their move out of their old apartment and into a new home highlight some of the issues Sunset Park

residents face and the sacrifices they make, as well as the ways they adapt through their communication strategies. While some of the changes in their daily practices have to do with the spatial configuration of their former and new homes, and the new life stages they have entered, other changes are evidence of an evolution in online communications in the U.S., for example toward cell phone use for young people. The pages that follow include some of the Lius' family history, a snapshot of their lives at home and communication norms when I first knew them, followed by a more complete portrait of their daily life today. Dehua Liu, the father, was not able to be home because of his work schedule, but he was kind enough to answer my follow-up questions via e-mail.

Chain Migration, From China to Sunset Park

I first met the Liu family at their home in Sunset Park on a Saturday afternoon in early January of 2008. The Liu household included Irene Chang [informant #4], age 42, a housekeeper in a hotel; her husband Dehua Liu [informant #49], age 41, a cook; and Irene's mother Ai Lian Li [informant #48], age 74 and retired from garment factory work. [Chinese women do not typically change their surname to their husband's, whereas children take their father's name, which is why the three of them have different surnames.] Besides these three adults, there were also Irene and Dehua's two children, Jenny [informant #3], age 17, a senior in high school and my research assistant, and Monique [informant #47], 13 years old and ready to start high school next year.

Although Irene's mother, Ai Lian, lived with the Liu family, Irene's father lived with one of Irene's older brothers. Irene and her brother decided to separate them because they argued so much, but they visited back and forth between the two households several times a week. Four of the elderly couple's six children have immigrated to the United States. Irene is their second

youngest. Irene's three brothers also live in Brooklyn nearby with their families; those are the uncles, aunts, and cousins that Jenny and Monique see regularly. Irene's two older sisters still live in China, as do all the relatives from Dehua's side of the family.

Irene's uncle started the chain migration process back in the 1950s. Her parents came long after, in 1991, bringing with them her youngest brother. She and her four older siblings were already too old to qualify to immigrate as dependent children at that time with their parents. Soon after her parents had found work and established themselves in the U.S., however, they began the paperwork to sponsor Irene to join them. By the time she finally came to America herself, in 1998, she was married to Dehua and already the mother of their two children, but she had to come without them; she stayed with one of her older brothers and later with her parents. Her husband and their small daughters lived with Dehua's parents in Guangzhou for the period that it took her to lay the groundwork for them to join her. Dehua was facing his own challenges, in China:

The days back then were very hard for all of us. I took care of the children while my wife was working in the U.S. It was not easy to be a stay-at-home dad. The job was all new to me, and both the girls and I missed their mother a lot. I was a full time stay-at-home dad for the first two years while my wife was working in the U.S. Then I started a business in a grocery store and had my parents take care of the children.

During the lonely years when Irene was in the U.S. and they remained behind in China, she called them once a week and talked for about an hour. In those days, the cards cost about \$15 per hour; they have since come down to about \$2 for two hundred minutes. She was only able to go back to see them once a year, around Chinese New Year, although she did manage to stay for two or three months at a time -- a long time for someone with so few resources, and testament to her strong need to spend time with her husband and children in person.

Irene's youth and young adulthood in China had prepared her for the mobility and

hardships that the chain migration process demands. She was born in a fishing village in Guangxi, moved to the city of Guangzhou at sixteen, and later to nearby Shenzhen to work in a factory. Shenzhen itself, little more than a village until its establishment as a special economic zone under China's economic reform in the 70s, is now China's fastest growing city, with an official population of more than ten million, according to Chinese government statistics (www.sz.gov.cn). The population figure is contested and is likely to be larger, as it is hard to count the large number of young, undocumented workers (the "floating population") who came from the countryside to special economic zones to work: people like Irene. The strict *hukou* system of household registration in China tied people to their place of birth, and those who traveled to the cities in search of work were in violation of state policy and ineligible for the benefits available to city dwellers. The life of the floating population was insecure and contingent on finding work, often in extremely harsh factory environments. Shenzhen's rapid transformation into a hub of manufacturing has been characterized by both remarkable economic growth and a sharp polarization of class, between the migrant workers who come from the countryside to work there and the privileged few.

Irene and Dehua were among the migrant workers who came to work in Shenzhen's factories in the late 1980s, young and ambitious enough for a better life to withstand the harsh conditions and long hours. They met while they were both working at a garment factory, where his job was ironing clothes and hers was knitting. For her work there, which Irene recalled as being a little dangerous, she earned only one hundred twenty yuan (about \$18.50 U.S.) per month, even though she was working ten hours a day, six days a week. Nowadays she has little to say about the difficult work environment she endured in those days, focusing instead on meeting her life partner there and how she was glad to be able to learn to speak Mandarin from

the friends she made among her co-workers at the factory in Shenzhen. Although Irene chose not to give much detail of her experience working there, Ching Kwan Lee described the harsh and restrictive work environment of a factory in Shenzhen, where workers were subject to many types of coercion, including docked wages and time restrictions on food and bathroom breaks, in an almost prison-like environment:

Control in the Shenzhen plant was overt, visible, punishment-oriented, and publicly displayed. The factory grounds were fenced on four sides by high concrete walls and the main entrance gate was guarded around the clock by security guards carrying batons.
(Lee 1995:383)

When Irene first arrived in the U.S. in 1998 at about age thirty, she found another factory job through an advertisement, as a seamstress at a garment factory in Sunset Park. She moved into a basement level apartment of a house in Brooklyn with one of her brothers, where the total rent was just \$500 (her half was \$250 a month), sending almost all the rest of her money to her husband and children in China. She did not spend money on treats for herself, to make her life easier, but just worked and saved and sent money to her family. Though she says that the working conditions at the garment factory in Sunset Park were poor and she found it very dirty, she ended up working there for nine years, from 1998 to 2007. Her husband worked there, too, when he came.

Eventually Irene found the much better job she has now, as a housekeeper in a hotel, where she has been working since 2007. Dehua went on to find work cooking in Chinese restaurants, working his way up to his current position as dim sum chef in an upscale Chinese restaurant, one with a listing in the prestigious Zagat's restaurant guidebook. With their work background doing exhausting work in garment factories for very little money, she and her husband feel lucky to have the relatively safe, stable jobs they have today, despite the sacrifices

that their small salaries demand, evidenced by the plain clothes they wear and the threadbare furnishings in their cramped apartment.

Irene's work hours as a hotel housekeeper in New York City are one aspect of the job that looks easy by comparison to the past: her work shifts now are just eight hours a day, five days a week, in a schedule set by her supervisor that varies from week to week. Typically she works the morning shift three days a week, from nine to five, and the night shift from three to eleven the other two workdays. Her usual days off are Monday and Tuesday. Irene belongs to the union at the hotel where she works. Her husband works seven a.m. to five p.m., six days a week, sometimes longer. Saturday and Sunday are his longest days, since he has to go in early to prepare the dim sum brunch. He generally gets Mondays off, however, giving them one day a week when they are both free. Irene travels by subway from the apartment in Brooklyn to her job in Manhattan, and her husband walks to the Sunset Park restaurant. Irene's older daughter, Jenny, heads off to high school on a city bus and her younger daughter, Monique, walks to the junior high school nearby.

At 17, Jenny is also expected to work hard. She not only has her studies --she takes all the advanced placement courses at her high school -- but also works summers as a receptionist in a Chinese community center. In addition, she does volunteer work at the library and participates in a youth group affiliated with the police force, roles that should improve her standing on college applications. Although the two girls are only four years apart, the age difference between them is important to the family, and Jenny shoulders a lot of responsibility.

Irene's mother is retired from garment work, and spends much of her time at home. She listens to a Chinese radio station offering news and music, which she keeps on all day, even when she is not in the room, as well as watching Chinese dramas on DVD. Having received

only three years of formal schooling before she had to drop out and start working, Ai Lian cannot read Chinese. She does not read the newspapers, although she offered to write her name for me in English with a shaky hand, to make sure I understood the spelling. Her hard life is etched in her face, and she is missing all of her teeth on one side, yet she wears a jaunty hair-band in her gray hair and speaks cheerfully about her life. Her relatives had all been farmers until they lost their land in the Cultural Revolution, and her daughter and grandchildren told me later that they remember her telling stories of people starving during those turbulent years in China, although to me she spoke only of her life in the United States.

Ai Lian was 59 in 1991, when she came to New York and began to work in Sunset Park sweatshops, staying with her husband's brother, who had been the first to immigrate to the U.S. When she and her husband joined him in New York with their youngest son, life was hard. She used posters on factories to find a job in a garment factory in Sunset Park, and worked ten to twelve hours a day. Her husband also worked there, as a bus boy for materials. She continued to do garment work in Sunset Park until she was about sixty-five, but those six years of employment in the U.S. were not enough to qualify her for Social Security benefits. Ai Lian remembers that there were few Chinese people in the area when she first arrived, and that there were lots of robberies in Sunset Park. Her husband, who is hearing impaired, was the victim of a hold-up in those early days, but did not have any money nor know how to respond. Back then, Ai Lian was working too hard in Chinese-run factories to have time to learn English, and now that she is old she says that taking English classes would make her head hurt (which is also what she has to say about the idea of trying to use a computer). She is still friends with a few former co-workers from those days, and she enjoys meeting them sometimes in the Chinese bakeries along 8th Avenue.

Home Life in Sunset Park

Like a lot of Chinese families renting apartments in Sunset Park, the Lius occupy one story of a row-house, a four-story building that has been partitioned so that each level is a separate, floor-through apartment. The door from the street opens into the house's tiny foyer, with a stairwell that leads up and down to the different apartments. The Lius have the first floor or parlor level of the house, so the front door of their apartment is just a few steps inside and to the right of the door from the street. There is a railroad apartment, in which each room leads directly into the next, with no central hallway, so a chief characteristic of their home is a lack of privacy, as well as many rooms without natural light. The rooms in the front and the rear of the apartment have windows facing the front and back of the house, but the center rooms are windowless and do not get sunlight.

On a Saturday evening in early January of 2008, when I first visit the Lius, everyone in the family is at home. The apartment door opens up into the Lius' small kitchen, where Dehua stands near the kitchen window, peeling vegetables for the family's dinner. A few steps through the kitchen and turning right lies the bedroom the two teenage daughters share, a small cluttered space with bunk beds, a computer desk, and a bookcase. The fact that their parents and grandmother must pass through here to get to the living room and to their own bedrooms beyond makes the daughters' bedroom a high traffic, focal point of the family's living space. The well-used family PC is kept there, on a small computer desk near the bunk beds. The Lius' apartment is cramped, which also means that the one computer they share is centrally located and gets heavily used.

Continuing through the girls' bedroom leads to a tiny living room followed by two more small connecting bedrooms, one for Irene and Dehua and one for her mother, bedrooms that I am

not invited to see. There is very little room in this small living area for furniture, and the sofa and tables they do have are somewhat battered and worn, the kind of furniture that can be found left at the curb in more gentrified neighborhoods in Brooklyn, ready to be removed by the city or available free to anyone with access to a van. There are no pictures on the walls. On this day in the first week of January, the room is made festive by a small, revolving tabletop Christmas tree, specially requested by the younger daughter, even though the family does not celebrate Christmas.

The gifts that the Lius give their children are less tangible than Christmas presents and are in the planning and sacrifices that the parents have made for many years, all oriented toward building a better life for their daughters than they have had themselves. Dehua only received eight years of formal education before he began his life of hard work, meaning he did not complete junior high school. Irene finished junior high school in China, plus she took some G.E.D. classes in Chinatown some years back, but she could not afford to stay with it long enough to complete her G.E.D. Both of them had a little basic English instruction in grade school in China, but not enough to be very helpful once they arrived in America. Though they did not achieve the level of education they wanted and they work hard at relatively low-paying jobs themselves, the Lius are determined to see their daughters succeed academically and pursue careers that require a college education. Both daughters are high achieving students with plans for getting in to the best possible colleges in the future but will have to attend public universities and will need scholarship support.

Computer Use in the Liu Household

Both parents defer to the daughters' usage of the computer, since homework comes first. Jenny, the older daughter, learned computer basics in fifth grade in China in what was more of a

typing class than a computer lab, and she taught the rest of the family. The Lius were early adopters of computer technology, buying their first computer in China from the funds that Irene was sending home to them in China. That computer was a PC running Windows 98, for which they paid three to four thousand yuan secondhand (about \$540), bought as part of their preparation for life in the United States. It was a great luxury at the time (2001-2002), acquired long before most of their neighbors there had one. Jenny and Monique were also the only ones among their classmates to have a home computer in China, but they did not have internet access. Back then, Dehua and the girls liked to have family contests to see who could type the fastest, and Monique used Microsoft Paint for drawing. Irene learned some computer basics from the G.E.D. classes she took in Chinatown for a few months, and later from her daughter. When they were reunited, the family had to buy a replacement computer because of the difference in electronic voltage between the two countries, highlighting the importance of the expenditure – the equivalent of two years' wages on a computer that would not even work after the move.

Today, Irene gets on the family's computer about five times a week, for an hour to an hour-and-a-half, to read online newspapers and communicate with local friends via e-mail. She reports that her friends also share information with her, things they learned about or experienced online. She is self-conscious about speaking English but can read it well enough to read the English language newspapers online. She turns to Chinese online newspapers for the entertainment section, especially the celebrity gossip. Irene calls her sisters in China on the phone to keep in touch, since they are not well off and do not have computers.

Dehua uses the family computer primarily to play Chinese chess, Xiangqi. In China, he played Chinese chess with an opponent in person. His main motivation for learning how to use the computer in the U.S. was so that he could continue to play online. Dehua must grab the

occasional time the computer is free in order to play the game he loves, every other day or so, and plays competitively online with anonymous challengers. He demonstrated for me how he finds someone to play chess with. After clicking into the Games section on Hong Kong Yahoo and signing in, he picks the 'room' (meaning a graphic representation of a room) with the most people in it. Then his avatar can sit down at an open chess table with another person sitting at it, and begin playing a two-sided game of chess with the unknown person there. Sometimes he is the one who waits at a table for a partner to sit down. The game itself is more military than western chess, with a general instead of a king, and no queen.

No conversation takes place, but the act of playing against another person connects him to a community he left behind when he left China in 2002, in much the same way that retired men in Chinatown sit in the park and play traditional games. The goal is certainly to win, although not for money, and a secondary benefit is the engagement of competitive play with another person. Mr. Liu is an interesting and thoughtful man, whose job as a cook helps support his family but does not offer much of the stimulation his active mind requires, so reading and playing chess are important reaffirmations of his intellectual side during his limited leisure time.

Dehua, who has had even less opportunity to learn English than Irene -- always working in the kitchen in Chinese restaurants -- understands little English and uses the computer only in Chinese. Although both he and his wife are really only comfortable speaking Chinese, they switch easily between their native Cantonese and the Mandarin they learned while working in Shenzhen, as do the children. The family normally speaks Cantonese at home, for the benefit of Ai Lian, who does not speak Mandarin. Dehua reads the Chinese newspapers' online versions, and sometimes looks up information online, although he often prefers to ask his daughters to do this with him as a way to spend time together. He keeps in touch with his parents in China via

phone, about once a week; they do not have a computer. For Dehua, as with Irene's side of the family, having relatives in China who are too poor to own a computer there limits the utility of ICT use as a way to keep in touch.

Like her father, the older daughter Jenny is serious and intellectual, with a shy smile, quieter and less extroverted than her sister. She was about twelve when she arrived in the U.S. and speaks English well enough to succeed in New York public schools but struggles with grammar and syntax. She uses e-mail and MSN instant messaging with her friends, as well as Facebook, but she only goes onto her Facebook account about once a week. At one time, she used to type MSN instant messages in Chinese to her former classmates in China, using free downloadable software called *Youguang*; she has gradually tapered off from keeping in touch with her friends in China. She has a cell phone but does not use text messaging, and she does not really play computer games. She uses the computer a lot for homework and research projects. Jenny used to download movies from various online sources after Googling the name of the movie. She does not have the time for that anymore, since the download can take two hours, and she is busy keeping up with schoolwork. Her friend does it for her, and saves it as a file that can be watched on the computer. If her mother needs to search information online that has to be done in English, like billing information related to the family's telephone or cable bills, Jenny will do it for her.

The younger daughter, Monique, is a lively and outgoing girl in eighth grade, who has been here since she was about eight. She speaks English as fluently as someone born in the U.S., so she sticks with English, except when talking to her family. She can still read Chinese but does not know how to write or type characters. She is using the family computer in slightly different ways. She visits some Chinese websites to download music, but almost all of the rest of her

web surfing and online communications are done in English. She uses a computer at school a few times a month, in eighth grade science class, where they each work on a laptop to do research. At home, she is on the computer every day, off and on, typically for about five hours a day. She uses Hotmail and checks her e-mail throughout the day, even though a lot of it is junk mail. She does not use e-mail much with her friends, however – she uses AOL Instant Messaging (AIM) to talk to friends. Monique also reads the *New York Times* online, as well as the print version sometimes at school, for example, in social studies class, where they often read an article together and discuss it. She does some online research, looking up things like American history for a social studies project about the Boston Tea Party, or movie show-times, although she is rarely allowed to go out to events like a movie, whether due to the cost or family restrictions.

Monique likes to download music via Limewire and listens to English language pop music. She sometimes watches a movie on the computer with her sister, but not often, since Jenny prefers Chinese movies (in Mandarin, from Taiwan), and Monique would rather watch English language DVDs she borrows from the library. She enjoys playing computer games like Diner Dash, downloadable on the internet and particularly popular with girls and women, in which game play involves serving customers in a restaurant efficiently, with the goal of turning a profit. She has a page on MySpace that she checks about once a week, and most of her friends have one, too. She is beginning to taper off from going on the site, partly from boredom and also because her account was deleted a few times; she speculates it is because she was under the legal age of thirteen required by MySpace. Of ICTs in general, Monique says, “sometimes they help me but other times distract me from doing other important things like schoolwork.” Yet she depends on them, too, and feels she could not live without the instant messaging capability of

AIM. She uses it after school every day and even more on holidays, and finds that it replaces some of the talking on the phone she used to do, since her mother got mad at her about the phone bill.

The way that the Lius rely on their children to help out with internet searches and computer applications is understood by the family as an inter-generational bonding activity. When asked how the computer affects his family relationships, Mr. Liu says that, although the computer does not affect his relationships with relatives in China, it brings him closer to his family here, particularly his daughters. He enjoys the process of getting his kids involved in helping him find information online, as when they helped him get set up to play Chinese chess and find chess partners online. He also feels that having the computer enhances his precious free time, since he can use it for entertainment, and he says he would learn more applications (like QQ and instant messaging) if he had more time... and his own computer.

Three Years Worth of Change

When I visit the Liu home again three years later, on a Friday afternoon in March of 2011, a lot has changed. A life characterized by sacrifice and preparation for the next move has finally led to a more settled and comfortable life for them, as homeowners in the Sheepshead Bay neighborhood, six miles south of Sunset Park, near the waterfront at the southern tip of Brooklyn. Jenny has gone off to college, and Monique has gotten into one of the city's tougher magnet schools and begun her high school years. The Lius still have the same jobs they had three years ago, as a hotel housekeeper and a cook, but are finally allowing themselves to spend some of the money they have been able to accumulate through scrimping and saving and living in the crowded apartment they were renting before. Besides moving out of Sunset Park and buying a modest home, they have begun to acquire some of the comforts they lived without for so long,

like nicer furniture, an entertainment center, and houseplants, which are Irene's favorite. I remembered this about her and have brought her a potted daffodil, which she places in a prominent place on the coffee table.

During the afternoon that we spend sitting in the living room and catching up, I feel like an honored guest. I think I may be the only person the Lius have gotten to know well who is not Chinese, and I feel my role as cultural ambassador keenly. I had been able to help Jenny with paperwork related to college applications and scholarships, but I have wished I could do more. Knowing that my questions are related to a Ph.D. dissertation probably makes them want to be helpful, considering the value they place on education. I do not want to take advantage. I try to show my gratitude for their hospitality in inviting me into their home, and their generosity in telling me their stories.

Whereas their previous home was in an ethnic enclave neighborhood surrounded by other immigrants from China, Sheepshead Bay is not so homogeneous. One family next door is Chinese, and there is another family a few blocks away who are also Chinese, both from Hong Kong. One of Irene's brothers also lives in the neighborhood, only a block away. These are the only Chinese families the Lius know of in the area. They have gotten to know their other neighbors a little bit, but are not close with any local families who are not Chinese, although people are friendly enough and say hello to them. The Hong Kong family next door just moved in about six months ago. An American family who lived in that house before them were quite helpful, giving the Lius advice when they first moved in and did not know anything about the neighborhood nor about things related to home-ownership like how to manage their household utilities. The neighborhood in general is quite different from Sunset Park, in ways that they find generally positive. They feel it is safer and very quiet, attributing the peace and quiet to the fact

that there are fewer children in the area and more elderly people. This part of Brooklyn is beyond the reach of the subway lines, so they had to buy a car, and now drive their used Mitsubishi to the nearest subway station to continue their commutes to work and school. Irene did not know how to drive, so one of her brothers taught her, and she got a driver's license last year. Dehua had learned earlier, at a Chinese driving school.

Many of the changes that the Lius have undergone in the past three years have to do with being homeowners. When I visited them in their cramped and spartan apartment in Sunset Park, no one had anything to say about their surroundings, but now they are eager to talk about everything related to their new house. They had not known how to do any household repairs and are very proud of all they have accomplished, like the thick coat of polyurethane on the hardwood floors and the basement they finished and turned into a separate suite of rooms. To bring the house to this condition, they started in on the renovations as soon as they got home from work every day, and it took them two and a half years. There is no yard in front of the house for a garden, just a little patch of pavement, but now they have more space indoors and lots of windows and natural light. Irene is enjoying indulging her green thumb with lavish houseplants, even an expensive potted orchid. Irene still favors the unadorned personal style she had before: no makeup, faded jeans, and a sturdy shirt with the sleeves rolled up.

The threadbare sofa and mismatched tables that were their only living room furniture in Sunset Park have been replaced by a whole new set of living room furniture: a large black vinyl sofa and matching loveseat, a corner cabinet displaying a collection of premium beers like Stella Artois plus a few bottles of wine, a coffee table, and a large entertainment center with a new flat-screen television. One corner of the room is marked off as a dining area, with a small table and chairs. Dehua's restaurant also hosts celebrations, and he sometimes gets to bring home the

centerpieces; on the small dining table, there is a large and colorful flower arrangement, just beginning to wilt, that he recently brought home from a party at work.

