# Survival Needs and Social Inclusion: Technology Use Among the Homeless

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## ABSTRACT

This research reports an ethnographic study of issues surrounding digital technologies owned and used by homeless people in Los Angeles County. We identify two themes—survival and social inclusion—that reveal, in part, how digital technologies enable social ties for collaboration in the lives of the homeless.

**Author Keywords**

Homeless, digital technologies, social inclusion.

**ACM Classification Keywords**

K.4.m Social Issues. Miscellaneous.

**General Terms**

Technology Use, Digital Divide, HCI

## INTRODUCTION

There has been little attention paid to homelessness in CSCW and related fields [1,2]. Understanding the role of poor people as unexpected users of technology [1] and identifying challenges of working with, and designing for, homeless populations [2] have been key themes of current research. Many questions remain regarding the role digital technologies play in the lives of the homeless, and whether the use and ownership of these technologies put homeless at an advantage or disadvantage. Our hope is to add to findings about collaboration among friends and family [2] by extending analysis to consider collaborative activities that take place in the neighborhoods and cities where homeless live.

The everyday activity of the homeless comprises the basic functions that allow them and their communities to thrive, including survival needs of food, shelter and safety, as well as social needs. We adopt the notion that artifacts serve to mediate purposeful human actions that relate people to their immediate world [3,4], examining the ways digital technologies mediate survival and social needs for homeless people. We argue that although homeless are often seen as marginalized, isolated, and out of touch with society, they skillfully use digital technologies to promote survival and social inclusion in important arenas of activity.

## RELATED WORK

The most common definition for homelessness derives from the Stewart B. McKinney Homeless Assistance Act (1987) where homelessness is defined to include people who lack a fixed, regular, and adequate nighttime residence, and people with a primary nighttime residence that is (a) a supervised publicly or privately operated shelter designed to provide temporary living accommodations; (b) an institution that provides temporary residence for individuals intending to be institutionalized; or (c) a public or private place not designed for or ordinarily used as a regular sleeping accommodation [5]. While service organizations and shelters help to provide a safe haven for homeless, more than half of their day is spent outdoors.

Traditionally the social lives of the homeless have been seen as removed from the larger society. Homeless are considered to be in a state of withdrawal, detached from social institutions [6]. In part this is because much research has explored homeless people with severe mental illnesses. When examining the social worlds of other homeless, it has been found that they establish and maintain intricate social networks [7]. Primary social relationships are with other homeless people, but there are secondary relationships with caretakers, service organizations, and police, which involve various collaborations. The neighborhood also plays a large part in the social lives of the homeless [8,9]. We refer to these varied interactions as "social inclusion."

## METHODOLOGY

In Los Angeles County there are an estimated 73,702 homeless people, approximately 11,442 of who are living in shelters and 57,166 living on the street [10]. We used the Los Angeles Homeless Count—a visual street count of the homeless combined with local shelter counts—to identify high-density areas that posed the fewest safety risks for carrying out our research. Our first field site was a park in the civic center neighborhood of a coastal city. The second

was Los Angeles's Skid Row, an inland community spanning a 52-block area. Our informants included those that slept outdoors, in temporary housing, in transitional housing, and non-homeless service workers or members of neighborhood organizations. They were a mix of digital technology users and non-users although the focus of this research is those who used digital technologies.

It took three weeks of visiting the Park and Skid Row to establish relationships with key informants. Once we had gained their trust, they were eager to introduce us to their friends. We gave informants meals and gift cards valued at $20. We also donated small gifts of razors, clothes, and food to the larger community on an irregular basis.

For 14 weeks, from mid-January to mid-April 2009, we conducted 42 hours of observations and 39 semi-structured interviews and informal conversations. We conducted participant-observation as members of the Skid Row Photography Club (SRPC), in attendance at Neighborhood Council Meetings, and volunteering for homeless counts throughout the county. Pseudonyms are used for informants and organizations. Pictures are used with permission.

## TECHNOLOGY FOR SURVIVAL

Study participants developed ways to use digital technologies to find food and shelter, to secure their safety, and to make money. When we met E-Man he had been homeless for six months. For him, life on the streets was fraught with [having] to go and spend so many hours of the day just to get your normal, basic needs.

E-Man credited his laptop in helping him adjust:

*First of all, it took me a while to figure out the ins and the outs about where the proper places to sleep were. Another joy of my computer is that I would go onto like Craigslist and I would meet up with people who wanted like sexual activities so I would spend the nights there…We would both get a night of pleasure and I would get a place to sleep and shower. The joy of that is that they don't even know that I'm homeless and that's what I like.*
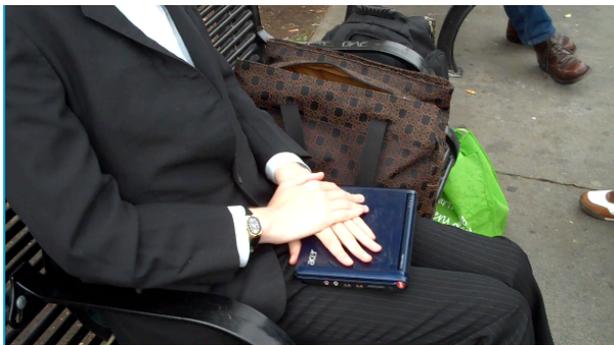


Figure 1. E-Man's 1gb Acer Laptop

An important part of E-man's process of adaptation and survival was relying on the technologies he was familiar with prior to becoming homeless:

*My first [laptop] was stolen the day after Thanksgiving and my second one was [stolen] only several weeks ago then I picked this one up. I purchased [my first one] prior to going homeless. I knew that I was about to go homeless and I needed that because all my skills have to do with computers and I needed a computer to get the info to get back out there and get a position. So I purchased it off of Sony's very nice no payments, no financing charges, and no interest until January of 2010. But unfortunately it's stolen so now I just have a huge bill…the next one was another one of these little Acers because unfortunately I don't have another $1500 to throw around.*

Though E-Man had been through two stolen laptops in his time on the streets, his laptop was the vehicle by which he could cope with homelessness. During the day he travelled the city learning the patterns of the homeless and the resources they used, and at night he was able to sleep on a bed indoors and eat a home cooked meal. His previous self, with its resource of technical knowledge, and his new social world with new practices were intertwined to aid in his survival and adaptation to the streets.

E-Man's socialization as a homeless person also included acquiring some previously undesired collaborative technologies that were deemed necessary for his new life:

*I didn't have a cell phone before I was homeless. I never liked the idea of a cell phone because that meant people could call me whenever I didn't want to talk to them. Now it's different because I need to have a number to be able to be contacted by employers for one, and also my psychiatrist or different officials. Before, I used Skype. I've always been very technologically inclined.*



Figure 2. E-Man showing us his prepaid cell phone

Cell phones were important to survival because of the connections they provided in securing jobs and adhering to requirements of funding and rehabilitation programs [2].

Milk, a self-proclaimed Internet freak who had been homeless for two years, explained the importance of digital technology to the underground economy of the homeless:

*A lot of people were telling me about the underworld, the burnt CD world. I saved my money, put it together and*

*bought a laptop. There's a lot of money in CDs, movies and CDs. If you sell movies and CDs you'll never be broke.*

Milk spent considerable time in the library downloading music and movies and burning CDs.

Service organizations often provided homeless clientele with access to cell phones, computers, and the Internet. But time restrictions were imposed on use within the organizations, making personal ownership of digital technologies very desirable. Jackie, a 61-year old homeless woman, explained:

*A lot of us are dealing with medical problems and we have to call to follow up with case managers and health care people...You never can do things from any of [service organizations] because you only have five minutes on the phone. So you need to have a cell phone. Most people can't afford it. People go out and pick up cans just so they can have something to eat, but these other things are necessities too.*

Having a consistent income, such as that provided by picking up cans, was important for sustaining technological ownership. It was also a resource for self-determination. There was a saying in the park that

*Bums eat what other people want to feed them.*

Having money was necessary for survival but was also fundamentally about freedom. A steady cash flow provided the freedom to fulfill survival needs on people's own terms. Money enabled the homeless to use digital technologies to generate more money, and to attend to survival needs in collaboration with individuals and organizations.