Much of the furniture was bought unassembled from a wholesale furniture store in Brooklyn. Jenny spent three days on a break from college putting together the entertainment center, so she shares in the pride they take in the space even though she spends less time in it than they do. They even have a couple of coffee table books now, including one lavishly illustrated cookbook for dim-sum, the small plates of dumplings and other brunch items that are Dehua's specialty in his current job. Irene puts out cups of instant coffee, mandarin oranges, and a prepared snack tray of nuts and popcorn on the coffee table as we look at the books. Dehua cooks all day at work, so Irene and the girls do a lot of the cooking for the household, in their large new kitchen. If she does not have to go in early, Irene makes breakfast for the family, usually congee or noodles; otherwise everyone fend for themselves. When she is not working the night shift, she makes dinner as well, with help from her daughters – her mother, Ai Lian, is now living with Irene's brother. If they are not working or at school, family members can usually be found at home, so they are also available for the regular phone calls they make to relatives abroad.

Transnational Family Relationships and ICT Use

On Irene's side, although much of the family came to the United States over the past two decades, her two older sisters and their families remain in China, with no plans to leave. Irene's younger brother came over with her parents, and her two older brothers came when Irene did. Irene sees a lot of her three brothers and their families, who all live in Brooklyn. Besides the brother who lives in Sheepshead Bay, just a block from the Lius' new home, she has a brother in Sunset Park, and another who lives in nearby Fort Hamilton Parkway. They all gather at the

home of the one who still lives in Sunset Park for weekend and holiday dinners, so she stays in close touch with everyone.

She also remains close to her two older sisters who stayed behind by talking on the phone regularly, every two to three weeks, calling on one of her days off, when it is in the morning for her and evening their time. The international phone cards she uses to place the calls are much more affordable than they used to be and also much less than it would cost for them to place the call from China, so she is always the one to initiate the call. Years ago, they would write letters from their end, and wait for phone calls from her. Like other people I interviewed in the community, they consider letter writing too slow today. All the contact is by phone now, since neither of her sisters uses a computer routinely.

Her motivations for maintaining these close ties are complicated. While these sisters are the last links that her side of the family has with China, they are also each more than ten years older than she, and the age difference keeps her from feeling as close to them as she might. Yet if Irene did not call regularly, her sisters would complain, so there is a combination of familial love and obligation in the connection. Their phone calls usually last twenty to thirty minutes, during which they talk about how they have all been, exchanging recent news about family members, including their parents and the sisters' grandchildren. They do not talk about work issues or concerns, but they do exchange information about how they are doing financially. Irene and her brothers have managed their money carefully in the U.S., but they have not needed to send money to her sisters, who are both doing well now without remittances. Her sisters live in a coastal city of Guangxi, one of China's southernmost provinces. One sister sells vegetables; the other is the owner of a large fishing boat and makes a profit fishing. Her sister who sells

vegetables does not make as much the one who fishes, but her children earn good wages and supplement the income she brings in, helping ensure she has a good life.

Irene sometimes talks to her adult nieces and nephews when she calls, especially since she is closer in age to them than to her sisters and often took care of them when they were little. Irene's parents offered to get her sisters visas, but they decided they were too old to manage the change and were also reluctant to leave their grandchildren behind. Their mother, Ai Lian, left China when she was nearly sixty, and she made the sacrifice of leaving grandchildren behind that her two oldest daughters now find to entail too wrenching a separation. Ai Lian faced different 'push' and 'pull' factors in her immigrant experience, however, since in 1991 she was coming from a China with less economic opportunity and more hardships than her daughters face today.

The relationships that each member of the Liu family maintain with their relatives in China today were forged in the upheavals of the chain migration process, particularly the three and a half years that the girls and their father spent living with his family, while Irene was already in the U.S. Jenny was about seven when Irene left the children with her husband and his family, and Monique was about four. Jenny was old enough to understand, but her sister was really too little. Jenny remembers that it was hard for her to be separated from her mother. Her grandparents were very good to her and her sister, however, and she did not feel estranged from her mother when she came back for visits at Chinese New Year, because of the strong connection they maintained through their weekly, hour-long phone calls.

Those formative years that they spent living with their grandparents had a strong emotional affect on Jenny and Monique that continues to this day. Monique almost always gets on the phone and talks to her grandmother when the family has their regular phone conversations with her, which is at least every other week for a half hour. Dehua's father passed away a few

years ago, and his mother now lives with his sister. Dehua calls his mother, on a landline, with a phone card, and hands Monique the phone; she will talk for five to ten minutes of the call, as does Jenny, when she is home from college. Irene takes a turn on the phone as well, to talk to the mother-in-law who helped keep her family strong while she was alone and struggling in the U.S.

Speaking of her family in China today, Monique, now a sophisticated New York teenager, nevertheless unselfconsciously says, "I miss my Grandma." She has not seen her grandmother since she was almost eight years old, at least not in person. The Lius *have* used their computer's webcam and built-in microphone to talk to China, but only once or twice, and do not have much incentive, since the family members they talk to most -- Dehua's mother and Irene's sisters -- do not normally have computer access. They tried an experiment a year or two ago with Dehua's mother and his sister. His sister, who does not own a computer, took their mother to a nearby internet café in China so they could both talk to the Lius face to face, via QQ. The families talked for about twenty minutes, and the topics of conversation were the same personal and family things they discuss on a regular phone call, except for the fact that they able to see each other online. Jenny was conscious that her grandmother had been wondering how she would look and how tall she would be, not having seen Jenny since she left for the U.S. as a pre-teen. Although Jenny has not been able to visit China since she left, she really wants to go soon, during a break from college.

As the Lius talk about the relationships they have sustained with family members here and in China, it seems that one reason for their closeness is that the transience and impermanency of the lives they have led have ensured that they did not have a sense of fully belonging anywhere else. Family relationships filled many of the gaps in their lives. Family ties

bridged the loneliness of life in a foreign country where they were too busy working to build many new relationships. Today, Irene says, she does not really miss China anymore; she would like to visit but would not want to live there again. Ten years ago, she thinks she might have answered differently. For at least the last five years, however, she has not felt that way. Perhaps it is not coincidental that her feeling of being permanently anchored in the U.S. dates back to the year she became a U.S. citizen, in 2006.

Irene's parents are back together now, both living with her brother in Sunset Park. I did not meet Irene's father. He has always been hearing impaired but never received any special education in China, so he functions as someone who is learning disabled. It caused both the girls and their mother embarrassment to be reminded, when I asked for an update about Ai Lian, that their grandmother lived apart from their grandfather three years ago. Now that the couple are reconciled and both living with their son, everyone was uncomfortable discussing the former arrangement. They had been quite forthcoming in telling me of his learning disability – they used the word 'retarded' – but were disconcerted to be discussing a separation in the family.

Now that she no longer wishes to go back to China, Irene finds that she does not really keep up with Chinese politics. She says she does not really follow U.S. politics, either, laughing as she acknowledges that she does at least know who is president and who is currently mayor of New York City. She is registered to vote but has been too busy so far to actually vote. She would have made time if it were an issue or a candidate she really cared about; she had hoped to vote for Hillary Clinton, if Hillary had been the candidate for president. Yet when I asked her if she would be okay with it if her daughters wanted to marry American boys who are not of Chinese descent, she pronounced herself against it ("I want them to marry Chinese boys"), speaking English for emphasis. Irene understands English better than she speaks it and was not

comfortable speaking English with me beyond a few words or phrases, although she says she speaks English at work with anyone who does not know Chinese, for example, while she is providing cleaning service for guests in the hotel. She reports that she is also friendly with co-workers who are not Chinese, like her boss. She is likely to get her wish for her children to marry endogamously, especially in the case of her older daughter. Jenny has 229 friends on Facebook today, and 221 of them are Chinese. Monique estimates that about 80 percent of her network of friends are Chinese.



**Irene Chang (Mrs. Liu) [informant #4], a hotel maid,
in 2011, after moving out of Sunset Park**

Separate Spaces and New Habits

Much has changed for the Lius beyond their neighborhood, including the spatial configuration of their household and the way it has affected their family life and ICT use. They renovated the basement level of the house they bought, which now has a laundry room, two bedrooms and a bathroom, so the girls each have their own room in the finished basement. Since Jenny went off to college, she only occupies her room during breaks from school, so Monique in practice has the whole floor to herself. After having shared a room with her sister for years, in a railroad apartment where access to every other room involved passing through her bedroom, Monique loves having so much privacy.

The family's computer is in Monique's room now, plugged directly into the DSL modem; when her sister comes home from college with the laptop the family got her for college, Monique switches over to a wireless router, so that they can share the connection. The family PC is just Monique's now, and her computer use has intensified, whereas her parents, who each enjoyed using the computer when it was centrally located in the crowded apartment they lived in before, no longer go online at all. When I took note of the fact that Monique is down in the separate basement now and that her parents reported not using the computer, she agreed that that may account for her parents not using it anymore, saying that it does make it easier for her to be online all the time. Instead, Irene and Dehua like to spend their leisure time watching Chinese videos that they check out from the library or the Chinese dramas on DVD that Dehua buys in Sunset Park. They also like to watch reality TV shows and competitions, like *America's Got Talent* and *Wipeout*, especially when their children are around to translate for them.

Another result of the spatial separation of their new lifestyle, with each family member isolated in separate areas, is that Irene no longer knows what her daughters are doing on their

computers. She used to keep tabs on their online activity when they were in the railroad apartment in Sunset Park, and had rules against such things as their going on dating sites or looking at anything sexually explicit. Even back then, however, they would always answer “homework” if asked what they were doing, so she is not sure she ever knew exactly what they were up to.

Now an attractive junior in high school, Monique arrived home from school during my visit wearing a colorful dress and stylish blue espadrilles, the kind of clothes that are a luxury for a family to spend on a growing girl. When I first met her three years before, Monique was dressed plainly like her parents and was still going by her Chinese given name. When she got to high school, she picked a new name for herself, choosing a distinctly French name, just because she likes it. She went to court recently to change her name legally, with her parents’ permission, and her mother went with her to wait in line. When I ask her how she likes the magnet school that she was so happy to get into three years before, Monique sighs about the “crazy competition” there, and the constant barrage of schoolwork. Students at her specialized high school have majors, and hers is industrial design, involving designing products and practical things for everyday use. A majority of the students at her high school want to be doctors, so they choose bio-engineering or bio-medical majors. Her circle of friends includes people from Queens and Manhattan, not just Brooklyn; the prestigious school she attends is a destination that high-performing students are happy to travel to from other parts of the city. She has stayed friends with a few people from Sunset Park, too, especially those from her junior high school. She is not sure yet about where she wants to apply to college but is sure she does not want to go to the public university upstate that her sister attends, because it is too far away and too cold.

Monique's best subjects in school, besides music, are American history and English, both subjects that draw on her fluency in English and in American culture. She reads the *New York Times* regularly for her advanced placement English class, which requires her to develop her opinions and writing skills by reading three editorials per marking period and writing a response. She knows a little about Chinese history, too, from listening to her parents talking. Monique can read Chinese but does not know how to write characters. Her mother would really like for her to learn, so she might consider taking Chinese classes when she goes to college. Her high school offers Chinese, but since she started with Spanish she has kept at it, especially now that she is almost done with the school's language requirement. As I press her for more details about language and language study, Monique says, "I'm not that familiar with Chinese," referring to reading and writing, as she speaks Chinese at home with her family. Monique is online every day after school, and watches movies and shows on her computer, especially old episodes of her favorite show, *Friends*. She was too young to watch the show when it was first-run, but enjoys watching it now as if it were new via a site called IWatchFriends.com.

Her friends all know she uses AOL instant messaging (AIM) and that they have to have an AIM screen name and free AIM account to instant message with her. With the AIM window open on her computer, she can see a list of friends who are online at any given time. Until recently, she used AIM as her main way to talk to friends. Now that she has a cell phone, text messaging has gradually begun to supplant the AIM messaging on her computer. The thing Monique prefers about text messaging on her cell phone as opposed to instant messaging on her computer is that her friends are not around their computers as much as their phones anymore, so it is more convenient. She is usually in her room in the evenings and available to chat online with

her friends from 6 pm till about 11 pm. When she needs to get in touch with a friend or classmate whose phone number she does not know, she always uses AIM.

She uses AIM and texting to catch up with people she does not see much, both people from her middle school who did not go on to the same high school, and others who are at her school but taking different classes. Their chats often begin with simple questions like “how are you?” or “how are you doing in classes?” and replies like “stressed about SATs,” etc. They are all talking about college a lot now as well. Sometimes she will have these AIM conversations in a popup window, while watching *Friends* on her computer. She and her friends text each other in English, using the T9 system, that fills in the word you are trying to write, so they do not use initialisms like ‘OMG’ (oh my God) or rebuses like ‘c u l8r’ (see you later). She mainly uses AIM and texting with friends her own age whom she knows from school or social events; when she needs to communicate with a teacher, she uses e-mail. She talks to the same few friends most of the time, unless she is asking more distant classmates about schoolwork, and sends tens of messages a day, at home in the evenings as well as at school. She and her friends often text each other between classes, or even during class, as her teachers do not seem to care. Her sister Jenny reports the same thing about her college experience, that she and her friends text each other during class because teachers apparently do not mind.

I asked Monique if, when she is in her room watching a video on the computer and her mother is upstairs watching one on the TV, they ever coordinate and watch something together. She thinks they might, but her mother likes to watch Asian shows, in Chinese, and Monique only wants to watch shows in English. She does not feel lonely, however, as she likes having her own space, and feels that is expected for a teenager (although her sister did not have it at her age). I reminded her about her answers to my questions three years ago, and asked for an update. One

thing that got a laugh, when she was reminded of her answers from before, was the computer game that Monique used to play, Diner Dash, which she now considers babyish; she does not play any computer games anymore, or only very rarely. She used to be on Hotmail, but is using Gmail today, as well as having a school e-mail address, important for e-mailing teachers. Three years ago, the girls both used Limewire to download music and movies, but Limewire is now defunct, so she uses either iTunes or Pandora, and only in English.

For Jenny, the type of instant messaging Monique does is ‘Americanized’ (her word) and distinct from her own habits. For evidence, she points to the fact that Monique always uses AIM and never MSN instant messaging, nor has she ever used QQ, which Jenny sees as both for talking to people *in* China and for use among Chinese people here in the U.S. who are talking to *each other*. Jenny explains that a lot of American born Chinese (‘ABCs’) use AIM instead of MSN, perhaps because they are going along with what their friends do -- implying that her sister is an ‘ABC,’ even though they were both born in China. The four year age gap and the difference in their ages when they arrived divide them in their own perceptions of how American they are, or how Chinese. People whose roots or computer training were in China are often more inclined to use Microsoft programs, like MSN, coming from an online background in which Apple devices are less common, where the Windows operating system dominates, and where America Online is unavailable. Even though technically they are both 1.5 generation, i.e. those who immigrated before or during their early teens, Jenny, just four years older, maintains a lot more identification with China than her sister. Jenny prefers MSN for instant messaging her own friends, although both sisters use Facebook a lot now for other kinds of asynchronous messages.

Most of Jenny’s junior high school friends, the first group of friends she had when she arrived in the U.S., used QQ to keep in touch with each other and with friends and family in

China. Whereas Jenny also used QQ through high school, going on the site at least once a month to see who had posted a message for her and to leave a reply, she does not really use it anymore. She has lost contact with most of her friends in China except for one or two, and lots of time goes by without her getting in touch with them. Her high school friends mostly use MSN and Facebook now, and no QQ. A lot of her friends from junior high here still use QQ, however, but only to talk to other Chinese friends in the U.S. They often keep at least two different instant message services on and will chat with whomever is online, even using MSN and AIM and QQ all together, since they want to be available to all their friends.

If she has a long or detailed message to send, Jenny might use MSN, or leave the person a message on Facebook if they do not have MSN. However, if she has their phone number, she usually sends a text message. When she is in the apartment she shares at college, she mainly sends texts, so she has an unlimited text plan for her phone now. When Jenny was still using QQ often, a lot of her chats were very simple messages, things like “how’s it going?” and “how are you doing recently?” to catch up, similar messages to what she now uses cell phone text messaging to compose. Jenny says that whereas on QQ you can do other things, like play games, shop, and watch movies and videos, you have to spend real money to do many of these things, which is one reason she is not interested in using QQ, despite its popularity as a communication tool among Chinese internationally.

Some of the changes in Jenny and Monique’s habits reflect general changes in ICT use in the U.S. In the three years since I first met them, for example, the popularity of smart phones and cell phone text messaging exploded, especially among young people. It does offer an interesting contrast to usage in China, which has experienced a very different trajectory. There, computer access had traditionally been prohibitively expensive -- as shown by the high cost of

the Lius' first computer compared with their wages in China – whereas cell phones have been in wide use in China for a long time, even among working-class residents. In fact, texting in China has been an important alternative for working-class people's communications, in light of the expense of both computer ownership and placing phone calls (Qiu, 2009; Li, 2009). In the U.S., on the other hand, landline telephones and voice-mail were comparatively cheap and personal computers introduced relatively early, so that people were already used to telephone, e-mail, and instant messaging by the time the cell phone industry grew more standardized and it became possible to send text messages among all the different providers (Crystal 2009). David Crystal, a linguist who writes about the history of texting and how it affects language, also points out that “..if you have more private space (your own room, your own phone), the need to text is less of an imperative.” (Crystal 2009: 99). For all these reasons, Americans, while very attached to e-mail and instant messaging, were comparative latecomers to the broad use of texting as a mainstay of communication.

Jenny remains more fluent in Chinese than Monique, retains more of a Chinese self-identification, and wrestles more with identity issues, including her name. Jenny has had a couple of different English names since arriving in the U.S. The first name she used was chosen by her relatives because it had a similar sound to her given name in Cantonese. After a few years in the U.S. she chose a different name for herself, in consultation with her high school friends, who immediately shortened it to a nickname and called her by the short version. She liked the name they gave her because it was an uncommon name in the Chinese community, whereas the English name her family members gave her when she first arrived is very common for Chinese girls. She went back to her original English name, however, when she went off to college, so now she is known by different names in different circles: her high school friends still know her

by the name they helped choose, her college friends know her by the English name chosen early on by her relatives, while she uses her legal Chinese name in formal situations like at her job, as well as at home with her family. She does not find it complicated, however – when the groups’ memberships overlap, friends and associates come to know the different names she goes by and to be comfortable with them all.

Jenny enjoys her time at home with her family, when she gets a break from college, and also takes the opportunity to get together with her high school friends who have scattered around the metropolitan area. Many of them went to the College of Staten Island and live on campus, one of the good public colleges of the City University of New York and among its nicest campuses, but she was glad to have the chance to expand her horizons and go away to college. She is an engineering major at Syracuse University in upstate New York, where the winters are much tougher than in New York City, but she likes it and shares an apartment there with several friends. She reports that they have all been too busy studying to buy a TV or any living room furniture, so their interaction is limited to the kitchen, where they share the cooking. When she is at home on break, like now, Jenny likes to go to karaoke bars with her friends, but she always spends a lot of her time preparing for the next challenge, like looking for summer employment and studying for the GRE. Jenny is good in all math and science-related subjects and is also enjoying the philosophy course she is taking, but struggles with anything that requires a subtle mastery of English, especially English composition classes and essay writing. She is on a work-study program at school and works at the library, besides taking four difficult engineering courses and one humanities or social science course every semester.

No one in the family plays computer games anymore. Whereas Dehua’s expectation when I first met him was that if he had more time he would learn more applications and use the

computer more intensely, in practice he has needed to channel more energy and disposable income into household upkeep and repair, and not to spend money on a computer for his own use. He does not use the family computer anymore, even for chess. About this, he says:

I don't play chess anymore, because I am tired after work and don't want to overwork my brain. Chess games got me excited, and I couldn't fall asleep at night after that. So my wife forbids me to play anymore.

Now that the Lius have some of the comforts of a more middle class existence, the sacrifices that they were making before are more apparent. They had always somehow managed to have one family computer, but hardly anything else that could possibly be seen as a luxury item. Now, besides the furniture and plants and books, they can finally afford amenities for their daughters, like nicer clothes and separate rooms. The biggest sacrifice of all, however, which comes up in the conversation this time and foregrounds the issue of communication and transnational family relationships, is that they never go back to China to visit family there. Even though almost a decade has passed since Irene went on a plane to get the others and bring them to America, they have not been able to spend time there again; only Dehua has gone, briefly, when he went for his father's funeral. Asked why she had never been back, Irene says she could not because she had to save money for their life here, gesturing around her, and to buy this house. She does not dwell on the fact that her two children were almost grown before she and her husband were able to create this pleasant home environment for them, nor that the couple are still tied to low-paying jobs by their lack of English and the education they missed by entering the workforce in China so young.

Conclusion

Some of the changes that the Lius have undergone in their ICT use have to do with their move away from Brooklyn's Chinatown and toward a more middle-class lifestyle, in a house

instead of a small apartment. When I first met them and they were still in the cramped, railroad apartment in Sunset Park, the computer was a gathering place for the family, who took turns sitting in front of it, basking in its hearth-like glow. Sometimes they worked together on a task, looking up information, learning to play online games. The computer was ostensibly for the children, but Irene used it for reading the news and Dehua for chess; with the two teenagers' homework and social networking, the computer was always in use. Three years later, the Lius are in a new life-stage -- the parents are focused on new concerns relating to home ownership, enjoying their big new living room and home entertainment center. Jenny is away at college most of the time, and Monique is luxuriating in the privacy of her own room and now the de facto owner of the family computer.

Although the Lius were early adopters of computers and lately have experimented with Skype calls to China, the telephone remains their main tool for keeping in touch with relatives there, partly because their Chinese contacts cannot all afford computers. The relatives they keep in touch with there are also aging, and not very technologically-oriented. Although the computer store owners in Sunset Park told me their customers were buying computers just to use QQ for face to face calls with China, there is less incentive for those like the Lius whose relatives in China cannot afford computers or choose not to have one. For the Lius, the computer has served as a valued part of their family life, just for the four of them here in the U.S., not as a transnational networking tool. The one-time expenditure for other luxuries like their entertainment center was also a good investment, since family members still spend most of their time off from work at home, not out doing things that cost money. Among their main social outlets are frequent visits with relatives in Brooklyn, so their local kinship network receives a lot of their attention as well as offering a lot of support.

In the three years since I first met the Lius, not only have the children grown older, but the communication strategies of young people in the U.S. have undergone a fundamental shift, toward texting by cell phone and social networking online, and away from voice phone calls. While land-line phone calls are the main communication strategy for Irene and Dehua, who talk regularly to relatives in Brooklyn and in China but no longer spend time online, the two children are focused on their cell phones and computers, and their friends in the U.S. The trend toward texting and online networking is even a boon for careful parents like the Lius, since they can know that Monique is safe in her room at home, while she feels connected to her friends through online chatting and text messaging. Jenny reports that many of her friends' parents have smart phones and use them for all their internet-based activities, but her own parents do not. Smart phone technology – in practice a micro-computer – has become an essential tool for many, but more settled and frugal people like the Lius have their trusty land-line, are satisfied that their children have computer access, and do not feel they need it right now for themselves.

The struggles that the Lius have undergone are in many ways a success story, as they now have various physical comforts they did without for so many years, along with local and transnational kinship networks that continue to fill a lot of their emotional needs. At the same time, their lives are still quite bounded by home and workplace, and their primary relationships remain kinship-based or largely limited to native speakers of Chinese, here and abroad. Although they no longer live in Sunset Park, the jobs they hold still tie them to the ethnic enclave economy, especially Dehua's job in the kitchen of a Chinese restaurant. Even after ten years in the U.S., he does not have any need to speak English at work, nor much opportunity to learn to do so, since he is always working, or at home speaking Chinese with his family. Irene's job affords a bit more contact with outsiders, by way of brief encounters with the English-speaking

hotel clientele she meets on the job and her supervisor. Still, responsibilities and the comfort of family relationships keep Irene and Dehua from getting to know many people who are not Chinese. The children, too, are close to their parents, grandparents, aunts, uncles, and cousins, and marshal all the technologies at their disposal to cultivate a network of friendships that are primarily with young people from similar backgrounds. Their generation are ‘becoming New Yorkers’ (Kasinitz et al. 2004), and their parents have struggled successfully to provide them with the tools they need to do so.

Chapter 5

ICT Use in Sunset Park: An Ethnography



Mr. Kan Leung [informant #6], age 75, a retired Cantonese garment worker, at home in Sunset Park

Introduction

Sunset Park is a low cost neighborhood where newly arrived immigrants can quickly find work (albeit low paid) with co-ethnic employers, and they do not need to know English to find an apartment, buy groceries, or go about other daily activities. Many of the residents have not had much opportunity in their lives and were not able to complete many years of education, although their children's educational success is very important to them. Most have a relatively

high literacy rate that makes them avid readers, despite their limited formal schooling. Along with that high literacy rate, many also have a relatively high *digital* literacy, facilitated by the high number of internet cafés in the area, the free computer classes at the library, and the free English classes at various agencies that include computer instruction. Typical jobs, with restaurant work being the most common, grant them no exposure to computer technology, which would appear to disadvantage them in computer literacy. Yet a high rate of computer ownership and computer use for leisure activities and personal development give people in this community more connections with the larger world than might be expected, despite the limitations that their jobs and lack of English place on their time and opportunities. In this chapter, I visit all of the spaces that these activities take place: library, home, and café, introducing some of the people I met in Sunset Park and some of the ways they adapt to their new lives in the United States.

Public Computer Access in Sunset Park's Libraries

Ray Wong [informant #2], the former restaurant worker turned IT instructor whose story I told in chapter 3, is the reassuring, grandfatherly presence helping adult computer novices in Sunset Park take their first steps toward integrating ICT use into their daily lives. In the classes I attended, students were in their thirties and forties, and sometimes fifties, and none had any experience with computers. Most of Ray's students are Fuzhounese and speak Mandarin. Ray himself is originally from Hong Kong, a Cantonese speaker who learned Mandarin by watching television; the class switched back and forth between dialects as the small group interacted with him. Ray presented much of the computer terminology to them only in English, however, even where a Chinese term exists, especially in discussing proper nouns like 'Hotmail' or 'Microsoft.'

Ray sat at a small bank of computers demonstrating on the central PC as he talked, with students sitting in two or three rows of chairs around and behind him. Only the people who got

the seats on either side of him were able to try out his instructions on their own PCs, while the rest of us looked on from behind. The number of attendees varied from four to ten people in the classes I attended; due to the small class size, students were able to chime in and ask questions throughout.

Besides computer basics, like the definitions of hard drive, hardware, software, etc., the curriculum also included how to open an e-mail account and how to use the keyboarding instructional software that would teach students how to type: a program called Mavis Beacon Teaches Typing. In the classes I observed, new users were eager to get started on this tutorial software as soon they had learned the basic functions of a computer. Chatter among the students, mostly women, attested that most of them had either just purchased a computer for their family, or were planning to. Ray later told me that this is typical for all the Chinese language computer classes he teaches at the library. All his students talk about being motivated to learn in order to help their children with homework and to correspond with their children's teachers, and for new uses they were discovering like managing household accounts in Excel and looking up their Chinese horoscopes. A highlight for participants of the series of classes I attended was getting a lunar calendar to take home on a floppy disk, and learning how to search the web for the latest entertainment news, including information about Chinese celebrities, which they extolled as very interesting (*hen you yisi*).

Everyone in the class learned how to set up an e-mail account and to begin doing web searches using the Chinese version of Yahoo. For these first-time computer users, everything was new, so the class covered how to use a mouse, including the wheel on the mouse for faster moving around on the page, and how to deactivate NUM LOCK, which would be important for gaming: useful knowledge for parents of avid, young computer game players, and those who

wish to play themselves. In keeping with the fact that most people were recent immigrants as well as being parents seeking to keep up with their children in a new environment -- both geographical and technological -- the instructor assured them that they would be able to close the generation gap if they could use a computer effectively.

Learning to use the computer keyboard and language issues were intertwined for participants in the class. Pinyin is an important element of computer literacy for Chinese speakers, though knowledge varies by age and education level, so a description is in order of its function in digital technology use. Although Chinese is not based on a modular alphabet, the computer's QWERTY keyboard can be used to type out a pinyin transcription of a Chinese word using the western alphabet, for example, *tianqi* for 天氣, meaning weather. The typist must then choose from a list of characters offered up by the Chinese software program, that is, a list of the characters for words or parts of words that could be pronounced as *tianqi*. In order to do this, they must also have a software program for Chinese transcription on the computer, whether through an add-on to Microsoft Word or through a separate software program, and must learn how to use it. While pinyin is taught in the elementary schools today as an introduction to pronunciation of characters, it is also an advantage later on for students to learn English and to use a computer. Not knowing pinyin is an impediment to a quick start on using the computer to type correspondence in Chinese. In order to get started using *English* to write an e-mail, new computer users -- most of whom completed high school and had some basic English and typing -- must also be reminded of orthographic conventions that do not apply for Chinese, like spacing between words and capitalizing the first word of a sentence.

For an older Chinese person who did not grow up when pinyin was an essential part of elementary school education as it is today in China, there were other methods of transcribing

Chinese. Ten years ago, adults were still learning and using an earlier transcription form, wubi, rather than pinyin. Wubi separates the character into different parts or strokes, and each of the 26 letters on a keyboard has a stroke attached to it. Each word has a distinct set of strokes used to type it, so the western keyboard can produce a typed Chinese manuscript. The user does not have to choose from a list of homonyms as in pinyin, where many words have the same sound. While it is possible to type a short word with just a couple of keystrokes, many more are required for more complex words.

After attending all or part of the short series of classes in computer basics, attendees are also able to make use of the public access computers at the library, although having to go through a sign-up process and wait in line to use one of the ten or so free computers can be a deterrent. A new user must first get an Access Brooklyn card and learn how to use it, but Chinese-speaking volunteer high school interns or paid employees are usually on hand to help. Visitors first have to sign up for a time slot using their new laminated card in a special computer console, and then wait for their number to be displayed on the digital crawl near the ceiling; wait after sign up can take as long as forty-five minutes. Once their turn is called, users have access to the designated computer for just thirty minutes, a short span for doing any lengthy web search or for composing documents in an unfamiliar software program. Many take their newly learned skills home and use their recently purchased computers, where they are able to get technical support from their children, who have already learned how to use a computer in school or from friends.

A young Chinese girl of about eight was the one who helped me navigate the same type of computer sign-up system on a weekday afternoon at the nearby McKinley Park library branch, which is also heavily used by Chinese Americans. The library branch was packed with Chinese

children, some with their parents. At my computer, after signing up and waiting my turn, I sat next to a boy of eleven or twelve who was playing computer games online while comparing notes with a friend of the same age at a facing computer. Besides the children who were at the computer stations, there were others reading Japanese comics (*manga*) and playing with handheld electronic games. Those on computers were chatting and using the computer to research homework assignments and to print things out. This library branch really reaches out to the community it serves, as it also offers lots of fiction and nonfiction titles in Chinese, and English as a second language tapes for both Cantonese and Mandarin speakers, as well as for other languages spoken in Brooklyn, like Russian. Even the security guard, who left at about 4:30, was very involved until then, acting as a library assistant, admonishing but also chatting with the children.

Spending time observing at both of these branches, I found that the public library is a space for Chinese Americans to congregate in a way that blurs the public/private boundaries. Whole families go to the library as soon as it opens in the morning on Saturdays and stay all day until closing, reading magazines, talking, and letting the children play or do homework. Of all the different people using the library, the Chinese families were the ones that came in larger groups and stayed for hours at a time. Ray Wong reported that this has been his experience, too, that visitors stay for hours. Despite the strict time limitations on the library's computers, they are free of charge, and therefore heavily used throughout the hours that the branch is open, especially afternoons and weekends.

Most of the computer users I interviewed in their homes said that they do not use the library's computers, although they may have in the past when their own service was temporarily down. Several people also told me that they had used the computers at the library only before

they got home access, and it seems likely that many of those waiting in line to use the library computers are doing so because they have no computer at home. Zhi Yang [Informant #53], twenty-one years old and an active computer user at home as well as a frequent patron of the internet cafés, told me that the only time he used the library's computers was when his family was in the process of moving and had no internet access. He would never use them under normal circumstances, because the library computers are old and too slow. But the slow speed of the computers at the library is not the only disincentive. Mei Yue Wu, the pregnant waitress whose ICT use I described in chapter 3, told me she is not comfortable going out to the library because of her lack of fluency in English, so she waited until she got home access to get active online.

The Neighborhood's Computer Stores

There are 16 small computer shops in the neighborhood, ranging from little spaces the size of a magazine and tobacco stand, to larger stores with stock on display. Some of these sales and repair shops are set up as part of another business, like one in the back of a bargain furniture store on 8th Avenue. Drawing on the power of the brand name of QQ, with its popular instant messaging and internet call features, one of these new stores is called QQ Computer Sales and Service. Hai [informant #50] is a man in his twenties who works at one of the larger computer stores on 8th Avenue, which handles computer sales as well as repair. The vast majority of his customers are Chinese, although there was also one African American customer in the store the day I interviewed him. He sells to a lot of first time computer buyers, and teaches them the basics of computer use in order to complete the sale. He says it is often the whole family shopping together who come into his store, and that the kids may get to pick the style and color

of the new family computer. He sells wireless routers, too, and is selling a lot of them, for families with more than one computer to set up a wireless home network.

When we meet in 2008, Hai reports that the popularity of QQ is driving computer sales, since many people he sells to are buying computers solely for chatting on QQ. Most computers now come pre-installed with webcams, so people using QQ Talk are already set up to engage in face-to-face real time conversation as well as typing out QQ instant messages. He believes that his buyers do not want computers for e-mail nor use it much at all – only QQ. However, it should be noted that users can write long notes on QQ for people to respond to later (like a private message on Facebook), a text-based function that allows for the same type of asynchronous communication as e-mail.

Hai says that “99 percent” of computer owners in China have QQ, and that people in the U.S. want to chat with their friends and relatives there, so they use it, too. His customers all know QQ by word of mouth before buying a computer, so even those who come in to buy a first computer and need to be taught the basics are already eager to use QQ. The second most popular reason his customers have for buying is to play computer games, especially role-playing games, like Diablo. He feels that these games are why people like to go to the cafés even if they own a computer, because cafés offer so many games. Hai did not mention that parents are buying computers to give their children an educational advantage, as I had heard in the library computer classes, but he did make the observation about families making the purchase as a group and the children getting a voice in the selection, which supports the idea that the children are central in the purchasing decision.

This computer store manager handles more repairs than sales, because he cannot match the discounted prices of big box stores like Best Buy, where many of his customers make their

actual purchase. He also sells peripherals and software to those who buy elsewhere, and handles upgrading the computer by adding a language pack; many people install PowerWord, by Kingsoft, which allows the user to point at a word in English and get the translation to Chinese. The user can also mouse over a Chinese character and get the English translation.

Although he sells desktop computers as well, Hai finds that his customers prefer laptops. He thinks this is because they are more portable so people can travel around for work with one, since they prove handy during off hours, for entertainment. The implication is that people are using computers not on the job but for entertainment while away on a work assignment, especially restaurant jobs in other states that pull them away from their families, although people I met sometimes had the travelling family member take the heavier PC. Most people in Hai's shop choose Windows-based personal computers. Only about five percent of his customers use Apple computers, which is not surprising, since the Windows operating system dominates in China, a lot of computer games are made for the Windows platform, and much of the best free software for working in Chinese and for English/Chinese dictionary functions are Windows-based as well.

I asked Hai about what changes he had observed in his business over time. The big change he had noticed proceeds from the booming economy in China. He said more people in China have been able to afford computers of late, so more people in the U.S. can use QQ to talk to friends and family back home. He thought that people in the U.S. may use Skype, but that the Chinese do not, so communication between people here and those in China is all done on QQ. A few months later, however, a friend from Beijing talked to me about the growing popularity of Skype in China, and a few of my informants mentioned using Skype interchangeably with QQ Talk.

Mr. Zhang, another Chinese computer store employee [informant #51], whose store is on the edge of the Chinese section of Sunset Park, sells more expensive computers where the customer can choose the components. He says that those who really know computers come to stores like his, to have more choice in building the computer they want, even though big companies can sell cheaper. Although in the past his typical customer was often Polish or Hispanic, he says that recently he is getting more Chinese customers; he speaks Cantonese and a little English, but not Spanish, so his transactions with the customers who are not Chinese must be in broken English. As a true 'techie,' whose eyes light up talking about motherboards, he enjoys talking to people about their computer knowledge and sharing his; if they know a lot about computers, he says, they will buy the best. He makes recommendations to customers with less knowledge after ascertaining their needs and also assists in upgrades. He will help people install software to make Chinese the default language for their computer, although he finds that usually they already know how, from using the installation CD and choosing the language during set-up.

Some of his best customers are gamers. To play computer games successfully, especially to play interactively on the internet, Mr. Zhang notes that one needs good equipment. The user needs a fast-responding computer to compete, he says, "because if your computer is slow, they'll kill you before your computer can respond" -- a reference to the action games many of his customers enjoy. His clientele even includes people who make a living by playing competitively, getting high scores (or achieving high levels in a multi-level game) and then selling their standing to others, so their good, fast computer is in fact an investment. Jack Qiu (2009) observed this for-profit game-playing among his informants in China, too, noting how this kind of micro-entrepreneurship was a working-class adaptation in China to the obstacles

against formal employment. For those who do not want to play games, Mr. Zhang can recommend a basic computer that costs just a few hundred dollars, but a good CPU for a better computer can cost \$1,000, which is why his prices vary widely. He himself, a man of about thirty, was taught the computer basics in school in China, and learned on his own the more advanced and specialized knowledge he acquired later.

At another small computer store further into the heart of Sunset Park's Chinatown, another Chinese computer store manager, Billy [informant #52], told me he thinks young people (which he defined as under thirty) all know how to use computers and that they learned it in China; most older people do not, and he believes they are resistant to learning. In my own sample, there were some very engaged older users, however, although only among the men. In any case, there appears to be an evolution in this, as services like QQ Talk become more desirable and easy to use, even for grandmothers, something I discuss in more detail later. Billy finds that younger people come in already knowing which computer they want and know how to use it, customizing graphics, capabilities, etc., whereas his older customers need more guidance, which he is happy to offer.

Billy often sells writing boards like Penpower Handwriter and Carefree Pen, which allow the user to write Chinese by hand, to be converted into type by the computer; the software can recognize more than 20,000 characters. Billy thinks that, whereas young people do not know how to handwrite Chinese, older people really like writing boards, as they are easier to use than trying to type on a computer for those who do not know pinyin. Like other small stores in the neighborhood, he does more repair than sales. He is doing very few system upgrades right now, since his customers are still happy with the previous version of the Windows operating

system. Not many of his customers ask for Apple computers, so he just special orders them as needed.

Billy's store is right next to several internet cafés, and I asked him what he thought motivates people to go there. He told me he thinks people go to cafés to “hang out and to do something different” with friends, not because the cafés offer other software or anything they do not already have at home. After expressing that opinion, he laughed and said he never goes to cafés himself.

Privacy and Access in Sunset Park

Both those who go to cafés themselves and those who do not suggested to me that internet café patronage was for meeting up with friends at least as much as for using the computer technology, an idea corroborated by many café managers and computer store owners. Some of those who own home computers also go to the cafés to get out of the house, to use the expensive software (especially games) that these computers offer, and to meet friends for online gaming. Groups of friends, sitting at adjacent computers, play online games for hours. The way people mill about and look on over each others' shoulders is the furthest thing from the kind of privacy one could have at home with the door closed, sitting at one's own computer. As the Lius' story showed in chapter 4, however, many people do not have privacy at home, either, whether due to cramped quarters or parental surveillance of children's activities. Yet none of the people I interviewed who avoid going to internet cafés mentioned privacy as an issue, although some, like Eric Li [informant #21], may have hinted at it by criticizing the cafés as “too crowded.”

Many home computer owners who shun the library do go to cafés, even though they could surf the web and chat or instant message more anonymously at home or for free at the

library. The biggest deterrent to people using the library computers appears to be the sign-up process and short period of access it procures, a drawback that, at least for home computer owners, overrides the fact that it is free of charge. The library also has some restrictions on the sites that young people can access, rules they are unlikely to circumvent, since the computers are positioned in open carrels right next to the central desk where the information librarian sits.

One eighteen-year-old, Charlie Mo [informant #35], a college freshman who had lived in the U.S. all his life but whose family was from Guangzhou, told me he did not like to use the computers at school, since there was no privacy there. He saved things he considered private, like visits to MySpace, for when he was at home. Others reported being concerned about privacy online and using pseudonyms on social networking sites, but this did not extend to a corresponding concern about privacy during actual computer use. In all the cafés I visited, no one ever seemed bothered by the way that people walked around, looking on as others worked or played on their individual computers. I myself felt self-conscious about writing out personal notes and e-mail in such a public sphere, and was surprised (but charmed) when a youngster leaned over me to insert himself into my attempts to play a new kind of computer game. I talked to Lili Zhang, a visitor from Beijing [informant #54], in a broader context, about her perception of how Americans zealously protect their personal space, their privacy, and the autonomy of their homes. She spoke of how she and her Chinese friends who spend time in the U.S. experience this emphasis on privacy as unfriendly.

While they may have arrived in the U.S. with an open-mindedness about shared public space that influences the way they use Sunset Park cafés, or may have been inured to a lack of privacy even at home, café patrons are unlikely to have had equal home computer access in China nor as much opportunity to use internet cafés there. Lili talked to me about computer use

at home in China versus in the United States. She pointed out that a computer costs about 10,000 *renminbi* (approximately \$1,500 U.S.) in China now, which she calculated as about a half a year's salary for an average city dweller, and more prohibitively expensive for a poorer villager. Also, since the government crackdown that led to much stricter rules on how the cafés were operated, no one under eighteen is allowed in (they check identification), and the cafés are no longer open 24 hours, closing instead at midnight.

In Brooklyn, New York, no such restrictions apply; in fact, as Ben [informant #1] told me about the café where he worked, some cafés in Sunset Park feel pressured by the competition to stay open twenty four hours a day. There is also not much limitation in Sunset Park cafés on what sites users can access either, except pornography, although to some extent young people are monitored, especially informally, by the open seating arrangement and lively activity. The fact that internet café use in Sunset Park is only limited by personal schedules and family pressure to stay home may influence the popularity of the cafés among new arrivals.

My experience interviewing people in their homes brings me to a different aspect of the discussion of privacy, as many informants were very concerned about guarding their recorded and traceable personal information, and, although they were quite willing to let me interview them, refused to let me tape-record the interviews. Some blocks I traversed have a greater number of recent immigrants than others, and it was somewhat more difficult to get the more recently arrived to talk to me. Those who have been in the U.S. longer were perhaps more comfortable talking about all their online behavior; for example, only two of my informants acknowledged accessing pornography online, and the only one to volunteer that information was a young Chinese American man who had lived in the U.S. all his life.



Hang Xing Internet Café in 2011

A Tour of the Internet Cafés

The noteworthy feature of Sunset Park's many internet cafés is not just the computer activity that goes on there but the group context in which it takes place. Each café has a loyal base of frequently returning customers; their loyalty may be engendered by the inexpensive members' fee, or the appeal of up-to-date computers and software. The language and regional affiliation of the majority of other customers and management also act as a draw. Many of the customers are young people who have arranged to meet friends there, in order to sit at adjacent computers and socialize while they play computer games and chat on QQ, listen to music, or surf the web. The clientele tend to be in their teens and twenties, although younger children go as

well, as do some more mature adults, especially in the evening. There are usually at least a couple of customers who are not Chinese at many of the cafés, although some of the older cafés are less welcoming to people from outside the community or to female customers. Like the young men, girls go there to play games and hang out with friends, albeit in fewer numbers; the games they choose are different enough that most people can separate the popular games into “girls’ games” and “boys’ games.”

Calling friends on the phone to arrange to meet up at the café is an important part of the experience, as many also have a computer at home and are doing some of the same computer activities at the café that they could do privately. They go to the cafés for the social scene and to get out of the house, even if it is to watch a movie or read something online, making the loud and lively atmosphere somewhat of a potential distraction. Serving refreshments is not an important feature at many of these ‘cafés,’ especially at the older ones; the newer ones are more likely to have a separate seating area serving ice cream, tea, and snacks. Many of the cafés are open twenty-four hours, seven days a week, and still manage to draw customers throughout the day. They do have more software functions than any one individual is likely to ever own for a home computer, but most users seem devoted to a shorter list, including text chat online and playing their favorite few games.

Ohiyo, centrally located in the neighborhood on 8th Avenue, has a glass storefront painted black, perhaps to reduce glare on the computer screens but casual passersby are also unable to see in. The managers working the front desk speak enough English to wait on customers who do not speak Chinese. On one particular day I visited there, all the boys who were using a computer in the not-quite-full café were playing computer games. As with other such cafés, when a web browser like Internet Explorer was opened, “cookies” and History and Internet Options proved to

be disabled. This meant that, among other things, it was not possible to view a history of what the last user was looking at online, a disappointment, since I had hoped to be able to track what websites the computer users who sat there before me had visited.