### TECHNOLOGY FOR SOCIAL INCLUSION
In large cities where the wealthy often share space and resources with the poor, it is increasingly important to establish social ties across socioeconomic groups. Both of our sites were downtown in large cities where the homeless and the housed came into frequent contact. Technology allowed the homeless to be included with the larger downtown community, and with the housed.

Laze was a 65-year-old recently homeless man who participated in various community groups. He founded a film and photography club for homeless and other residents of Skid Row:

*I started the club because I'm a filmmaker but also because people need a place to get off the streets. They could come here, to the meetings, and spend two hours indoors and away from all the drugs and addictions. The hard part was getting the cameras because I didn't want to be told [by a donor] how to use them. What we want to do is just give people cameras and a chance—no strings attached.*

Rob, the president of the Neighborhood Council for all of downtown, talked about the Photo Club:

*It was a great way...for people to literally create visual images to tell their story. Because so many people think folks that live in Skid Row and that are homeless have nothing in common with them. So it's like, "Why should I care? Those people are different. Those people deserve to be there."...And as long as you make it easy for people not to care then they will. If you make it really difficult for people not to care because they see they're not much different...then I think it's easier for them to get involved.*



**Figure 3. Wiley (center) getting tips on how to use his new digital camera from other members of the SRPC.**

Laze remarked on his philosophy of the SRPC:

*We're going to start a whole other concept and that concept is going to take us to better technology. And all that technology does is allows us to compete and be able to do what every...high schooler can do.*

For Laze, technology was more than just owning a device; it concerned competition and recognition within a larger social sphere. The Club worked to extend ties to include non-residents of Skid Row. Opening the SRPC's doors to non-residents, and participating in activities that required them to work and collaborate with the broader downtown community, tied the homeless to the larger community. A primary component of SRPC's participation in the greater downtown area was their inclusion in the monthly Art Walk. Rob described Art Walk as:

*40 galleries open, like five thousand people in the street, musicians, food. So that energy of people being here, having a sense of community and having a freedom that really is as diverse as it can get and it sort of celebrates living in the city.*

Typically efforts are made to segregate and avoid the homeless [7]. Their involvement and presence in the Art Walk made it hard for them to be ignored. Their eagerness to be included in Art Walk indicates that homeless do not

always prefer to live in isolation, that social inclusion beyond their own communities can be vitally important. The president of the Neighborhood Council explained the tone of the community's response to the inclusion of the homeless in the Art Walk:

*Most people sort of expected some of the photographs of the shopping cart or people strung out or [feces] on the street. What they didn't expect is seeing some of the beautiful images like this one of the sunset through the barbed wire fence. It's like, "Well, wait a minute, a homeless person would go to the beach?"…Then you start to realize, "Yeah, we are very similar and we have a lot in common."*



**Figure 4. An image captured by a member of the Photo Club**

To maintain consistent contact with the rest of downtown following the success of the Art Walk, a new gallery and social space, The Exchange, was created. The Exchange and the Neighborhood Council were instrumental in allowing of the homeless to participate in events that happened outside Skid Row's 52-block radius.

**CONCLUSION**

Digital technology use among the homeless is linked to collaborative practices ensuring survival and inclusion in social worlds beyond their immediate communities. LeDantec and Edwards found that technology was a factor in connecting the homeless with friends and family [2]. We discovered that technology was also an important factor in creating the social ties necessary for collaboration in neighborhoods and cities, as in the Photo Club and Art Walk. The needs of homeless for survival and involvement in social worlds beyond their immediate communities were a source of motivation in the use of digital technologies making technology a powerful but not obvious part of the culture of homelessness in our field sites.

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