The computers had about sixty English language computer games and about forty-five in Chinese, a significant investment for the café, if they were all licensed. A seven or eight year old boy leaned over me and started playing my game when he saw how haltingly I was playing. I moved aside and turned over the machine to him, along with my few remaining, pre-paid minutes. His friends were impressed to see him getting a free game, saying “she let you play?” On another day in the same café, most customers were boys under eighteen, all but one of them Chinese, but there were three girls there, too, one playing pinball and two at computers. At this café and some of the others, there were sometimes one or two customers who were African American, white, or Latino and a couple of adults mixed in with the main customer base of Chinese youth.



Fiber Internet Café in 2011

Fiber Internet Café, in a less strategic second floor location on a side street, is divided into three main computer rooms and one curtained alcove to the side. The three main rooms are each tightly packed with rows of PCs, each with its own big, comfortable armchair, but in a space small enough so that the arms of the chairs touch each other and any sudden movement by one's neighbor causes jostling. The café was newly opened and had pristine facilities when I first explored the neighborhood in 2006; back then, it had brand new high back vinyl chairs, all new PCs, and was a bright, clean space.

When I visited Fiber again, on a summer day in 2007, it was quite run down, with torn and soiled carpet, damaged chairs, and a thick residue of cigarette smoke covering everything. It was ninety-two degrees outside and nearly that hot inside the café. Despite the inadequate air-

conditioning, the computers were all in use by young men, many of them smoking. The games they were playing included Solitaire and Audition (also popular with girls), a performance game in which the player gets an avatar to dance onstage. One boy was looking at a sexy but not quite pornographic website with pictures of girls in bikinis. There was a great deal of swearing among gamers in English, in the face of temporary setbacks in the games they were playing, but otherwise all the conversation was in Mandarin Chinese.

Fiber may be packed with customers because Fuzhounese locals would rather go there than to Ohiyo down the street, which is mostly Cantonese. On the same day that Fiber Internet Café was full, despite having little or no air conditioning, Ohiyo had its AC blasting, but several computers there were not in use. The next afternoon, however, the last day of school in the area, Ohiyo was full of young people as well, plus one older man dressed in traditional Orthodox Jewish attire. The pinball machines all had groups and pairs of young people crowded around playing, and the music was Chinese rap and pop. One of the rules posted on the wall warned against occupying a seat if you are not playing, but being in the café without paying to use a computer is permitted for anyone not sitting at a computer station.

Loyalty to a particular café seems to be the standard, and each one has lots of repeat customers. One way they ensure this is by offering the membership deals that can bring the repeat customer's rate down as low as \$1.00 per hour. Some of the cafés that have been open the longest can get a reputation with computer aficionados of being outdated, since they have not upgraded their equipment, and that can drive customers away. Over and above the membership deals, each café has its own loose geographical and linguistic allegiances, as people from the same part of China speaking the same dialect, some of them friends, are drawn to a particular café and claim it as their own. Zhi Yang [Informant #53] told me he prefers the café he is a

member of on 58th St. because of its brand new computers and proximity to his house, but I also noted that he is Fuzhounese and so is the store's manager and clientele.

The cafés vary in atmosphere, from a somewhat intimidating chaos at Fiber to a rather businesslike serenity at New Line. At New Line, all the computers were new, and there was more quiet, individual computer use and a few more mature users, as well as a clean, bright café section selling inexpensive, fresh, and tasty bakery items. Fiber, on the other hand, had an unmarked private, back room where there were sometimes activities that seemed to measure up to the cafés' bad reputation. Groups of two or three young men and sometimes girls disappeared into the back and burst out later, wired and glassy-eyed, obviously the worse for wear from their backroom activities, drugs or possibly chewing betel nuts. There was also a computer alcove, apparently for private viewing of pornography, with nothing but thick draperies separating it from the rooms where youngsters of thirteen or fourteen were playing the latest video game.

Most of the cafés were dark and shabby when I began my study in 2008, but there has been an evolution toward a nicer atmosphere as new cafés opened and old ones closed, though the total number remains about the same in 2011 as it was in 2008. The newer cafés, like Qiyuan Internet Café on 58th St., are more likely to be bright and open, with big glass storefronts through which you can see in from the street. They also tend to live up to the name of 'café' by offering some kind of refreshments and to abide by local ordinances against smoking. Qiyuan has a large, inviting section in the front of the store selling baked goods, soft drinks, and ice cream, with a separate section for popular Japanese candies and snacks. New Line Internet Café on 8th Avenue at 50th Street, also one of the newer cafés, has bright open windows looking in on the bakery at the front of the shop, which serves Chinese teas, pastries, and sandwiches on a par with the many dedicated bakeries in the neighborhood. It also has a soda counter area with stools

facing the picture window where customers (those with no wish to remain out of view) can have a snack, regardless of whether they are using a computer. The big picture window storefront gives an impression of openness that contrasts with the negative image of some of the older stores, while placing the refreshment area and cash register in the front still allows them to keep the computer carrels away from the street view.

Forest Internet Café had two women managers on a day I visited, both of them apparently suspicious of my motives for visiting their café, as they were not very friendly. One of them refused to answer when I asked her about the hours they are open. The café has about sixty computers, and was almost full of Chinese customers that day, ranging from high school age up to about twenty-five. One of the women appeared to work at both this and another nearby café called New Forest, which has about fifty computer stations, with brand new red and black vinyl chairs, and customers mostly in their late teens.

Hot Game Network, one of the newer cafes, has about forty-five computers, most in use by junior high school age boys when I visited, one Latino and the rest Chinese. It is open twenty-four hours, and had three young men working the front desk that day, who were sitting together behind the counter eating bowls of noodles. Their listed price is \$2 per hour for non-members, and \$1.50 for members. The café also has four video game consoles, a Pepsi refrigerator bin, and a lot of snacks, like Oreos and cups of noodles.

The manager of Ohiyo café told me that in the evenings after nine or ten p.m., when his customers are all adult men, he notices them using e-mail and chatting online. In the daytime, when most customers are young and many of them are playing computer games, the games he sees people playing most often include Maple Story, Rose Online, and World of Warcraft III, all in Chinese, and all online; customers also play Audition, both in English and Chinese. He does

not notice much Skype use by clients, but they are actively using social networking sites like QQ.

Young male customers I saw at most of the cafés were playing action and role playing games like Counterstrike, Warcraft III, and DotA. Girls preferred to watch movies, including Chinese dramas, and to play different games like QQ's *Fei Che*, an online car-racing game. Older customers were more likely to be searching the internet, and non-Chinese customers were more often observed accessing e-mail. I also observed girls instant messaging via MSN and Yahoo. I talked to Hai [informant #50], the manager of one of the computer repair shops, about the gender differences in his customers and asked why he thought there are not more girls at the cafés in the neighborhood. His first response was to say that it is because they are so crowded, people are smoking, and things like that. He then corrected himself to say that girls *do* go, or at least the outgoing ones do, but that they tend to go in groups and to play less violent games like Audition instead of 'shooting games.' Since the girls and women I interviewed at home reported playing computer games, it is clearly not just due to the fact that internet cafés cater to gamers that they serve many more male than female customers.



Mr. Zhi Yang [informant #53], age 21, a student and restaurant worker from Fuzhou, 2011

My chief gaming informant, Zhi Yang [informant #53], who worked during high school taking orders in a Chinese restaurant in Brooklyn and so had more cash than his friends did, usually spent two to three hours at a time in internet cafés, especially at the one near his house that offered free V.I.P. membership to the first members to sign up. He and his friends would call each other to make plans to meet up at that café about once a week, to play interactive games like Warcraft III and Counterstrike. He also had these games on his home computer, so he could play there, too. In some ways, it would have been more convenient at home, since at home he could play online against any opponent, whereas at the cafés he could only play interactively with other gamers who were at the same café. The internet cafés in Sunset Park generally do not

want to spend the money (about \$20 per computer) to install the CD key on each computer to allow users to play the games interactively with anyone on the internet, so only gamers on the local area network (LAN) inside the café can play against each other. The reason Zhi and his friends enjoyed going to the cafés to play anyway was that they could sit at adjacent computers and play competitively, laughing and talking with each other as they played. Zhi, one of only two informants to acknowledge looking at pornography online, at a site called aisex.com, told me he reserves that for when he is online at home; he and his friends used their time at the cafés only for gaming. He does not go out to play games competitively in cafés as much anymore, now that he is in college and working so hard, but he maintains his V.I.P. membership card at Qiyuan Internet Café. In high school he spent time a lot of time there, especially late at night when the hourly fee was lowered.

Content of Games

Game play is such a vital part of the social interaction taking place in Sunset Park, especially among youth in the cafés, that more information about game play is an essential part of this ethnographic description of digital technology use in the neighborhood. The games that are popular are constantly in flux, as players take up new games upon their release, often ones with similar game play but more spectacular effects or new interactivity. The games currently popular with young men in Sunset Park are also popular with gamers worldwide, and are often first person shooter games or real-time strategy games with battle scenarios, not necessarily between good guys and bad guys. Some have a fantasy/science fiction premise involving equally matched races of aliens, humans, and fantasy creatures like orcs or elves (World of Warcraft, Starcraft II, DotA); more reality-based narratives can also involve two sides of a fight, but players may end up representing either side. That is not to say that there is no epic battle of good

versus evil, or any heroes. Warcraft III added characters called Heroes to its enhancements of earlier game versions of the game; Heroes gain strength and experience during play, to make their action more effective. Warcraft has had several iterations and has been supplanted by Starcraft II in popularity among Zhi Yang and his friends. Fighting in these battle-oriented games varies from realistic street fighting, like soldiers fighting terrorists in Counterstrike, to fantasy games with Undead and Night Elf among the races battling each other in Warcraft III: The Frozen Throne. Individual tastes vary and one player may tire of a game he has played too often, even though its popularity continues unabated with others. DotA (pronounced Doe-tah, an acronym for Defense of the Ancients), a spinoff of Warcraft III and Starcraft, is still quite popular, but Zhi Yang is not playing it much anymore himself. He played it so often in the past three years that he became a bit sick of it.

I observed Zhi Yang as he played some of these games at the eGame café in the neighborhood, one of the two he frequents enough to have a membership card. This particular café is new and is the first in the Hispanic part of Sunset Park; it hosts a mixed clientele of Chinese and Hispanic youth, though the front desk managers are all Chinese. Spanish speaking customers have to get used to the fact that the sign-in screen when you first start using a computer there is in Chinese. In fact, the start-up screen gives a lengthy list of café rules and restrictions in Chinese, apparently the same ones that would be used in a café in China, as they caution against such things as using the computer for religious purposes or for anti-government activities.

The first game Zhi played for me was Counterstrike: Condition Zero, with team members divided into two sides, the counter-terrorists and the terrorists. If the gamer is not in the café with a group of friends, he can play against the computer, which is how Zhi played that day. He

played the English language version of the game for my benefit, so the start-up screen in the game and instructions were in English, though the game play generally involves imagery and not words in either version. The conditions of the game vary and can be to kill all one's opponents, stop the terrorists from planting a bomb, and to save a hostage -- or to stop the counter-terrorist from saving the hostage if you are playing on the other side of the fight. Counterstrike is a first person shooter game, and Zhi's avatar was a western soldier in American style fatigues, making his way through the alleys of an urban combat zone reminiscent of Baghdad, with his machine gun at the ready for enemies as they appeared around the corner. There was a map to show the strategy required, as well as a list of the elapsed time and number of rounds. Zhi's avatar got killed quickly, however, as he was busy talking to me.

The avatars that players embody in this action game, the men racing through the streets with guns in Counterstrike, are white or black soldiers in American fatigues. If the players wanted particularly Chinese characters in their game play, those could easily be found. In fact, Jeffrey Ow criticizes the orientaling art design of some computer games, like *Shadow Warrior*, in which the player inhabits an avatar depicted as an Asian martial artist, but with a militarized persona that Ow considers distinctly western (Ow, *in* Lee and Wong 2003). Game play in the version of Counterstrike that Zhi demonstrated also represents a western military point of view, as it mimics urban warfare engaged in by the U.S. in the Middle East, but Zhi soon moved on to a new game, with fictional races at war, *Warcraft III: The Frozen Throne*.

Sherry Turkle considers the interaction between youth identity and the games they play, observing that "these days, adolescents use life on the screen – social networking, game avatars, personal Web pages, and citizenship in virtual communities – to crystallize identity by imagining the selves they wish to be. An online avatar can come to feel continuous with the self and so

offer the possibility of personal transformation” (Turkle 2008:20). Turkle’s volume includes several clinical accounts, including from a child psychiatrist who uses his youthful patients’ preferred internet activities as a way to engage with them and treat their problems. He concludes that youth play heroic fantasy figures in computer games, seeking the opportunity to succeed in a way that they may miss in life off-line. In treatment, he seeks to have them role-play skills the super-heroes might lack, like self-reflection, empathy, and communication skills (Hamilton *in* Turkle 2008).

The next game Zhi played, Warcraft III, is a real-time strategy game with a complicated fantasy narrative involving humans, undead, and night elves and many levels of game play. The gaming service Battle.net is integrated into the game, potentially allowing for anonymous matchmaking by skill level and a high level of interactivity among players, such as a list of online friends, even allowing for contact with those who are playing a different online game. But Sunset Park users can use some of these features only at home, and only if they have paid for a CD key that allows full access. Game play in Warcraft III is broken down into campaigns, and is oriented by a map that lays out the objectives. The goal in the first part is to kill all the enemies in a unit as well as to destroy their structures, while quickly building ones own, creating a shop that will allow your team to forge necessary new equipment. Besides the different races (night elves, undead, humans) and their heroes, buildings, and shops, there are also heroes who can be hired at a neutral structure, the tavern. Fallen heroes can also be revived at a tavern, although they have reduced powers afterward. Game play could go on for twenty minutes or so in this level, until all ones opponents are dead or have quit the game.

A related team-based game of strategy, DotA, allows each player to have a Hero avatar, with varying strengths and powers, to use in defending his team’s section of a map. The hero

gains experience at each level, adding to his powers and his ability to quash enemies, and also uses gold to buy equipment that enhances his performance. Level 15 is the highest that Zhi has achieved in this game (which he did while playing at home), and two hours is the longest he has played at one sitting. Games like World of Warcraft, Starcraft, and DotA have very complex storylines, and plot exposition can occur in military style briefings (Starcraft) or in cinematic ‘cutscenes,’ where the player does not control the game’s advancement but a video reveals new information (Warcraft). Some of Warcraft III’s game objectives or quests are optional and wait to be uncovered by a more involved player.

The eGame café does not yet offer Starcraft II, Zhi’s current favorite game, only Starcraft I, the once dominant version that has been available for more than ten years and is of no interest to Zhi. Starcraft II, released in the summer of 2010, is another real-time strategy game, with a military science fiction premise, a sequel with some of the same characters as the original. Set in the distant future, it involves three races battling for control of the galaxy: exiled humans, a more advanced humanoid race, and insect-like aliens. The game does not yet support LAN play, however, so none of the cafés can offer it as they did the popular original. Game critics have praised the aesthetics and the involving storyline of Starcraft II, which sold three million copies in the first month on sale, with nearly as many pirated copies downloaded via BitTorrent (<http://torrentfreak.com/5-torrent-files-that-broke-mind-boggling-records-101107/>).

These games have all enjoyed worldwide popularity, especially with young men. Each one involves learning rules and strategy in order to be rewarded by moving to the next level, as well as an opportunity to compete with other players in strategic team efforts.

Zhi told me he does not know of any girls who play these games, as they are too violent and scary. He said he would play against a girl if she were interested, but he would find that

very strange. It is possible that the anonymous competitive play Zhi and his friends do online does match them with girls, and they just do not know it. There was some attempt by the game developer Blizzard Entertainment, owner of Battle.net, to require gamers to use their real names in their online personas, but it met with an angry backlash from players and was dropped. I did not find any girls in my sample who talked about playing any games that are considered primarily boys' games, and it is harder to observe what games girls are playing, since girls and women are more often playing games at home rather than cafés. The games girls in my sample reported playing were strategy games, however, with no battle scenes or shooting scenarios, which supports Zhi's belief that girls play less violent games.

Racing games are one popular type for girls, like Kart Rider, which is Hua's favorite. Hua [informant #33] was ten when she moved to Brooklyn from Guangdong in 2000, and a teenager when I met her. Hua lives with her parents, a nine-year-old sister, and a cousin, age ten. The three children share the desktop computer, while her parents only use it occasionally, for things like looking up stock information; she was one of only three people in my sample who specifically mentioned financial data or online banking as something they do online. Hua said that everyone told her one must know how to use a computer to succeed in the U.S., so that was her motivation for learning, which she did with help from her uncle's girlfriend. She remembers now how odd it seemed, and she found typing really difficult.

Hua still has a few friends in China she keeps in touch with, and she used to write letters to them, but letters took too long to arrive. Now she places internet calls to a couple of them who have computers, as well as sending e-mail in English to the ones who speak English. Her family speaks Cantonese at home, but everything Hua does online is in English, since she does not know how to write Chinese, a common obstacle for the 1.5 generation, who had to change

primary languages during pivotal years in their education. The main thing she does on the computer is homework, but she also plays Kart Rider with her sister and cousin. Kart Rider, a racing game popular in Korea, features both fantasy cars and real branded cars like BMW, and has several different types of tracks and modes of play, including one where the goal is to capture a flag and hold it the longest, and one in which you gain points by crashing into other cars. For girls, too, the games that are considered fun are always changing, as time passes and as they mature. Zhi Yang reported that the games *Fei Che* and Audition, popular with girls when I began my study, are not as popular now with girls he knows, and Monique Liu [informant #47] lost interest in her favorite, Diner Dash, in which she raced around serving customers in a restaurant.

Liang Chen [informant #24] is a housewife, born in 1983, with small children. She arrived from Fuzhou less than a year before I met her in her home, during my door-to-door canvassing of the neighborhood. She still has a lot of friends and family back home, and feels that having the computer connection brings her closer to all of them, as she uses QQ Talk and Chat to connect with her many friends and relatives in China. Before staying home with her children, she worked as a waitress; her husband, who is a cook, is also an active computer user. She herself only has time to go online about every other day for about a half an hour, but she uses that time for another type of connection: playing poker against competitors online, via QQ.

Calvin [informant #10], a 17-year-old who has lived in New York his whole life, uses e-mail, AIM, and MySpace to connect with friends, and also plays games at home. All of his friends and family are in the United States, and he has never been to China himself, although his family speaks Chinese at home. He is online everyday, and considers his internet usage a very important part of his life. Although his e-mail and IM habits are very much like any American

teenager, and he likes to look up comic videos on YouTube, the game he plays most is a favorite among Chinese young people in Sunset Park: MapleStory, a role-playing game from Korea, which allows the user to develop characters in four classes -- Explorers, Cygnus Knights, Heroes, and Resistance. Players then move through a mapped fantasy world over several continents, building their skills to fight the banished Black Mage. Since Calvin plays MapleStory online, interactively with others, the game allows him to 'connect' with others with shared interests, though they do not meet.

QQ as a Transnational Communication Tool

Besides competitive online gaming, another application people use to connect with others in a big way is QQ. At its most basic, 'QQ' refers simply to the instant messaging service it began as more than ten years ago, but QQ includes many other services. The name QQ also refers to QQ.com, the web portal, and all of its holdings, which incorporate many more services than just the IM function, notably QQ Talk, the voice over internet protocol (VoIP) feature that residents of Sunset Park have been using with growing enthusiasm and frequency to talk to their relatives in China. Tencent QQ was founded by two Chinese entrepreneurs in 1998 and is now one of the top internet companies in the world, publicly traded since 2004 on the Hong Kong stock exchange. Beginning with just an instant messenger service, the company went on to add all the other features that have made it both popular and extraordinarily profitable, including a great deal of advertising as well as small fees for add-on services, fees that add up handily for a company that now provides service to more than 600 million customers, according to the company's fact sheet (<http://www.tencent.com/en-us/at/abouttencent.shtml>). As a point of comparison, Facebook's public announcements (Facebook January 2011) gave its number of

active members as more than 500 million, while a QQ press release from around the same time (September 2010) pegged its membership at more than 636 million.

Ma Huateng, one of QQ's two founders, was ranked by Forbes as number 208 among the world's top billionaires on its 2011 list, with a reported net worth of over \$5 billion, and a company whose value continues to climb (Olsen 2010). Mr. Ma's partner is further down the list, with a personal net worth of 'only' \$2 billion. The company is headquartered in the boom city of Shenzhen, where Irene Liu worked at a factory for approximately \$18.50 per month, and it continues to expand, as more users in China take up using the popular service.

Tencent QQ's owners have made some missteps that have challenged their image, such as their efforts to crush a competitor, Qihoo 360, popularly known as just 360, by requiring that QQ users delete 360's antivirus software from their computers in order to make QQ operative. The feud began when 360 let it be known that QQ's own antivirus software, QQ Doctor, scanned its users' computers without their consent, and QQ responded to the revelation by forcing people to choose. Many loyal customers chose QQ, uninstalling 360 and switching to QQ's antivirus software, because QQ was so ingrained in their daily communication habits that they were not willing to give it up. Ironically, if QQ were not in fact scanning the computers it was installed on, the other software would not be detectable, so their position actually confirms 360's accusations against them. While QQ's IM software and games were the original, core business for the company, it has expanded to include myriad other services, including VoIP and shopping. The fact that they have copied what other internet leaders were doing and branded it for China was not lost on young adults like Jenny Liu, who called it a copycat of eBay, Amazon, Google, Skype, etc. Jenny was also disdainful of QQ's efforts to crush competition from 360, and put off by all the advertising.

I took a tour of the QQ web portal with Jenny, hearing her perspective on what an important social tool it was, despite her complaints about their business practices and advertising. Although QQ has experimented with charging for membership, public pressure drew them back to making it free; but many extras like a short and easy to remember account number or one containing auspicious numbers are available for an additional cost. When signing into QQ, with a ten-digit number and password (Jenny's is ten digits), you choose whether you are accessing from home or from a public computer requiring the most secure connection. We were signing in from an internet café, so we chose the public computer option. Talking about the account numbers, I asked Jenny if her account number was linked to her name somewhere, which is how I got the response, "No way!" and "online?!", revealing the strong attachment to anonymity online expressed by many of my informants. We were signing on in the middle of the afternoon east coast time that day, but we could still see there were more than *nine million* users online, despite the expectation that people would be sleeping at 3 a.m. in China.

People in Sunset Park are very aware of the twelve-hour time difference between New York and China, and factor it into their interactions with their friends there. That can mean signing on in the morning if they are not working, when it is evening in China, or at night in the U.S., when it is morning in China, on days when they expect their contacts to be available at that time. People change pseudonyms a lot, so Jenny could not be sure who was who in her list of friends online at that time. One community she stays connected with on QQ is a reunion group of her cohort from junior high, the friends she met when she first arrived in the U.S.; this group does use real names with each other online. They used QQ to plan their recent reunion and met up at a popular spot in Brooklyn for a karaoke night.

Entertainment options available on QQ included the ability to play a song for or watch a movie with a friend. There were many QQ games to play online with friends, as well as the ability to invite someone to watch a TV program with you online. QQ Town offered games unique to QQ, while other areas offered chess, poker, and other online versions of popular traditional games. Chat options included sending a text message, pictures, files, and ringtones, with webcam and microphone options for video chat via QQ Talk, and the ability to invite a third person to join the chat. There was also the option to choose a sound for indicating new mail.

Installing QQ on a cell phone for mobile use granted the option of sending a message from a computer to a friend's cell phone, as well as phone to phone. Other options included Q Zone, an area that is like MySpace, where users post profiles, such as ones that promote their artistic endeavors. There were also portal connections to Sina, which provides instant messaging, e-mail, and games, and to Sina Weibo, a Twitter-like service for micro-blogging, which is rapidly growing and may well prove to be the next transformative ICT in China (Epstein 2011). There were also links to popular Chinese search engines, including Baidu and hao123.com.

Another especially popular service on the portal besides QQ Chat and QQ Talk was the link to Kugou, for downloading music. Links to Yahoo, Google, and a weather service were also there, with a bookmarking capability for saving frequently used websites. There was also a place to post pictures in a personal photo album, links to other areas like QQ Book, where you can get some e-books for free, and a link to QQ Video (like YouTube), for uploading video for others or to watch one. There was also an auction space called Paipai that connects people who have something to sell online with people looking to buy, like eBay, along with a place to exchange funds for this, similar to PayPal. In addition to buying and selling real life things online, the service offered many opportunities to spend real money on virtual goods, like fashionable outfits

for your avatar, or to maintain a virtual pet. An outfit cost 1.8 Q dollars on that day. Q coin, the money used in this virtual realm, can be paid from your own QQ account, or by sending the bill to someone else's account with a note, or by billing it to your cell phone account or using a credit card.

We looked at one user who had two virtual pets, a penguin and a pig, as well as many outfits and a lucky six-digit account number, all extras that led Jenny to say that this QQ member "must be so rich." Indeed, this VIP life-time QQ user had icons for being a VIP, for QQ space, for the online store, an e-mail in-box, and ranking diamonds that one has to buy as well as ones based on frequency of use. Different color diamonds give different access -- for example, the possibility of a discount toward the purchase of clothes for your avatar. We could see he was a webcam user with a 3D avatar, and with an icon for a house with windows; to decorate this virtual home also costs extra. In light of the multi-faceted way in which layers of virtual play and connection were included in the QQ site, we decided by way of comparison to check the numbers for that day on Second Life, the U.S. virtual community site popular with young people. There were 54,000 people online on Second Life at that time, versus *nine million* in China, even though it was right after school, or prime-time in the U.S., but the middle of the night in China.

Only one of my informants mentioned having any of QQ's valuable add-on perks, like an avatar or a virtual pet: Zhi Yang, a very active QQ user. I took a separate tour with Zhi of his QQ account, and found that he has a VIP membership for which he pays \$2 a month. Sign-on was with a user number plus a password, and once online he used a pseudonym, so there were several layers of anonymity. QQ gives moons, stars, and suns for active users (4 stars=1 moon, 4 moons =1 sun) and Zhi had two suns, two moons, and three stars. His account showed he had been a member for 2052 days, about five and a half years, and that he would earn his next star in

about sixty days. He had 99 unread messages, which he did not bother to check, since he said they would mostly turn out to be advertising. He had switched his e-mail account from Yahoo to AOL since the last time I saw him, for the same reason, to avoid seeing so many ads.

We looked at the page in his account that is like a Wall on Facebook, where Zhi's friends had left comments, including: 1) that he cares about girls more than boys (from a male friend from high school); 2) that he is sometimes good but also sometimes bad (from a female friend he met online); and 3) that he needs to be more powerful (from a male friend from junior high). There was also a comment from a girl from his college saying an IQ of 145 is stupid, and another girl from high school calling him the cutest man in the world. His lists of friends were grouped by how he knew them, those from China (five online now), from junior high (four online now), from high school, cousins (one online), and gaming friends. His high school friends were about half male and half female, all using pseudonyms (his is z'W); he reported that he can effortlessly remember which pseudonym belongs to which friend – remarkable, considering that he had more than 200 friends on QQ.

Zhi told me he thinks QQ games were just for high school students, and he preferred other functions like listening to music, and used it for watching TV shows. He was able to get a lot of Chinese shows he liked via QQ, including dramas, movies, and current shows from China, all for free. The movie he had watched most recently was in English, but he can get more Chinese shows on QQ, and watches all these programs on his computer when he is at home. Zhi reported being on QQ every day, actively instant messaging his friends from high school and college, local Chinese American friends, as well as using QQ to keep in touch with a few friends in China. Whereas on Facebook people use their real names, QQ usernames are actually a number, and you have to know the other person's number in order to add them to your list of QQ

friends. For that reason, it was easier for him to meet new friends, or cute girls, on Facebook, by searching the list of his friends' friends and sending them a friend request. If he got to know someone new on Facebook, he could ask for her QQ number and then add her to his QQ list as well. On QQ, he had about 200 friends at that time, versus about 300 on Facebook, with only a bit of overlap. He used both the English and Chinese language versions of QQ, too, because he had some friends he speaks English with and others with whom he more often speaks Chinese, but he preferred the Chinese version. If he met a cute girl, and was only getting to know her via typing, he would rather do it in the language he was most confident in, that is, Chinese.

Zhi reported that he uses QQ instant messaging every day, all day long, on his cell phone, and his friends know that if they need to reach him they should text him on QQ. His texts on QQ are often short messages that begin with a simple greeting, like "how are you doing?" but go on to discuss many different things. There is more teasing in chats with male friends than with female. Transcripts of a few of these QQ chats are in Appendix G. The first one, a flirtation with a high school girl in Brooklyn who had been in the U.S. about four years and whom he had known a few months, began with his joking about the shortness of his time in the U.S. and then declaring that he had actually been here much longer than she had. She purported to be impressed, calling him "senior," and sent him two virtual prizes, and he ended by asking her if there were still a lot of Chinese students at the high school she was attending, where he also went. The second conversation was with a college girl his own age, in Queens, whom he had also known for a few months, and the third was with a male friend from Brooklyn whom he had known since junior high school, a friend who was working on his GED. These three conversations were casual and joking, and two of them mentioned computer games. The fourth chat was with a 15-year-old male cousin in China, who was asking a question about activating

his iPhone, and joked about their technical wizardry. Zhi normally only uses the IM function on QQ with friends -- other young people in the U.S. and the few remaining friends he keeps in touch with in China -- and uses the VoIP version with his relatives. In this case, however, he was talking to his cousin via text chat, since it was not a full meeting of the families online, as I will describe below.

When I was conducting most of my in-home interviews, in 2007-8, only 31 percent of my informants specifically mentioned QQ in talking about their online activities (see Table 6 in chapter 3). Usage in the neighborhood was just starting to really take off, and store owners at that time told me that interest in QQ was beginning to drive computer sales. My study was also oriented toward the neighborhood and in-person activities and practices, so I do not have other QQ ‘chats’ to analyze besides these few, which seem to reflect the kind of flirtations with girls and teasing with male contacts that I would expect from a young man online. Still, there is an opportunity for a future study with more textual analysis of online discourse based on relationship type. It would also be informative to survey whether the same topics come up as in the chats described above, such as length of time in the U.S. and preferred computer games as a point of reference among young people getting to know each other.

Unlike the Lius, Zhi Yang and his family are active users of QQ to keep in touch with their relatives in China. His parents have not learned to use the computer themselves, even though QQ Talk is their main way to keep in touch with his mother’s four sisters, his father’s brother, and his eight cousins. Each family they talk to in China has a computer, although none of the adults are proficient at using computers at all. The young people set up the QQ chat on both ends – Zhi in Brooklyn, and his cousins in China – so that the families can have a face to face conversation, about every other week, usually around 10 pm New York time. Since the

calls are not on a scheduled day, but could take place any day that both families have time, they first check in with each other via telephone to make plans to set up the internet call.

Zhi's family is always the one to place the phone call, since it is so much cheaper to dial from the U.S. to China than vice versa. That call is very brief, however, just to give each other the heads-up to get ready to talk via webcam. At that point, either party could be the one to start the internet call on QQ, which is free. The two families then huddle around their computers, although it is mostly his parents talking to the adults their age on the other end, with Zhi and his cousins just being 'around.' Their conversations begin with what Zhi considers the normal questions, like "How are you? Is everything fine?" and they proceed to talk about how their lives are all going, family things and gossip, but not about work. His mom and her sisters often end up talking about who they know that is getting married. Zhi's grandmother lives with one of his aunts, so he often gets to talk to his grandmother, too, in the QQ Talk conversations as well as on the telephone. Zhi says they keep in close contact with their family in China because they want to know how they are doing and miss them, not out of obligation. He thinks that if they did not call, no one would be angry, since in China they know that people in the U.S. are busy. When Zhi's brother is away working in Florida, and Zhi is working at restaurants in Newark, as he does during intercession breaks from college, their parents do not have the face to face calls but just use the telephone, since he is not there to set up the QQ chat on the computer for them. On his own, Zhi uses QQ or calls on the phone to keep in touch with his brother, about once a week, whether he is at home in Brooklyn or temporarily working at a restaurant in New Jersey.

Home Access for Various Professions and Household Types

Because of active use of QQ for internet calls, communications with friends and relatives from home in Sunset Park are not just in the form of messages sent and received

asynchronously, which lose something in the process, but are face to face *conversations*, using simpler spoken language, and happening in real time. Having a view of the other person on the computer screen, although mediated by the computer technology, also allows them to feel connected in a more visceral way than e-mail. It also avoids the problems noted above with typed messages – that older people may not know how to use a phonetic system to type in Chinese, while youth may only know how to speak Chinese but not know how to read or write Chinese characters. To some extent the embrace of Skype-like calls reflects the changing times for Americans in general, especially a younger generation who use email less than adults, but internet phone call activity is still quite a bit higher in Sunset Park among the computer users I met of all ages. The online activities people I interviewed reported valuing tended to fall into three categories: entertainment like games and music, text and video chat, and news and information.

According to a Pew Internet survey, 62 percent of employed adults in the U.S. use the internet or e-mail in their jobs (“Most Working Americans,” Pew Internet, 2008). For most people in Sunset Park, however, who have jobs that do not involve any computer use or access, before and after work is what matters. Eric Li, for example, [informant #21] is a thirty-two-year-old cook from Fuzhou. He graduated from high school in China and had been in the U.S. for eleven years when I interviewed him. Eric learned how to use a computer in typing class in China, and reported being online now two to three hours a night after he gets home from his job in the Chinese restaurant. Before he got his laptop computer a year before, he used to go to the cafés a lot in the evenings, to use QQ and to meet up with friends, but he never went to the library. Eric lives with a roommate, but his roommate does not use the computer. Most of Eric’s family and friends are in China, including pen pals whom he met online; he reported feeling that

having computer access had increased his circle of friends. He mostly used a webcam to talk to them, and he sometimes typed messages on QQ. He did not really use e-mail at all, just QQ. He also called his family to keep in touch, using a phone card. He liked to listen to music on Kugou and had started shopping for clothes online, too. Eric does not speak much English, but he is interested in fashion, so he made the effort to read the fashion pages on English language sites; otherwise, he got most of his news from Singtao and the World Journal, which he read online, as well as still buying the print copies every day.

Besides using a computer during evening hours after work, some people are active online when they are experiencing a period of unemployment. Qi Zheng [informant #42] is 37 years old and had just moved to New York from Centreville, Georgia a month before I met him. He had been there in Georgia working at his most recent restaurant job and had not found a new restaurant job yet in New York. A junior high school graduate from Fuzhou, Qi came to the U.S. ten years ago. He is married, and his wife was not employed, either, as she was staying home with their infant daughter. The family had not bought a television yet, but he had gotten his first computer a month before, and was just then learning to use it. Youthful and smiling, with a baseball cap on, Qi reported that so far he was using it mainly to type out messages to his relatives in China via QQ, especially his parents and his sister. He had tried using the computer to call them online, but they could not hear well enough, so he switched to just calling them on his cell phone when they want to talk, though he was also really enjoying the text chat feature on QQ. He instant messaged his friends here in the U.S. as well. They were the ones who told him you need a computer in the U.S., then taught him the basics and told him what to buy. He had heard people say that he would enjoy it so much that he would become addicted to the computer now that he has one, but he thought it is too soon to know. He was just learning how to look up

information, and was normally too busy when he was working, and with the new baby, to play games. He had not learned much English yet, so he was doing everything online in Chinese.

Others I met were also using their home computer to do things that would help them in their jobs, even though no computer was provided in the workplace. Jerry Hsu [informant #15] is a 30-year-old truck driver, originally from Hong Kong, who had been in the U.S. for ten years when I met him and was living with his parents and his brother. He graduated from high school in the U.S. and attended two years of community college in Brooklyn, at Kingsborough Community College. He and his family had three PCs and four laptops, even though his parents do not really use computers, just Jerry and his brother -- plus he had a Blackberry for saving data and an iPod to listen to music on the road. He used a computer for researching things related to the transportation business, prices and stockage, and to handle his banking online; he was one of the rare informants to mention doing online banking. Jerry used Hotmail and MSN instant messaging to keep in touch with his friends locally, and called his friends in China on the phone. He had also taught himself to use Excel and Quickbook, to keep track of transportation data.

Joe Tang [informant #16] is also a driver, from Guangdong, 37 years old and in the U.S. for twenty years when we met. He had seven years of formal education, meaning he was not able to complete junior high school. He had a PC and a laptop, which he and his seven year-old daughter used; his wife did not. He had only had the computer for a year, but he was never one to go to cafés, even the one on the corner, nor to the library. Joe's uncle in China was the main person he still kept in touch with there, and his uncle had a computer, but Joe mainly used the phone to talk to him. Most of my other informants reported having no problem with the time difference for talking, but Joe mentioned it as an obstacle to having webcam talks online. Joe's job involved long hours and travelling around, and he and his uncle would both need to be near

their computers to talk online; they found the time difference made it too difficult to set up. At one time, Joe and his uncle used to write letters, but Joe did not replace it with e-mail when they stopped corresponding by post, and today they just call on the phone. Now that he has a computer, he reported reading the paper online, Singtao, and playing some computer games, war games or anything with a lot of action. He sometimes watched DVDs on his computer, and listened to music on CD, not streaming online like on Kugou. He did not have any other devices besides his cell phone, but he looked up maps on Mapquest to help him with his job as a driver. Reading the news and looking up maps were his main motivation for learning to use a computer. The fact that his friends all used a computer made him want to learn, too, and his friends were the ones who taught him.

Zhiwei Lin [informant #8], age thirty-two, who is pictured at the beginning of chapter 3, is another who got a computer and started getting active online because of his friends. They told him he would be able to see family and friends online and to get free movies, so he bought a computer and got his friends to teach him how to use it. Zhiwei moved to the U.S. from Fuzhou almost four years before I met him, but had just gotten his first computer, a laptop, a few months before the interview. A junior high school graduate in China, he worked at a restaurant and was also very busy at home helping his wife to care for their two small children. He reported that he did not have much time to use the computer, only two or three hours a day. He felt that he was just getting started, so there were things he did not know how to do yet, but he was already really active on QQ, using it especially to download music, play games, and for text and video chatting. His parents did not have a computer, so he called them on the phone using a phone card, but he placed internet calls to his friends and other family in China who do have computers; he loved being able to actually see them online. He had already learned how to use the download manager

Xunlei to get lots of free content, including recent Chinese movies, and was getting his friends to make copies of computer games on disc for him to try. He found the ease of communication online very important and beneficial to his relationships, but he was not especially anxious to learn different applications or to look up other information – he just wanted the free movies and the webcam function, and to get the World Journal newspaper online for free.

Some people were working too hard to do much to build and maintain local relationships, so their closest ties remained with distant loved ones. Jingchen Wang [informant #46], age twenty-five, who moved to New York from Fuzhou about five years before we spoke, lived with his twenty-six year old sister in one of the nicer buildings in Sunset Park, a tall apartment building with a security buzzer and a marble-like lobby. He greeted me in shorts and a t-shirt and led me into his living room, completely unfurnished except for a pair of incongruous airplane seats lying down on the floor, and a card table with the laptop he and his sister share. Jingchen looked tired, and mentioned several times how hard he was working in his job as a sushi chef. He missed his parents in China and called them almost every day, talking for half an hour at a time, but not online. He used a regular phone with an international phone card, because his parents did not have a computer. Jingchen reported that he was too busy working long hours to do much of anything else or to spend much time on the computer. He played games a little, especially poker, and looked up recipes sometimes, but there were a lot of things online he felt he did not know how to use and found he had no time to explore.

Some Snapshots of Women and Home Access

Women may not have a presence at the internet cafés in the neighborhood, but I found them to be active participants online from home. Going door to door in the neighborhood seeking interviews, I was able to secure twice as many interviews with men than with women,

but it was apparent that many women were just being cautious about opening the door to strangers. Often the only adult at home was an elderly woman, left to watch the house and perhaps some small children while the other adults were out working. But quite a few women did agree to talk to me, especially those in their twenties and thirties, and they were just as likely to be active computer users as the men I talked to. Although none of these women reported going to cafés, the time they spent online and their activities were substantially the same as the men, including an interest in playing computer games. For those who do not feel comfortable going out to café spaces that they feel are disreputable, and who do not think they have enough English to navigate the process of library access (although the library provides Chinese language assistance), having a home computer would seem to be especially important.

Kit Tang [informant #45], thirty-one, spoke to me while we were seated at her kitchen table along with her eleven year old nephew, who was playing computer games on his laptop. Originally from Hong Kong, Kit Tang had been in the U.S. for twelve years, finished her last year of high school here and attended two years of college, and was working as a bank teller. Like many families in the neighborhood, hers had three generations under one roof. Besides Kit, the household included her parents, in their late fifties, her married sister and her sister's husband, and her sister's children, ages eleven, thirteen, and fifteen, plus one who was still an infant. Their house had not been divided up into separate apartments like so many of the buildings in the area, and they occupied the whole building. With so many adults working and joining forces, she reported that they were able to afford nine computers, representing one for everyone in the household (including the baby). She used a computer all day for her job, and was also online two to three hours per day at home; she joked that the kids were online *the whole day*, playing games.

For the Tang family, this level of computer ownership and use revealed a prosperity that was also evident in their newly refurbished kitchen, lined with stylish blond wood. With each person in the home having his or her own computer, there was no need to hover over a single computer, but they did still congregate in the kitchen with laptops. The first floor entrance from the street led directly into the kitchen, so anyone headed in or out must pass through there. Whether they chose the kitchen because they were drawn to the nucleus of family interaction was not clear, but they were avoiding the isolation of each person in a separate part of the house that the Lius faced when they moved to Sheepshead Bay. The Tangs' grandchildren, Kits' nieces and nephews, were still going to the internet cafés in the neighborhood, too, despite having computers of their own at home. The fact that the children leave a space this 'wired' to head out for the internet cafés is strong evidence that the cafés are for socializing, and not just for those who do not have access at home.

Some families were not so actively engaged with ICTs, but did have one for the children. Stephanie Wang [informant #30], born in 1984, the daughter of another family, who spoke to me in her home, lived with her parents and two young cousins who had just arrived from Hong Kong two months before. Stephanie was lounging in her pajamas on a Saturday afternoon and taking care of her cousins the day we spoke. She moved to New York from Hainan eight years before, at fifteen, went to high school in Brooklyn, and was a senior at Hunter College when I met her. Her family lived in one of the nicer houses I visited, and we spoke in the living room near a big entertainment center and large screen television. Yet they only had one computer. Stephanie said her parents felt it was too much hassle to learn to use a computer themselves, so she only shared her laptop with her newly-arrived, young cousins, ages nine and twelve, and they used it for playing games, listening to Chinese music, and watching Chinese movies, three or four hours

per day. The family spoke Cantonese with each other and with her little cousins, who had not had time to learn English and used the computer only in Chinese. Stephanie herself, in the U.S. since she was fifteen, did not remember enough characters to read Chinese, so she used the computer only in English. She also had access to the library and computer lab at her university, as well as the computer at her job on campus, and used them all a great deal.

Home Access and the Older Generation

The older generation runs the gamut in terms of how connected they are or want to be online, with elderly women unlikely to report any computer use except for internet calls. Those who are parents and grandparents themselves and living in the U.S. have different needs than young adults trying to keep in touch with parents and loved ones in China. Mrs. Tang [informant #11], 60 years old and in the U.S. about 20 years when we spoke, had an adult son living with her, and he had a computer, but she felt that she was too busy helping her daughter care for her kids (a paid position that replaced her former employment as a seamstress in Chinatown) to take the time to learn how to use a computer herself. A homeowner, she was lucky to have the type of Brooklyn house that is suitable for providing different generations with some autonomy while remaining under one roof. Like some other extended families I met, she and her husband occupied one floor, while her grown son lived on the second floor. Her daughter lived elsewhere, but came for dinner everyday after work, blurring the boundaries of the household's composition. In her case, having young people in the family did not lure her into using a computer, but rather kept her too busy taking care of the family to find the time.

Lam Phan [informant #40], fifty-five years old and in the U.S. since the 1980s, is a housewife, who used to work as a cashier. She, too, reported that she did not use a computer because she has no time, as she was busy cooking for her family, plus she was not interested and

felt it would be too hard to learn. Her children, ages thirty and twenty-four, lived with her and her husband and owned both a PC and a laptop, but she was not sure what they did online besides a vague sense that they have used them for school and other things. She still had two brothers and two sisters in Vietnam; her parents were Chinese but immigrated to Vietnam, and she was born there. She kept in touch with them only by phone, since, with only six years of formal schooling, she found it was too difficult and time-consuming to write letters.

A pair of older siblings I met, Edward Ko [informant #14], age fifty-eight, and his sister Choi Wing Lee [informant #13], age sixty, have separate households, but Mr. Lee was at his sister's home doing household repairs, as he frequently does, when I arrived. He had come to the U.S. in 1971, ten years sooner than his sister, and was much more conversant in English. Whereas she had never used a computer, because she had no time or interest and was too busy with her job as a home attendant, he had owned a computer for twenty years, ever since the Commodore PC he purchased in the early days of personal computers. He bought that first computer for his sons, but hardly used computers himself until his kids were grown. Today he is an electronics technician and reported being online every day, on both a PC and a laptop, reading the news (mostly in English), e-mailing his sons, cousins, and nephews, and trading and investing. His wife, a retired accountant, also used the computer (especially to play mahjongg), as did his younger son who lived with him and his son's wife.

Because his older son -- who met his wife online -- moved out of state, Edward Ko found e-mail convenient for sharing family news and pictures with him, but he called frequently, too. Although he had few remaining relatives in China, he reported writing to them about once a year and sending money, asking them to pay respects to his grandparents and to visit their graves. He was one of the few people I talked to who said he still wrote letters; most people of his

generation reported using the phone to keep in touch. Because he valued the help that Google gave him in learning English and searching for information, he said that it was “like a scholar in your home.” He also liked the power that an online connection gave him with his nieces and nephews, for example when he e-mailed them information; he said that normally he would not get the opportunity to tell them anything they did not know.

Jia Liang Lin [informant #26], age fifty-four, a soft-spoken Cantonese man, had been in the U.S. for twenty-four years when I met him; he had few relatives left in China, but many friends. He mostly used the phone to keep in touch with them. He worked as a cook in a Chinese restaurant and never had much opportunity to become fluent in English. We talked in his dining area, decorated with bamboo plants and a large lacquer cabinet full of Chinese collectibles. The adjacent living room area was full of the latest technology, a nice entertainment center and wireless cable modem enabling the internet connection to the three computers in the household, but he himself was not active online. The computers were really for his son and daughter who lived with him, both of them in their twenties and working. His wife spent about a month in China every year, and he reported using a webcam-enabled computer during those times himself, with his children’s help, to talk to his wife face to face. He said he would like to be able to save money on reading the Chinese newspapers online (he bought the print version of Singtao every day), and liked that one can look up information online. He had asked his kids to research information for him in the past about insurance and major household purchases.

Conclusion

For newly arrived citizens whose English is limited, the Chinese language computer lessons at the Sunset Park branch of the Brooklyn Public Library can be an important introduction to computer technology and the possibilities it opens up for new types of

communication. Many who attend the classes have recently purchased or are about to purchase a home computer, often with their academic aspirations for their children as a primary motivating factor. They then learn about new ways to access information, including reading Chinese language websites, newspapers, and magazines, and to send e-mail and create correspondence in Chinese, as well as in English, as a way to participate actively in their children's lives in the local public school system.

The 16 computer stores under Chinese management in the neighborhood are another source of information, as most managers are at least as involved in recommendations and upgrades with Chinese language software, as they are in selling the actual computer. Computer stores attest that customers' desire to communicate via the social networking service QQ drives sales. Chatting on QQ, via webcam face to face, and through written text messages, is increasingly popular in China; those who are newly arrived are eager to have access to it as well, to keep in touch with relatives and friends in China who are beginning to own computers, as well as with new friends in the U.S.

Despite the high interest in online communication, Chinese Americans in Sunset Park are protective of their online personas, and are quite likely to use pseudonyms for their activity online. They are also concerned about protecting their privacy when it comes to any documented record, as I found when I attempted to tape-record interviews, which hardly anyone would allow. Women, especially older women, were wary of being approached by an unfamiliar person for interviews, but it was clear from those who did agree to be interviewed that women are active online participants just like the men, although much less likely to go to internet cafés. The female customer who does go out to the cafés is likely to be an assertive teenager, eager to play computer games, albeit less action-based (less violent) than the ones her male counterpart favors.

The internet cafés persist in number in the years since I began this project in 2008, but there has been a gradual change in the way they function. A few closed and a few opened in this period, and it is notable that the ones that closed were the darker and less hospitable ones and the ones frequented more by an older clientele. The newer ones all have a more gaming oriented interior, with padded chairs and joysticks at each station beckoning gamers; the candy-colored carrels in one of the newest appear meant to appeal to even younger children. They all offer some refreshments now, and many of them are very well-stocked with snacks and drinks that appeal to a youthful palate, along with brightly colored interiors, gaming posters, and other amenities, like a pool table at the newest one on 5th Avenue.

Although the cafés were perceived as being for young people in 2008, in practice they were used quite a bit by adults as well. In 2011, that clientele has fallen off somewhat, and the café interiors have caught up with the change, in terms of décor and amenities. Zhi Yang, who was in high school and a heavy café user when I met him in 2008, commented to me off-handedly as we toured the full cafés in 2011 that “nobody goes to cafés anymore.” When I pointed out that the cafés were all busy and asked him if he meant nobody among his friends goes there, he was still unable to clarify. My impression is that his remarks refer to this shift in users. During the period that coincided with my early fieldwork the cafés were serving more of a dual purpose: both as an outlet for youthful socializing and gaming, and a pragmatic option for internet access for newly arrived immigrants who were older but lacked the resources for home access. Now, with cell phone technology and its increasing functionality, a smart phone could serve many of the same purposes at a lower cost than purchasing a home computer, which is likely to be why there were fewer adults using the cafés in 2011 than in 2008. In cell phone use the U.S. was behind other countries, notably China; Qiu (2009) reported on the ubiquity of

mobile devices as a working-class strategy in China several years ago, a strategy that newcomers can now use in the U.S. as well. Adults do still use the cafés, though in fewer numbers, and they are very active online at home, if they can scrape together the funds to purchase a home computer.

Chapter 6

Conclusion

Introduction

The high level of computer use and ownership I found among Chinese immigrants to Brooklyn's Sunset Park community is connected to the emphasis people place on nurturing family ties and ensuring the success of the next generation. The chain migration process links families, and sustaining the transnational ties that made immigration possible is a big part of the communication styles in the community, such as placing face to face internet calls at a higher rate than the national average. While people reported they have always kept in close contact with family in China, the mode of contact for many has evolved. It is no longer just phone calls, carefully measured in expensive minutes, nor the letters that were the norm for an earlier group of arrivals. Today, immigrants like Zhi Yang's family, whose relatives in China can afford computers and are young enough at heart to want to learn to use them, have gone on to a more satisfying and cheaper face-to-face option, via Skype or QQ.

The strength of family networks is an important building block of immigrants' strategies for success. The Liu family's experience shows how that bond draws families to use all available communication tools to maintain close ties. While the struggles of the Lius are similar to what others face, their story is not meant to stand in for all the Chinese American families in the neighborhood, as they are not in every way typical. Many others are more active online and use online video chats more to keep in touch with relatives in China.

The long-term cooperation of extended family households that is characteristic of chain migration, such as grandparents providing childcare in the short and long-term, builds links among generations even when they are separated in space. Families living together in tight spaces, sharing a computer and the space it occupies in the home as well as cooperating in online activities, can draw family members closer together as well. Extended families pooling their resources to make ends meet and working long hours may also find that there is little time for anyone to connect with others outside the family in a significant way, nor sufficient leisure time to engage in online activity other than games or reading the news. The ICT access they manage to achieve may connect them to a larger circle of news, ideas, people, and learning opportunities than they would otherwise encounter but does not eliminate the oppressive structural disadvantages they face.

A New Population

Newcomers take the most insecure jobs and work very long hours, sometimes with several adults in the household all working more than full-time to meet household expenses. One side effect of that grueling schedule is that young people are often left alone more than they might be otherwise. Ong (1999) talks about this in the context of elite Chinese Americans, whose 'parachute kids' (so called as if dropped from a plane by their jet-setting parents) live in the United States but whose own transnational careers entail much time spent overseas. Things look different for the working-class Chinese in Sunset Park, for whom schedules can mean youth left unsupervised, finding companionship at the cybercafés while parents work, nearby but seven days a week. The three young Fuzhounese men hanging out together in the cafés whose cases I discussed in chapter 3 are examples; they reported spending time in cafés in part because they felt lonely at home. Their situation also reveals the tension between an idealized model minority

image of Chinese Americans that young people in this community hold up as goals versus their own more limited life opportunities. Their families moved to the U.S. during their high school years. Now, none of them has a high school diploma nor the English language skills to complete a G.E.D. program; without more education, they are unlikely to find better jobs than their parents, and right now all three young men are unemployed.

The circumstances of the working-class Chinese of Sunset Park are connected to their lives in China, but are also embedded in their ongoing experiences in the United States and the local community. Besides the support of friends and relatives who help them find jobs and apartments and learn their way around, there are institutions that support the transition and help new immigrants, such as the Brooklyn Chinese American Association. Newcomers can get help there, for example with English language classes, although the organization's ability to serve the large and growing community is limited enough that those classes are offered on a lottery basis. Classes at the public libraries are offered regularly but are only taught during the day when many people are busy working. As a result, none of the offered English and computer classes may actually be available to the poorest newcomers who need them most but who are unable to attend because of their schedules.

The downtown Chinese in Sunset Park who are the subjects of my research believe certain preconceptions about the divide between them and their uptown Chinese counterparts, in terms of ownership and use of ICTs. Although class advantages might be expected to make a bigger difference, the ICT activity reported by the group I studied supports the NSF and NTIA findings that Asian Americans are the most active online. Many hard-pressed households own computers, sometimes more than one. Even those families with no computer or with a computer shared by many household members still manage to make their own path in communicating online. The

lines at the public library and the 24-hour-a-day schedules of the internet cafés attest to the willingness of the downtown Chinese in Sunset Park to find ways to work around their lack of economic power to build social networks and seek advancement opportunities for their children and themselves.

They are making ICTs an important part of leisure time activity, although that fervor is complicated in several ways. Internet cafés hold a disreputable position, yet these same cafés are often open 24 hours a day in order to keep up with the competition from all the other nearby cafés, and they remain busy throughout the day and evening. Inside, avid users are playing games, viewing videos, and sending texts via QQ, but less likely to be doing things that enhance their cultural capital, as elites routinely do. Even those who know how to use a computer to seek information are still left with the stark realities of low wages, heavy debt for some, and few advancement opportunities.

The Secondary Digital Divide in Sunset Park

Manuel Castells predicted in 2001 that the digital divide could be widened by some having access to computers through school and in their professional lives, while lower income and lower status jobs did not offer any such exposure. His concern was that such a dichotomy “could amplify the social differences rooted in class, education, gender, and ethnicity” (Castells 2001:260). There is not much of an observable digital divide in ownership or access in Sunset Park today, as even the poor residents I interviewed with no access at work manage to find ways to get online. Still, there are some important limitations on how they use computer technology, with more of a focus on entertainment and socializing than national averages. Listening to music, playing games, and networking via instant message and internet calls were activities they engaged in more than national averages, while banking and shopping were ones they do much

less. They also used email less than the national averages, but not by much (see Table 6 in chapter 3); they are replacing such asynchronous communication with real-time conversations, in text and face to face. They did report looking up information at a higher level than average, but most of them do not have the language skills to look up information in English and so would be unable to perform certain necessary tasks online. Some informants reported being happy just to get music, games, and the news online for free, and were not as motivated to learn to use a web browser for advanced information searches, or were just too busy working to do more.

Many have not achieved in full what Thomas et al. (2007) call ‘transliteracy,’ which those authors define as “the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, to digital social networks” (Thomas, et al. 2007). Sherry Turkle also considers levels of understanding and proficiency important, demarcating the digital divide between those who just use computers for gaming and those who can do really useful things with them:

..Even if the very important issues of access could be resolved, there is still a divide between the large mass of users and those who are empowered by computation to do more than play games. Making the leap depends on having food, clothing, and access to educational and social resources that are not found in cyberspace. (Turkle 2004:102)

Since the early days of the internet, scholars have expressed concern over the gap between those with access to technology and information and those without. The National Telecommunication and Information Administration (NTIA), the federal agency responsible for telecommunications and information policy, was the first to use the term *digital divide*, to describe the gap between nations and communities with broad access to technology -- the *information haves* -- and those who lack access -- the *information have-nots* (Talukdar and Gauri 2011). Since then, an enormous body of literature has developed, analyzing the meaning,

origins, and potential outcome of the uneven distribution of access, both within each country's population and among countries worldwide.

The literature is so extensive on the topic, that even the definition of what is meant by 'digital divide' is quite unsettled. Scholars make distinctions among the type of ICT, who is using it, the attributes of those users, and levels of adoption, from basic access, to a higher engagement with a measurable impact (Hilbert 2011:715-6). Bearing in mind the connection the topic holds to policy-making around the world and different situations, Martin Hilbert suggests allowing the definition and focus to vary according to different ends being sought, prioritizing impact over analytical simplicity (Hilbert 2011).

In some cases, Martin Hilbert (an economist and social scientist) observes that the focus may be on achieving some kind of access, whether or not ownership is part of the equation. In a study conducted across several Latin American countries, Hilbert examined variables like income and household expenditures on luxury and necessity goods, looking for the magic number that would be required to make internet access affordable to everyone. The figure they determined was about \$10 U.S. per person in a household, but large segments of the poor populations in those developing countries did not have that much disposable income and the countries did not have the funds to subsidize them. Mobile phones are gaining utility and function and coming down to that level, and ownership among the poor in the countries surveyed (Mexico, Uruguay, Brazil, and Costa Rica) is growing. The author also points out that "while mobile phones are an important first step, they do not convert the poor into full-fledged members of an Information Society" (Hilbert 2010:767). One possibility he recommends is some sort of shared public access with a combination of public and private support, like a cybercafé, space that Sunset Park already has in abundance. New York City increasingly offers open access wi-fi

coverage as well, although the benefits accrue to users who have access to an individual laptop or other device.

Playing off the standard language of the digital divide as between *information haves* and *information have-nots*, Jack Qiu (2009) described working-class ICT users in China as the *information have-less*, because their access is patchy and their abilities are not as fully realized as more privileged Chinese. For example, one of the divides he observed was the tendency of his informants to use ICTs for gaming and chatting but not as a tool for more serious cultural capital-enhancing activities. Whereas Qiu observed an entertainment-only model at cybercafés and in interviews in China, in Sunset Park I found an entertainment and social media-focused practice. People were playing games, listening to music, and communicating with friends synchronously at higher rates than the national averages and emphasized those in interviews, but they were also reading the news and looking up information more than other groups.

The last remaining divides in internet access and availability are much smaller than they once were in the U.S., since broadband internet access has spread quickly – a diffusion rate faster than color television, VCRs, cable, and other recent innovations (NTIA, “Digital Nation,” 2011:5). Although around the world there are still many populations with difficult hurdles to basic access, in the U.S. scholars have begun to focus on types of usage and skill levels as a remaining divide. In exploring new ways of conceptualizing the digital divide, Mark Warschauer (2002) considers various aspects of digital literacy, and comes up with a number of different definitions. He describes it as a social practice with a physicality as well as intangibles like skills, content, and social support. He also argues that acquisition of digital literacy is about power as much as it is about education. In her review essay on the digital divide, Eszter Hargittai argues for a more complicated digital divide than just that between the ‘haves’ and

‘have nots,’ across “multiple dimensions – technological access, autonomy, social support, skill, types of uses” (Hargittai 2004a:141).

Concern about a knowledge gap that may be driven by media access precedes the days of the internet. A study in 1970 challenged the idea that mass media – in that case, newspapers -- would benefit all equally, finding instead that those with more media competency, knowledge, and social status were able to make more effective use of media information (Tichenor et al. 1970). Later researchers added to the knowledge-gap theory by considering that not everyone would have the same motivations, and scholars since then have investigated digital inequality from the perspective that it is important only when internet access and competency grants real benefits on the user or involves necessary functions that are not luxuries, which is becoming more and more the case (Zillien and Hargittai 2009). Access to social services, education, and government agencies, for example, increasingly requires a computer, not to mention the ability to look up information – witness the fact that Encyclopedia Britannica is no longer publishing a print edition as of 2012. Recent research supports the idea that socioeconomic status is more closely associated with the informational use of the internet than with internet access, and that the differential use of the internet is associated with a greater knowledge gap than that of the traditional media like newspapers and television (Wei and Hindman 2011).

Using a detailed formula that included income, education, and occupational prestige, sociologists of technology Nicole Zillien and Eszter Hargittai analyzed data on how people’s online activities were influenced by their socioeconomic status and the context of use, finding that people’s habits of use were self-perpetuating and correlated with their social status. They found that those of already high status were the most likely to engage in online activities that

extend their participation in economic and political life, finding information, and government forms (Zillien and Hargittai 2009).

In particular, high-status individuals carry out information-oriented activities and transactions online to a significantly greater extent than their lower-status counterparts: high-status Internet users' odds of benefiting from political and economic news online, travel information, stock prices, product information and price comparison, email, and search engines are significantly higher than those of lower-status ones.

(Zillien and Hargittai 2009:288)

Besides finding these inequalities in the types of information and activities that high-status individuals benefit from, which lower-status individuals do not, the authors found that the divide is likely to persist, and that already privileged people would continue to gain more.

People's incorporation of digital media into their everyday lives does not happen independent of the constraints and advantages of their existing surroundings; rather, the Internet is just one component of people's lives in which numerous social factors interact with each other. Not surprisingly, then, those with more resources – whether technical, financial, social, or cultural – end up using the web for more beneficial purposes than those who have considerably fewer assets on which to draw.

(Zillien and Hargittai 2009:288)

The relationship between ICT use and the potential benefits to immigrants like those in my sample is complicated by the fact that some online activities may serve an important social purpose in their lives but still not be an aid to any structural inequalities nor meet the 'capital-enhancing' standard of knowledge theorists. There is also some evidence that social networking with family abroad and existing friends can prevent people from taking steps to make new friends and fully assimilate in their new environment. For example, in their research with Chinese students studying in New Zealand, Cao et al. found that the students used social networking tools as a way of keeping their existing social connections alive, rather than for making new contacts or building new friendships (Cao et al. 2012:7). The students in the study who reported having more contact with existing Chinese contacts online reported having greater

life satisfaction, however, and felt more social support, so the social networking was beneficial at the same time that it did not encourage them to meet new people.

Negative feelings like stress, loneliness, and depression, can be part of the experience of adapting to a new country, and online networking can help (Croucher 2011). Considering that internet use can have a big impact on immigrants' interaction with each other and their host country, communication theorist Stephen Croucher proposes that "overall, increased social network use, particularly among individuals from the same social group, will more than likely lead to decreased steps toward acculturation" (Croucher 2011:261). As I found from my interviews, people are very active on QQ and other social networking services, which help them maintain close ties with family but not necessarily to meet new people nor to speak any language beyond their native Chinese.

There is an opportunity for further research in exploring some of the details of the secondary digital divide that my interviews did not explore. I did not ask informants to show me how they look up information, to assess their skill level, nor have them show me what websites they were using and how. My limited focus also did not extend to gauging the details and the outcomes of information seeking. For example, are people looking up health information online, are they finding appropriate information, and what affect does it have on their health and access to health care? Do they know how to find legal advice for immigrants online? I also chose to focus on the physical world of Sunset Park rather than the virtual world they share with other Chinese on the internet. A textual analysis of what the same group of people are reading and posting online could be fruitful, beyond the few text chats I collected.

I also focused on the Chinese residents of Sunset Park, whereas in-home interviews with their Latino neighbors could present an opportunity for a more robust on-site comparison beyond

the data I found. A local comparison of these two groups with interview data from the Latino population could also offer a fuller analysis of why the Chinese in the neighborhood choose to be so ‘wired,’ while the Spanish-speakers are less so, or what Pew Internet calls “the Latino Digital Divide” (Livingston 2010). In-home interviews with the Spanish-speaking population could be augmented with research in the e-Game café on 5th Avenue, a public space where Latinos are beginning to be active in Sunset Park. I have begun the work with my data on one little slice of the Chinese population, something that is not that easy to obtain from national statistics. Most detailed analysis of technology usage in Pew Internet databases, for example, is only offered for black, white, and Hispanic, and does not include the smaller Asian population or other immigrant groups. One reason is that the sample size that Asians represent in national surveys is too small for statistical accuracy; another is that Pew interviews are conducted in English and, since many Asian households do not speak English as a first language, any results would be biased, since many households would be missed (Smith 2010a). Further research could also analyze ICT use by immigrants from different countries cross-referenced with data on internet penetration and access in the sending country, to see how that may affect online activities in the U.S. If English language facility is not the key variable, since Chinese are active online but foreign-born Latinos are less so, an examination of the issues affecting ICT use in each of the sending countries (e.g. Dominican Republic, Mexico, and Puerto Rico) could be useful, especially in light of the high level of transnational communication I found among Chinese residents of Sunset Park.

Newspapers in the Ethnic Enclave

Reading Chinese-language newspapers is an important part of what people I met are doing online, and many read them in print as well. In fact, online vs. print newspapers represent a convergence of “‘old’ and ‘new’ media technologies [that] are being brought together into cyberspace,” although that is something that we already take for granted (Thurlow et al. 2004:32). The papers people in Sunset Park read include a number of editions published for Chinese Americans from different ideological points of view. The Chinese Daily News, for example, started as explicitly pro-Taiwan and anti-communist, but shifted to more centrist point of view to appeal to a Mainland Chinese overseas reader, which became a big part of their readership (Zhou and Cai 2002:431). When Min Zhou and Guoxuan Cai wrote about Chinese language media as a tool for assimilation in 2002, they described an immigration environment in California driven by uptown Chinese, writing that “online media users are predominantly middle-class professionals who are not only well-educated, but also English-proficient and assimilated” (Zhou and Cai 2002:432). They distinguished between the immigrants who used online media, and those who relied on television instead, who “tend to be non-English speaking, older, and more recently arrived” (Zhou and Cai 2002:432).

Today online access is no longer just for the privileged few, and there has been a proliferation of online newspapers as well as widely available print editions of many Chinese language newspapers. In their study, Zhou and Cai interviewed people in the Los Angeles area, testing some on their knowledge of current events. They found that even those who did not speak English were remarkably well-informed about current events, from N.B.A. scores to U.S. politics, through reading the Chinese papers (Zhou and Cai 2002:435).

The locally produced newspaper forums and TV and radio programs routinely discuss topics that are of special interest to immigrants – such as how changes in immigrant laws

affect them, how to invest in their children's education, how to purchase and finance a dream home, how to apply for a business loan, how to bridge the generational gap between them and their teenage children, and so forth.

(Zhou and Cai 2002:435)

The authors observed that media have a “subtle but profound” affect on reinforcing the values of educational achievement and financial success, for example by running feature stories about students who win awards and get into good schools, and by advertising Chinese run businesses (Zhou and Cai 2002:436). They found that Chinese language media worked to acculturate readers into western ways, acknowledging that it was counter-intuitive for Chinese language “media to contribute to acculturation when the key measure is the adoption of the host language” (Zhou and Cai 2002:436). The examples they give include small behavioral changes, like readers eating take-out food from restaurants that advertise in the newspapers and immigrants exercising their newfound democratic freedoms by writing letters to the editor. They concluded that ethnic media ease loneliness and isolation and fill an informational gap by providing information about how China's politics and economy affect relatives back home and about U.S.-China relations (Zhou and Cai 2002:437). They also ultimately acknowledged that the ethnic media provide a disincentive for people to expand their circle beyond the Chinese ethnic enclave.

[They] may be well informed about what is going around them in their community, but they may not be compelled to make friends with their non-Chinese neighbors for reasons like the lack of English proficiency as well as the perceived low instrumental value of such personal relationships.

(Zhou and Cai 2002:438)

As important an activity as reading newspapers was among my sample, it bears a complex relationship with the secondary digital divide and the desirable goals of improved assimilation and social support. Reading the news in the language they are more comfortable with may not

enhance their English language skills nor encourage making friends outside the ethnic enclave, but the news does serve its main purpose, of making residents better informed.

Other online activity can also have a mixed impact on their assimilation in a new community in the U.S. and to learning English. As I discussed in chapter 3, Ben [informant #1] who spent a great deal of time online every day keeping in touch with friends from grade school, even after many years in the U.S., acknowledged to me that he felt uncomfortable about his lack of fluency in English and more connected with the life he had left behind. He eventually moved back to China. Zhi Yang [informant #53] also reported that his parents, who were very actively using QQ Talk to see their family in China on the computer, had little sense of belonging in the U.S., and expected to move back to China in retirement.

The robust growth of QQ as a web portal with entertainment and shopping functions as well as a search engine carries with it potential limitations on users' progress in making the fullest use of the tools of the technology. Paul Dimaggio, Eszter Hargittai, Russell Neuman, and John Robinson (2001) wrote about how portals and search engines are gatekeepers that affect commodification of information, as well as how relatively few sites people use, when letting a popular portal or search engine (often ad-based, as QQ is) navigate for them. They also highlighted new concerns regarding the digital divide, saying that

..research on inequality in access to and use of the internet [should give priority to] not just whether or not one has 'access,' but inequality in location of access (home, work, public facilities); the quality of hardware, software, and connections; skill in using the technology; and access to social support networks.

(Dimaggio et al. 2001:314)

Many of the gaps in research on inequality that concerned Dimaggio et al. in the above quote were areas I investigated in my study, especially location of access, software used, and access to social support networks.

Although QQ offers an important social connection for transnational networks of Chinese internet users, using it exclusively seems to perpetuate a focus on existing social networks that limits development of English language skills and using the technology for other purposes. It may also limit their exposure to information not readily offered by this ‘gatekeeper’ portal, in a similar way that America Online (AOL) did for English-speaking users during its dominant years in the early days of the internet. This suggests a direction for further research on the actual web pages and applications that internet café and QQ users access, as it relates to their ability to claim the technology for their own. Most of my informants knew how to find the games, movies, and music they wanted, but only about a third of the women reported ever looking up general information online. Interestingly, Eszter Hargittai assessed computer users’ skills in finding information online and found that there was a negative correlation with having children in the home; in other words, those who had children at home were unexpectedly less skilled at doing internet searches (*in* Howard and Jones 2004b). Hargittai posited that people were getting their children to look things up for them and as a result were not developing new skills of their own. As discussed in chapter 2, most of my informants live in family households, and having young people around may keep some adults from developing the most robust information-seeking skills of their own, especially where the children’s English-language facility is greater. Several people told me they rely on their children to look up information for them, but a test of users’ skill-level correlated with household composition data is not something I attempted, and could be incorporated into a future study.

It is not only in looking up information but in *giving out* information that people in Sunset Park vary somewhat from national norms. U.S. citizens are more generally inclined to give up a great deal of information about themselves online in pursuit of some benefit put forth

by corporate marketing strategies, or what has been called the “commodification of privacy” (Campbell and Carlson 2002). This group of internet users in Brooklyn’s Chinatown, however, are somewhat less inured to handing out personal information online, using pseudonyms even with their friends on QQ. Two of my informants reported relying only on memory to tell which pseudonym on QQ belongs to which friend, as no one uses their real name. In contrast to that concern for online anonymity, however, there is no expectation of privacy in the actual usage of a rented computer in the internet cafés in Sunset Park. People mill about looking over the shoulders of others and commenting on what they are each doing on their computers.

When I began my study the public/private domains were clearer, with the choices being between home access and public café, library, or school. The proliferation of smart phone mobile devices -- in effect affordable micro-computers – occurred after my fieldwork had ended and is something that further research could address. One unanswered question is how will the ability to own a hand-held device that accomplishes much of what an expensive home computer could do change the way people in Sunset Park acquire and use ICTs. Qiu (2009) found working-class people in China to be information have-less in part because they were often using cell phone technology as a substitute for fuller internet access. Since there are many functions that even the best smart phone cannot provide, like filling out a government form or job application, such an adaptation could actually widen the secondary digital divide in Sunset Park. Another question is whether the internet café phenomenon will persist in a new era of the availability of more affordable individual devices (i.e., smart phones that cost less than \$100 a month to use and can access data via free wi-fi networks); another question is how that might change the social experience of the internet cafés, which young people have been using as gathering places.

Literacy, Education, and Generations

The improvement in literacy and education that China has achieved in recent decades means that the working-class people arriving in Sunset Park from China, often with only a few short years of formal education, are not only literate enough to be voracious readers of the news, but also able to achieve a comfort level with ICTs that fits the overall Asian American profile of high computer literacy. Even those young adults who were unable to complete high school usually received some computer training, required in school in China now. The older generation, who have often been in the U.S. longer or are arriving to join their adult children under U.S. immigration's family reunification policy, can read but usually not type in Chinese, not having had the in-school computer training that focuses on typing or word processing skills. This older group has the hardest time making use of the textual communication possibilities of chat and e-mail, but they still enjoy face-to-face webcam conversations with family and relatives in China.

Despite the rigorous schooling that allows most to read and write enough Chinese characters for basic literacy, the people I met find letter-writing too difficult and time-consuming to compete with real-time discussions by phone or online. The need for written Chinese in transnational communication had already been diminished by the telephone, and is now reduced further by internet calls. One 27 year-old man [Kevin, informant #28] told me that "only girls write letters," but in fact most people I talked to of both sexes only spoke of writing letters as something they had done in the past. Most of the people I met were so many years removed from the era of frequent letter-writing that no one even bemoaned the loss of letters that can be physically handled, re-read, and saved for posterity. As Mirca Madianou and Daniel Miller (2011) found in their research on transnational communication among generations of Filipinos

historically (via letter and audiocassette), something may be gained by the simultaneity and interactivity that new media permit, which more than makes up for the change:

Far from concluding that this letter and cassette tape-mediated communication was satisfactory or successful (although there are individual positive stories), we have shown that the key limitations of both letters and tapes – their lack of interactivity and simultaneity – exacerbated inequalities in these parent-child relationships. The time lag between sending and receiving these communications also partly explains how communication often ended up becoming a more formalized or ritual exchange that was as much an expression of cultural obligation as of personal feelings.

(Madianou and Miller 2011:269-70)

Miller and Madianou concluded that the decline of letter-writing may not be such a bad thing, since the interactivity and simultaneity of modern CMC between family members made possible warmer personal exchanges than formal letters and tapes. I did not review any letters written or received by Sunset Park residents, but I did hear frequent rejections of the slowness of that medium, and many of my informants have trouble either typing or writing in Chinese. Second generation youth, bilingual at home, can usually speak but not always write or type Chinese, so their heavy computer use is usually in English, except for chat on Skype or QQ with cousins and friends in China.

When it comes to spoken English, first and 1.5 generation immigrants also struggle with language facility, even if they studied some English in school, compulsory now in China. They may lack the confidence to use computers in other settings where they assume fluency in English is expected, like the library. Cybercafés where the manager and other clients speak their own Chinese dialect therefore fill a need, including serving informally as a community center for the young men who use them the most heavily. Whereas young men and boys may have more freedom to spend time in the internet cafés, imprinting these spaces with such masculinity that far fewer girls are bold enough to enter, the gender divide does not reflect overall ICT use when

home and school use is factored in. In those private and institutional spaces, women and girls are just as active, and communicating in similar ways, playing games as well as reading the news and chatting with friends and relatives online. Women are more active users of e-mail and men IM more, but both are active on QQ, as well as playing games.

Gender is not an important determining factor for ICT use outside of the cybercafé environment, as online activities and time spent on the computer were similar for my male and female informants, both youth and adults. There was a gender divide, however, among the oldest group; some elderly men reported being quite active online, but no elderly women did so, and they were often too busy taking care of children and grandchildren and their homes to talk to me. Kan Leung, a 75-year-old man from Guangdong province (pictured at the beginning of chapter 5) and his wife are examples of this. Retirement for him -- from garment factory work -- means having the leisure time to spend many hours a day online, enjoying classical Chinese music and reading the news of China and the U.S. on *Namfang* and *Singtao*. After fifteen years in the U.S., he still has a great many relatives and friends he keeps up with in Guangdong, but he calls them on the phone and does not do any online chatting, use e-mail, or look up information, only using the computer for personal entertainment. His wife was busy cooking while I talked to him, however, and did not participate in our conversation, though he told me she does not know how to use a computer. This age-related gender divide probably says more about the gendered division of labor in the household than it does about older women's innate interest in ICT use. A recent analysis of the gender differences in internet use reported by a range of communications researchers also concluded that life stage, such as marital status and employment, is an important contributing factor to observed differences between men and women's online activity (Helsper 2010).

Youth, Education, Gaming

The dominant discourse in Sunset Park about the young men who are heavy internet café users – that is, the widespread carping about truant youth hanging out in internet cafés – corresponds not only with what Jack Qiu observed in China but also with what Mary Yu Danico and Linda Trinh Vo reported in their study in California. Qiu (2009) found the anti-café narrative in China to be a class-based critique, since only the poor need avail themselves of the cheap computer access and camaraderie of the cybercafé. Qiu also found it reflected in the state-sponsored news items and public discourse he analyzed. Likewise, Danico and Vo (2004) observed that complaints about violent game content in California were only raised about the working-class Asian American cafés, not those in the more upscale areas and shopping malls.

The discourse in Sunset Park about the younger generation in cafés also expresses a rather harsh judgment against youth whose home-lives are empty enough to make the cafés appealing as a community center. The disapproval also reflects the education-first attitude of this striving population, whose aspirations are grounded in education for the next generation. It is true that some young people who are falling through the cracks of the stressed public school system in Brooklyn or who lack supervision at home may spend time in cafés during school hours, time that often centers around gaming. Staying out of school and in a comfort zone where English is not required could hinder them from moving beyond the structural limitations put on them by their families' economic situation.

There may be some truant youth in the cafés, but in fact as a group, Asian students in New York City have a higher four year high school graduation rate than any other ethnic group: 82 percent, versus 78 percent for white students, 60 percent for black students, and 58 percent for Hispanics (NY City Department of Education 2010). The high rate for Asian students includes

those who are not English as a Second Language (ESL) learners, however, and graduation rates for ESL students are much lower, just 46 percent citywide. Girls also graduate at a higher rate than boys: 87 percent for Asian girls, versus 77 percent for Asian boys, and 64 percent for Hispanic girls versus 52 percent for boys. For black students, the four-year graduation rates are 67 percent for girls versus 53 percent for boys, and for whites, 82 percent for girls versus 74 percent for boys. At one of the high schools in Brooklyn attended by many Sunset Park residents, F.D.R., which has a high number of ESL students, the dropout rate in 2006 for Asian students was low, just 14 percent, versus 21 percent for blacks, 26 percent for whites, and 28 percent for Hispanics. The overall dropout rate for Brooklyn for that year was 12 percent. The percentage of those reading at grade level at F.D.R. is also quite low (22 percent), but at least in terms of dropout rates, hanging out in internet cafés and gaming is not having the negative effect on Sunset Park youth that disapproving adults fear. All data are from the New York City Department of Education (schools.nyc.gov).

Yet it is not only among Chinese Americans striving for upward mobility that computer/video games are talked about as if they are at best pointless and potentially quite harmful. Sherry Turkle (2004) examined issues with gaming, concerned with how the opaque simulation of games kept players from needing or even wanting to know how the operating system works, or from understanding more than they need to progress to the next level in a game. Steven Johnson (2005:17) presented the harm of gaming as conventional wisdom by citing the venerable pediatrician Dr. Spock, who wrote that video games are time-wasters, which foster aggression in children. But Johnson then went on to challenge this, with a step-by-step examination of the increasingly complex games that are popular today, and the problem-solving, persistence, and analytical thinking that they require.

Johnson asserts that creating worlds of meaning and order through complex decision-making is part of the joy of these psychologically involving computer games (Johnson 2005:62). Likewise, the games favored by the young people who frequent the cafés in Sunset Park are not just violent games for the trigger-happy, but draw the players into successfully navigating a lot of information in order to move to the next level, just the positive outcome Johnson extols. Johnson also acknowledges, however, that games today have a rewards-based pattern and that neuroscientific studies show they can trigger an addictive response in the brain. While gaming can be social and even require some intellectual involvement, some gamers in Sunset Park do no doubt get too caught up in the experience, to the point of addiction, as Danico and Vo (2004) observed in the California cafés. Danico and Vo found that people in the southern California Asian American community talked about games as “online heroin” (Danico and Vo 2004:186). The authors found some apparently addicted players in the California cafés they visited, including one who spent at least five hours a day playing games, but they found that to be atypical, concluding that the cafés were more commonly a safe place and an inexpensive retreat for otherwise at-risk youth. They also pointed out that the violence in the games is less graphic than what can be seen on television and in film today.

Based on my research, I agree with Danico and Vo that the cafés can be a reasonable alternative for working-class youth to have a place to ‘hang out’ in the neighborhood. The draw of the cafés seems to be more about the camaraderie that can be found there than access to software and games, since even those youth who can afford home computers and games still enjoy the communal setting. The situation of these young people in Sunset Park has important correspondences with that in China. Jack Qiu (2009) observed that even among low-income families in China, children from one-child families may benefit enough from the combined

resources of parents and doting grandparents to obtain their own ICTs. Yet he also observed youth going to cafés in groups and attributed the time spent together as an important part of the experience for isolated, urban, only children (Qiu 2009:132). Like Qiu, I found that playing computer games, for the youth in Sunset Park as with those in China, is not an isolating experience, but quite social. Following Johnson's evaluation, I tend to agree that such gaming can be more than mindless time-wasting, potentially allowing players to develop cognitive skills as well as English language facility, as some of the games and banter while playing them are done in English.

A 2011 Horizon Report, a collaborative effort of the New Media Consortium and the Educause Learning Initiative (non-profits supporting the use of information technology in education), which drew on expertise in education, technology, business, and other fields, attempted to forecast what emerging technologies' impact will be in the next five years. The report concluded that "the greatest potential of games for learning lies in their ability to foster collaboration, problem-solving, and procedural thinking," with the prediction that "the realization of this potential is still two to three years away" (Johnson et al. 2011:5). Of course, their projections were based on games that are designed for learning and can be incorporated into a curriculum, even if they mimic their entertainment counterparts, like World of Warcraft. The game-playing youth of Sunset Park would be an excellent test group for educational games of this type, to see whether certain pedagogical challenges could be better addressed by role-playing games than by traditional teaching methods for the ESL learner in an underfunded Brooklyn high school classroom. Although my research has not extended in this direction, there are opportunities for future studies that address the educational challenges faced by people in this community and also draw on their embrace of ICTs.

As I have shown, it is not only youth that are playing games, taking into account home use as well as in public spaces. Of those I interviewed in all age groups, 36 percent reported gaming, versus 13 percent of U.S. residents nationally. With their high rate of online activities that are commonly associated with young people, especially games but also internet calling, adults in my research sample are statistically more like youth in the U.S. nationwide. Sociologist Adela Ros also observed this phenomenon, in her research on new technology use among immigrants in Catalonia, finding that they used the internet more than the native population, and more like the young people in the nation overall:

One could argue that age could be affecting these results, because the immigrant population is younger than the native population. However, ...immigrants..have usage patterns more similar to young natives (between sixteen and twenty-nine) than to older ones. This is very clear in the case of Webcam use.

(Ros *in* Alonso and Oiarzabal 2010: 28)

Ros also concluded that keeping in touch via ICTs before migrating means that people now have more information than they used to, allowing them to have somewhat more realistic expectations about their new home, albeit somewhat undermined by glamorous images proffered by other media like television (Ros *in* Alonso and Oiarzabal 2010: 29). Further study in Sunset Park could include this issue, i.e., to what extent people used ICTs in preparation for immigrating, if/ how it shaped their decision to move and their expectations, and how closely those expectations tracked with the reality they found after immigration.

Diasporic Identity and Political Networking Opportunities

Clay Shirky (2008) wrote about how QQ and Twitter enabled people to get the word out instantaneously about the earthquake in China's Sichuan Province in 2008, and to maintain protests about the faulty construction of schools, which exacerbated the natural disaster's devastation. The instant presence online (Shirky reported that a Wikipedia page was created

within forty minutes) was enabled not just due to the undersea cables that made it technologically possible but also because of the “invisible bundle of connections between people on both continents” (Shirky 2008:294). He saw big implications for the future from this event, when “QQ enabled anyone with a camera-phone to be both a private citizen and a global media outlet” (Shirky 2008:297).

Shirky’s position on group organizing possibilities online is a very optimistic one, and I did not find any evidence that people in my sample were embracing their newfound freedom in the U.S. through this kind of political blogging or activist networking. At the local level, as Tarry Hum pointed out, few Chinese in the area (and for that matter Latinos, who make up a larger segment of the neighborhood overall) are able to tackle the old-boy network of the local community boards in Sunset Park, to get a chance to shape policy, even on issues of most concern to them, like education (Hum 2010). There is an opportunity for further research here, in exploring the types of actions people take online and how increased ICT use affects their engagement and participation in political, religious, and social support networks beyond their family group.

The extent to which diasporic Chinese continue to identify with their nation of origin is something that Loong Wong (2003) considered in his essay about how they use the internet. Wong cited Arjun Appadurai (1997) in considering the belief that diaspora leads to a revived nationalism. Wong’s own encounters with websites and online discussions geared toward Chinese communities in locations outside China showed instead that “they attempt to draw together very specific notions of community that involve sharing the same physical and digital space and time.” He concluded that “their independence and autonomy demonstrate that they are not transmission belts conveying the ‘Chinese nation’ project; they may indeed be critical of

such aspirations and have their own agendas" (Wong 2003). My impression of the outlook of Sunset Park residents I interviewed is that they remain actively interested in the news from China, but that may mean news about celebrities, media, and culture more than politics, as they busy themselves with the daily challenges of making a living and preparing a good future for their children in the U.S.

Conclusion

The working-class Chinese residents of Sunset Park achieve a level of ICT access and use that is comparable to that of Americans overall, and in some activities surpasses it. Many of the activities they report favoring have an entertainment focus, and enhance their limited leisure time and personal relationships. The number one activity people do online is reading the newspapers, something they did before in print, and most still read print newspapers but enjoy the savings of access to the online version. Some also enjoy looking up information but many do not have the skills to make full use of all applications or access the internet via any portal other than QQ. Even those whose access and ICT use are not limited by this secondary digital divide cannot overcome the other life hurdles they face, even with their enthusiastic embrace of technology. Their high level of ICT use is no panacea for reducing a structured social inequality that is a fact of life in ethnic enclaves like Sunset Park.

As an anthropologist studying new information technology, David Hakken wrote that he has learned "the necessity in cyberspace studies to balance acknowledgment of the potential for transformation with the reality of continuity" (Hakken 2003:27). Despite all I have said about burgeoning ICT use, it is worth noting at the end that the telephone remains the most important tool for transnational networking in Sunset Park. Most people use a combination of communication strategies, however, and their practices vary by the relationship and the setting.

The popular VoIP calls -- on QQ or Skype -- are almost exclusively used with family, often across generations, while text messages are almost always between friends, usually both young. Sherry Turkle showed that with all the choices available to people now – email, texting, instant messaging – they expect more from a phone call, that it will be a richer and more demanding experience, and so reserve it for family (Turkle 2011:188).

As I have described, the struggling Chinese immigrants in Sunset Park use their computers for regular VoIP conversations that have the richness people want from phone calls, with the enhancement of also seeing each other onscreen. Their transnational relationships with relatives have a fresh and personal immediacy because of these calls, made easier now that economic development in China ensures that more and more people there have computers as well. Because the younger generation in the U.S. often speak but do not read Chinese, while the older generation may not know how to use the keyboard to type Chinese, their connections with family in China often veer more toward oral conversation than to typed-out messages. There is broad participation and a possibility of real satisfaction for the family, as multiple generations on each end hover around the computer during the call. Similarly, the Sunset Park internet café experience is surprisingly social, since young people use the cafés as places to meet friends at least as much as places to go online.

A question that remains unanswered is how adaptations like these will evolve, both among working-class Chinese in Sunset Park and within individual families as they rise in prosperity. To what extent will they come to experience digital technologies as alienating in the way that some Americans already do? One academic who writes about this anomie and lack of face-to-face interaction is Sherry Turkle. In an April 2012 opinion piece in the New York Times, Sherry Turkle wrote about the alienation experienced by average Americans, their ever-

increasing links to technology-based communication, which come with less actual conversation and less feeling of connection. She made a distinction between the slow progression of a face-to-face conversation, building meaning and understanding along the way, versus communication mediated by technology and conducted asynchronously. Turkle showed that we are ‘communicating’ more but experiencing it all as rather lonely and are also less able to create personal meaning in solitude. People experience instead a lack of fulfillment that makes them want to share Facebook updates in order to feel, rather than first having the emotion and then choosing to communicate it to friends and family the old-fashioned way, like telephoning:

We are tempted to think that our little “sips” of online connection add up to a big gulp of real conversation. But they don’t. E-mail, Twitter, Facebook, all of these have their places — in politics, commerce, romance and friendship. But no matter how valuable, they do not substitute for conversation. (Turkle 2012: 1)

It is not yet possible to see to what extent the people I interviewed in Brooklyn's Chinatown will share this wired but unsatisfying future, the personal alienation of this over-reliance on asynchronous, computer-mediated communication. Although I have presented technological access and facility as desirable goals, there is also a possibility that attainment of these goals and increased cultural capital will come at an unexpected price; pleasure could turn into pain and the mainstream, middle-class scenario Turkle described.

Will the popular internet calls remain an important adaptation and the strong transnational connection endure for those who succeed in attaining their life goals for themselves and their children? Within the family, young people are setting up the internet calls for their parents and grandparents; as they grow up and move away, the older generation may switch back to traditional phone calls rather than learning new skills. In addition, there is no guarantee that the cafés will continue in the future, in light of the development of new technologies and other inexpensive ways to network online. There were more cafés when I revisited Sunset Park than

when I began my study, but fluidity and change are the watchwords of communication technology. As young people grow up and their families gain financial security, they may move more toward ICT use at home, in relative isolation, except from their own nuclear or extended family members. Yet perhaps adaptations within the ethnic enclave setting will continue to be more transnational, family-oriented, and social than elsewhere given the use that people make of home computers, at the end of a long work-day in which computer use played no part. These are questions for another day, as computer-mediated communication continues its evolution, along with the shifting spaces of Sunset Park.

New immigrants are moving into Sunset Park all the time, bringing with them new needs. Families also move away from the ethnic enclave to new neighborhoods that are not so oriented toward providing for Chinese language services, as the Lius did toward the end of my study, when they were able to purchase a small home in the primarily white Sheepshead Bay section of Brooklyn and move away. The boundaries and make-up of the community are always changing, just as they have in years past, when waves of immigration transformed Sunset Park from a Norwegian neighborhood to the primarily Latino and Chinese one it is today and established the digital diaspora in Brooklyn's Chinatown.

Appendix A

Methodology

In order to obtain in-depth interviews with residents of Sunset Park in Brooklyn, New York, I chose to select an area of the neighborhood to focus on. I would then send each household an introductory letter and follow up with a weekend visit, when more of them were likely to be at home. Paired up with a Chinese American student who lives in the neighborhood and works at the Sunset Park library, I surveyed the neighborhood, identifying blocks with a high number of Chinese-occupied residences (often identifiable by shiny chrome gates and front doors, paper hangings, or distinctive outdoor décor). Using real estate agent software, I prepared a mailing to every household on those blocks for which the primary contact had a Chinese name. After sending out that letter, I began weekly visits; when those possibilities were exhausted, I sent another mailing to another block, and so on until I had obtained 55 interviews.

The response varied widely. I knocked on 419 doors in order to obtain 55 semi-structured interviews, a 13 percent response rate (7.8 bells rung for each interview obtained). I talked to people whose time in the U.S. ranged from a few days to a few decades, and those who agreed to be interviewed were about 65 percent male and 35 percent female. Elderly women home alone were the least likely to agree to be interviewed, although I was able to talk with a few. Ages of respondents ranged from 13 to 74.

Cantonese speakers and Mandarin speakers (as well as some whose primary language is yet another dialect of Chinese) live together on the same blocks, although often one language dominates. Because my own Chinese language instruction was in Mandarin, and in order to ensure that no nuances were missed, I had a research assistant, who spoke both fluent Cantonese

and Mandarin, accompany me on every interview. She generally asked the questions, while I took notes and suggested follow-up questions; I also tape-recorded where the interviewee gave permission, which was rare. Besides general demographic information, I talked to them about relationships, lifestyle, and attitudes toward not only computers but also other new information technologies, like cellphone text messaging. See Appendix B for a list of the questions that generally structured these interviews. My final interviews were with managers of the computer stores that serve Chinese American families in the area. Note that I did not explicitly ask about QQ in my question number 19 about social networking, as I only gradually understood its importance when people mentioned it in interviews.

A list of all informants with information on their household composition is in Appendix C. A summary of educational backgrounds for my sample is in Appendix D. U.S. Census data on household composition for all of Sunset Park is in Appendix E, and sample QQ text chats are in Appendix F.

Appendix B

Interview Questions Sunset Park research

1. What is your name?
2. How old are you?
3. How long have you lived in the neighborhood?
4. Where did you live before? *> if China, what province, city, town, etc.?*
5. Do you use a computer at school, at home, at work, or anywhere else, at least occasionally?
> if yes, go to 6; if no, ask
Did you ever at some point use the internet or e-mail, but have since stopped?
> if yes, choose reason: no longer have access, lost interest, too expensive, had problems with viruses, too difficult/frustrating, was spending too much time online/waste of time, had problems with spam, other
> if no, ask
What is the main reason you don't use the internet or e-mail? *not interested, don't have access, too difficult/frustrating, too expensive, too busy/just don't have the time, think it's a waste of time, worried about computer viruses, worried about spyware and adware, other, don't know*
6. Do you have a computer at home? *> if yes, what kind (e.g. PC, laptop)?; > if no, go to #11*
7. Who uses the computer? *> if 'kids', 'parents', etc., ask how many people are in household and their ages*
8. Is your computer connected to the internet?
9. How (cable, DSL, dial-up modem, wireless)?
10. About how long have you had access to the internet? *> in years or months*
11. Do you use a computer at work or school? How often? What for?
12. Do you use free, public computers, like the ones at the library?
13. Do you go to internet cafés? How often? Which ones?
14. What do you do there? *> if games, which ones, and are they played interactively online?*
15. What days and times do you usually go?
16. Do you meet your friends there?
17. Tell me about your experiences at internet cafés and/or the library, and how it is different from using a computer at home.
18. How often do you go online? *> several times a day, about once a day, 3-5 days a week, 1-2 days a week, every few weeks, every few months, or less often?*
19. What different ways do you use computers and the internet? *> Ask specifically about and get details for:*
 - E-mail
 - Reading newspaper – which ones?

- *Listening to music*
 - *Watching DVDs*
 - *Instant messaging*
 - *Games – which ones?*
 - *Chat*
 - *Blogs – maintain one’s own, read others, post?*
 - *Study or schoolwork*
 - *Info -- on Health? Religion? Community? Education? Government?*
 - *Social networking sites like Facebook or MySpace*
 - *Dating and romance*
 - *Pornography*
20. Do you still have friends and family in China? *>get details*
 21. How do you keep in touch with them? *>phone? E-mail? Letters?*
 22. How often? *>if e-mail, Skype, etc. – do they have computers? What software do you use to type in Chinese? if IM, use pinyin?*
 23. What other devices do you use? *> e.g. Blackberry, Palm Pilot, cell phone for text messaging*
 24. Tell me how you feel that these technologies (including computers) have affected your day to day life.
 25. Do you think using the internet has INCREASED, DECREASED, or NOT REALLY AFFECTED (a) the number of people you feel very close to in your life; (b) number of people you feel SOMEWHAT close to; (c) number of casual acquaintances in your life
 26. What kind of work do you do?
 27. How far did you go in school? *>if went to school in NY, which one?*
 28. Did you use a computer there?
 29. When did you first start using a computer? *>if at home, what caused you to buy it?*
 30. How did you learn? *> e.g. from a book, from a friend, from a family member; if in a class, which one?*
 31. What motivated you to learn?
 32. Which things do you use English for on the computer? How much do you use English for what you do on the computer, and how much do you do in Chinese?
 33. Where do you get your news from? TV? newspaper? Online or print? English or Chinese?
 34. HH income *>paper with income levels to be checked off and put into sealed box anonymously*
 35. *If not already covered in previous answers, also ask:* What impact do you think computer technology has had on your settling into life here in the United States?

Appendix C

List of Sunset Park Residents Interviewed and Their Household Composition

Informant	Name	Gender	Age	Occupation	Job Status (if not active)	Other Household Members	Total in HH
1	Ben	male	31	internet café manager		2 adult siblings (M and F), parents	5
2	Ray Wong	male	60s	library employee		wife	2
3	Jenny Liu	female	17	library employee, student		sister, 13, parents, 30s, maternal grandmother	5
4	Irene Chang	female	40	hotel maid		2 teenage daughters, husband, mother	5
5	Tami Hsu	female	40s	library employee		teenage son and daughter, husband	4
6	Kan Leung	male	75	garment factory work	retired	wife	2
7	Wallace Louie	male	40s	restaurant employee		his sister and her small children	4
8	Zhiwei Lin	male	32	restaurant employee		his wife and their 2 small children	4
9	Mr. Sit	male	50s	cook		wife	2
10	Calvin	male	17	student		his brother, sister, mother, and mother's brother	5
11	Mrs. Tang	female	60s	seamstress	retired	her husband and their son, about 30	3
12	Mei Yue Wu	female	29	restaurant employee	unemployed	roommates (husband works out of town)	unknown
13	Choi Wing Lee	female	60	home attendant		none	1
14	Edwin Lee	male	58	electronics technician		his wife and son, 27	3
15	Mr. Hsu	male	30	truck driver		his parents	3
16	Mr. Tang	male	37	driver		his wife and their daughter, 7	3
17	Jia Ling	female	30	housewife		her husband and their son, 5, and baby daughter	4
18	Vincent Zheng	male	18	none	unemployed	his parents and younger brother	4
19	Ken	male	21	none	unemployed	his parents and 1 sibling	4
20	Johnny Qing	male	20	none	unemployed	his parents	3
21	Eric Li	male	32	cook		roommate	2
22	James	male	23	internet café employee		his mother	2
23	Qi Wing Mark	male	34	printer		his brother and his nephew	3
24	Liang Chen	female	24	housewife		her husband (a cook), their children, sister-in-law	5
25	Hok Lee	male	25	finance employee		his parents and brother	4
26	Jia Liang Lin	male	54	cook		wife; son, 22; daughter, 26	4
27	Andy Lau	male	26	IT consultant		wife	2
28	Kevin	male	27	sushi chef		two brothers, 29 and 22	3
29	Ms. Luo	female	43	housewife		son, 18, and his sibling, 7	3
30	Stephanie Wang	female	23	college student (works on campus)		her parents and two cousins, 9 and 12	5
31	Bobby Shi	male	14	high school student		his father (restaurant owner), mother (a housewife), and uncle	4
32	Mr. He	male	40	construction worker	unemployed	his mother; son, 14; son's one sibling	4
33	Hua	female	17	high school student		her parents; sister, 9, and cousin, 10	5
34	Kelly Ng	female	24	high school English teacher		her mother; grandmother; uncle, 44; brother, 14	5
35	Charlie Mo	male	18	college student		his mother	2
36	Meiling Lin	female	18	college student		her cousin, 36; cousin's husband; their 2 toddlers	5
37	Thanh	male	24	watchmaker		sister, 19	2

Appendix C

List of Sunset Park Residents Interviewed and Their Household Composition

Informant	Name	Gender	Age	Occupation	Job Status (if not active)	Other Household Members	Total in HH
38	Jie Chen	male	60s	restaurant worker	retired	his wife	2
39	Alvin Fung	male	55	chef	unemployed	son, 22	2
40	Mai Tran	female	55	cashier	unemployed	daughter, 30; son, 24	3
41	Ling	female	26	cashier	unemployed	roommate, 30	2
42	Qi Zheng	male	37	restaurant worker	unemployed	his wife and their baby	3
43	Wen Bin Lin	male	59	restaurant worker	retired	his adult son and small grandchildren	unknown
44	Hongqian Ma	male	23	college student		sister, 25; mother; sister's baby	4
45	Kit Tang	female	31	bank teller		parents in their 50s; 2 adult sisters, brother-in-law, 30s; sister's 4 children: 5, 13, 11, and a baby	10
46	Jingchen Wang	male	25	sushi chef		his sister, 26	2
47	Monique Liu	female	13	student		parents, about 40, grandmother, 74; sister, 17	5
48	Ai Lian Li	female	74	garment worker	retired	daughter, 40; son-in-law, 38; granddaughters, 17 and 13 (the Liu family)	5
49	Dehua Liu	male	38	cook		wife, 40; mother-in-law, 74; daughters, 17 and 13	5
50	Hai	male	unknown	computer store employee		unknown	unknown
51	Mr. Zhang	male	unknown	computer store employee		unknown	unknown
52	Billy	male	unknown	computer store employee		unknown	unknown
53	Zhi Yang	male	18	student		his parents, and brother, 22	4
54	Lili Zhang	female	20s	college instructor		roommates	unknown
55	Shan Feng Lian	male	24	internet café employee		brother, 22, and their parents	4
Average household size							3.6

Appendix D

Educational Background for Sunset Park Residents Interviewed

Education in China only

less than junior high	6
junior high	7
some high school	3
high school	7
some college	2
college	2
post-grad degree	1
	28

Education in both China and the U.S.

junior high, China; some high school, U.S.	3
junior high, China; GED, U.S.	2
junior high, China; high school, U.S.	0
junior high, China; GED & some college, U.S.	1
junior high, China; HS & some college, U.S.	3
high school, China, some college, U.S.	2
	11

Education in the U.S. only

less than junior high	1
junior high	2
high school	1
some college	2
college	1
some post-grad	1
	8

Data Unavailable 8

Total Informants 55

Appendix E

Sunset Park Population by Household Composition

Variable Group	11220, Brooklyn, NY	ALL OF USA
Zip Code		
# Households (HHs), 1990	25,834	91,986,540
# Households (HHs), 2000	28,991	105,480,101
# Households (HHs), 2010	29,977	118,402,143
# Households (HHs), 2015	30,316	124,054,545
% Non-Family HHs, 2010 Inc	25.87%	31.77%
# Non-Family HHs, 2010 Inc	7,755	37,615,186
# Non-Family Pop, 2010	9,731	44,257,413
% Non-Family Pop, 2010	10.02%	14.35%
# Other (Non-Married) Families, 2010	7,702	18,998,524
% Other (Non-Married) Families, 2010	34.66%	23.52%
HH, Average Size, 2010	3.21	2.54
HH, Median Size, 2010	3.4	2.73
Household Growth, 2010	3.40%	12.25%
# Families, Female HHer, No Husband Present w/ Children Under 18, 2010	2,992	8,162,103
% Families, Female HHer, No Husband Present w/ Children Under 18, 2010	13.46%	10.10%
# Families, Female HHer, No Husband Present w/ No Children Under 18, 2010	2,446	5,567,369
% Families, Female HHer, No Husband Present w/ No Children Under 18, 2010	11.01%	6.89%
# Families, Female HHer, No Husband Present, 2010	5,438	13,729,472
% Families, Female HHer, No Husband Present, 2010	24.47%	16.99%
# Families, Male HHer, No Wife Present w/ Children Under 18, 2010	845	2,679,014
% Families, Male HHer, No Wife Present w/ Children Under 18, 2010	3.80%	3.32%
# Families, Male HHer, No Wife Present w/ No Children Under 18, 2010	1,419	2,590,038
% Families, Male HHer, No Wife Present w/ No Children Under 18, 2010	6.39%	3.21%
# Families, Male HHer, No Wife Present, 2010	2,264	5,269,052
% Families, Male HHer, No Wife Present, 2010	10.19%	6.52%
# Families, Married w/ Children Under 18, 2010	8,091	26,914,156
% Families, Married w/ Children Under 18, 2010	36.41%	33.32%
# Families, Married w/ No Children Under 18, 2010	6,429	34,874,277
% Families, Married w/ No Children Under 18, 2010	28.93%	43.17%
# Families, Married, 2010	14,520	61,788,433
% Families, Married, 2010	65.34%	76.48%
# Family HHs, 2010 Age	22,222	80,786,957
% Family HHs, 2010 Age	74.13%	68.23%
# Family Population, 2010	86,591	255,932,758

Source: United States Census Data, 2010 (Estimates)
from Simply Map Database, Geographic Research, Inc.

Appendix F

Four Sample QQ Text Chats

z'W 10:01:25 PM
来美国几年啦

☆~瑶~☆ 10:01:57 PM
3

z'W 10:02:16 PM
不错啊

z'W 10:02:19 PM
我才来 1 年

☆~瑶~☆ 10:02:55 PM
了不起啊

z'W 10:03:26 PM
哈哈。。你还真信啊。

☆~瑶~☆ 10:03:36 PM
不然呢

z'W 10:04:22 PM



后面加个 0

☆~瑶~☆ 10:04:55 PM
10 年

☆~瑶~☆ 10:05:08 PM
请让我叫你一声前辈

z'W 10:05:35 PM
好吧。。拜见前辈 可都是要礼物的啊

☆~瑶~☆ 10:06:09 PM



我比你大方给你 2 个

z'W 10:17:50 PM
=。 =

z'W 10:17:52 PM
谢谢妹子

☆~瑶~☆ 10:18:26 PM
不用太客气…我没损失钱 回复

z'W 10:25:37 PM



z'W 10:26:28 PM
fdr 中国人还很多吗

☆~瑶~☆ 10:30:03 PM
饿

z'W 10:01:25 PM
How long have you been in the U S ?

☆~瑶~☆ 10:01:57 PM
3

z'W 10:02:16 PM
that's great

z'W 10:02:19 PM
I've only been here for one year

☆~瑶~☆ 10:02:55 PM
amazing

z'W 10:03:26 PM
haha..you really believe it

☆~瑶~☆ 10:03:36 PM
if not, what then?

z'W 10:04:22 PM



add a zero to it

☆~瑶~☆ 10:04:55 PM
ten years?

☆~瑶~☆ 10:05:08 PM
please let me call you senior

z'W 10:05:35 PM
okay, but there's gonna be a price

☆~瑶~☆ 10:06:09 PM



I give you two

z'W 10:17:50 PM

=。 =

z'W 10:17:52 PM
thanks sister

☆~瑶~☆ 10:18:26 PM
you are welcome, I didn't lose any money

z'W 10:25:37 PM



z'W 10:26:28 PM
Are there still a lot of Chinese at FDR?

☆~瑶~☆ 10:30:03 PM
yes

z'W 10:32:08 PM

姐好

1s 、 SuwE1 10:32:55 PM

乖~~~~~

z'W 10:33:30 PM



1s 、 SuwE1 10:34:16 PM



z'W 10:42:19 PM

在干嘛呢

1s 、 SuwE1 10:42:54 PM

看电视 聊天 玩遊戲

z'W 10:45:14 PM

姐 做我师傅 一下子可以做这么多事

1s 、 SuwE1 10:45:42 PM

..我很经常这样呀..

1s 、 SuwE1 10:45:42 PM

哈哈哈

z'W 10:45:51 PM

玩什么游戏啊

1s 、 SuwE1 10:46:02 PM

iphone 的.

z'W 10:46:18 PM



z'W 10:46:36 PM

什么游戏好玩啊

1s 、 SuwE1 10:47:10 PM

那个..企鹅的

1s 、 SuwE1 10:47:12 PM

哈哈哈

z'W 10:47:26 PM

air penguin?

1s 、 SuwE1 10:48:00 PM

是啊是啊

z'W 10:48:18 PM



我玩到第 3 关就玩不过去了

z'W 10:32:08 PM

Hello, sister

1s 、 SuwE1 10:32:55 PM

good boy~~~~~

z'W 10:33:30 PM



1s 、 SuwE1 10:34:16 PM



z'W 10:42:19 PM

what are you doing?

1s 、 SuwE1 10:42:54 PM

watching tv, playing games, and chatting

z'W 10:45:14 PM

be my master, and teach me how can I do this many things at the same time

1s 、 SuwE1 10:45:42 PM

I always did that

1s 、 SuwE1 10:45:42 PM

hahaha

z'W 10:45:51 PM

what game are you playing?

1s 、 SuwE1 10:46:02 PM

it's on iphone

z'W 10:46:18 PM



z'W 10:46:36 PM

what games are good?

1s 、 SuwE1 10:47:10 PM

penguin

1s 、 SuwE1 10:47:12 PM

hahaha

z'W 10:47:26 PM

air penguin?

1s 、 SuwE1 10:48:00 PM

yes

z'W 10:48:18 PM




I have played to stage three then I died

z'W 1:27:23 PM
在干嘛

Jaylove/tsh 1:27:38 PM
玩 MHP3

z'W 1:27:54 PM

 好闷这几天

Jaylove/tsh 1:28:25 PM
去看电视吧..

Jaylove/tsh 1:28:33 PM
多看点爱情片

z'W 1:28:45 PM





Jaylove/tsh 1:29:05 PM
可能会帮到你啊

z'W 1:30:09 PM

 不需要啊

Jaylove/tsh 1:31:02 PM

 那你自己解决啦..我继续玩我的
MHP3..

我等了这么久才破解的 PSP.. 


z'W 1:31:14 PM



z'W 1:27:23 PM
What are you doing?

Jaylove/tsh 1:27:38 PM
playing monster hunter three

z'W 1:27:54 PM

 so boring these days

Jaylove/tsh 1:28:25 PM
go watch TV then


Jaylove/tsh 1:28:33 PM
watch more dramas about love

z'W 1:28:45 PM





Jaylove/tsh 1:29:05 PM
it might help you

z'W 1:30:09 PM

 I don't need to

Jaylove/tsh 1:31:02 PM

 I'm going to continue playing my game, I
waited so long for it to be unlocked.. 


z'W 1:31:14 PM



开心 6:06:41 PM
再不? 你哥说可以解锁了是吗?

开心 10:58:54 PM
zaibu

开心 11:37:33 PM
伟哥,

z'W 11:39:44 PM


开心 11:40:42 PM
我的手机什么时候可以解锁哦?

z'W 11:40:57 PM
你去中国买个卡贴不久可以了

开心 11:41:14 PM
贵,

z'W 11:41:20 PM
美国也一样

开心 11:41:29 PM
哦,

z'W 11:41:29 PM
不然也不办法啦

开心 11:41:42 PM
都几个月了怎么还不出

z'W 11:41:48 PM
应该是不出了

z'W 11:41:54 PM
你还是去买卡贴吧

开心 11:42:02 PM
不是吧,

z'W 11:42:09 PM
我不知道啦

z'W 11:42:12 PM
这种事谁知道


开心 11:42:59 PM
呵呵,

开心 11:43:13 PM 以后我要去当黑客

开心 6:06:41 PM
you there? your brother says it can be unlocked,
right?

开心 10:58:54 PM
you there?

开心 11:37:33 PM
Wei

z'W 11:39:44 PM


开心 11:40:42 PM
When can my iphone be unlocked?

z'W 11:40:57 PM
you need to buy a turbo sim card in China

开心 11:41:14 PM
it's expensive

z'W 11:41:20 PM
it's the same price in US

开心 11:41:29 PM
I see

z'W 11:41:29 PM
otherwise it can't be unlocked

开心 11:41:42 PM
It has been months. Why isn't unlock software out
yet?

z'W 11:41:48 PM
I guess I won't be doing any software unlock

z'W 11:41:54 PM
so, go buy the turbo sim card for the unlock

开心 11:42:02 PM
you kidding me?

z'W 11:42:09 PM
I am not really sure

z'W 11:42:12 PM
who knows these things?

开心 11:42:59 PM
hehe

开心 11:43:13 PM
I'm going to be an unlocker when I grow up

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