Designing for and with Diaspora: A Case Study of Work for the Truth and Reconciliation Commission of Liberia

Michael L. Best

Sam Nunn School of International Affairs

Georgia Institute of Technology

Atlanta, GA, 30332

mikeb@cc.gatech.edu

Thomas N. Smyth

School of Interactive Computing

Georgia Institute of Technology

Atlanta, GA, 30332

thomas.smyth@gatech.edu

Daniel Serrano-Baquero

School of Interactive Computing

Georgia Institute of Technology

Atlanta, GA, 30332

dsb3@mail.gatech.edu

Abstract

We describe our experiences in designing new media technologies in cooperation with Liberia's Truth and Reconciliation Commission. This work includes two major projects: a dynamic, interactive Web site for the Commission, and a mobile video-sharing kiosk intended for use in-country where connectivity is limited. We place specific focus on our design exercises with members of the Liberian diaspora in Atlanta. Our report includes lessons learned both in designing technologies directly for diaspora users, and in using diaspora members as surrogates for users in-country. These lessons include the need to recognize diversity even within the diaspora community, the sensitivity of content to cultural nuances, and the overall value of the perspective of interaction with diaspora members.

Keywords
Participatory design, user-centered design, contextual design, cross-cultural design, diaspora, Liberia, post-conflict reconciliation

ACM Classification Keywords
H.5.2. User-centered design

Introduction

Participatory and user-centered design are two popular and canonical interaction design philosophies. The central questions posed by a user-centered approach remain today as fundamental to good design processes: Who are the users? What are their needs and wants? How can they be active participants in the design and development process? A well-regarded refinement, advocated by proponents of contextual design, goes perhaps a step further by positioning the system designer in the specific context of the "customer" [2]. In other words, the designer enters the work site itself and participates directly in the problem context.

However, not all users are available to participate and not all contexts are readily visited by system designers. In this paper we offer a case study from Liberia, West Africa, where due variously to distance, context, and culture, our user base was not readily available for participatory or contextual design exercises. In their absence we have explored ways to rely on surrogate user models—Liberians in the diaspora.

Related Work
A new movement has formed at the intersection of HCI and International Development. Sometimes referred to as HCI4D (HCI for Development) or UCD4D, it has witnessed a series of recent workshops designed to foster this nascent intellectual community (e.g. [3]). The goal of HCI4D is to examine the particular challenges and needs in designing interactive systems for users and contexts within the Global South. Researchers have noted the difficulty of this work and its importance. For example, in relatively early work Cogburn [4] explored the impact of social, political,

economic and technological factors in computer design in the developing world, while Dray and co-authors examined design, development and evaluation issues under constrained conditions of the developing world [5]. Finally, one of us (Best) has called on a thorough re-think of system fundamentals within the HCI4D context [6].

As scholars have examined the importance of HCI and UCD methods in the design of systems for developing countries, some have looked explicitly at ways that systems can be designed for multiple cultures [7] or how people of one culture can design for a second one via a cross-cultural design approach [8]. Ramachandran and co-authors [9] report on relevant studies conducted in India and Uganda focusing on microfinance and educational systems. They argue that cultural probes (specific artifacts that relate to the task under study and can elicit discussion) along with design tasks are particularly useful in these settings. Furthermore, they advocate for the need to include a broad range of participants from different backgrounds as well as the value of observing the community at different "levels".

We have also seen projects to develop specific computational devices in low-income settings using HCI principles. This includes microfinance systems (e.g. [10]) and our own recent work on rural video story telling systems which we report on here [11].

The case study presented here deals with both the development of computer environments for the use of communities in the diaspora as well as the use of diaspora communities as surrogates in user-centered design for remote populations. At least one scholar has

studied the development of community information systems specifically for diaspora communities [12]. Additionally, researchers from Intel have explored various techniques that support a culturally informed design process when travel to the country or community of interest is not possible [13]. They have identified techniques of mediated immersion (watching videos, reading books from or about the culture, etc.), the culture capsule (creating a physical environment that recreates elements of the culture), and localized field work and concept exploration (the use of members of the community who are local to the researchers).

This overall body of research makes clear that: 1) the problems of HCI and user centered design in the Global South are distinct from a completely general program of HCI and encompass an important intellectual and practical space for inquiry, 2) a number of specific methodologies have been created to assist in this area though further work is required, 3) a preferred method includes ethnographically-inspired direct participation with the community of users, 4) but this directly contextualized approach is not always available and so accommodations can and should be explored.

The Case of Liberia
Liberia, founded in 1847 by freed African slaves from the USA, is situated on the Atlantic coast of West Africa. Unrest has been a staple there for more than 14 years with two major civil wars in this time period. These years of conflict has seen nearly one-third of the population displaced and taken the lives of approximately 250,000 people. A tenuous peace was established in 2003 and democratic elections were held in the fall of 2005 resulting in the selection of Africa's first elected female head of state, President Ellen Johnson-Sirleaf (see [14] for a review of the Liberian conflict).

Like many other post-conflict nations before it, Liberia has established a Truth and Reconciliation Commission (TRC) in an effort to bring about national healing through the establishment of a factual record of the events and effects of the conflict. While more comprehensive information on TRCs can be found elsewhere [15], one of the pivotal roles of any such body is the wide dissemination of its findings and the stimulation of public discourse, such that the truths it establishes become common knowledge. The Liberian TRC's mandate states as much when it stresses "… that introspection, national healing and reconciliation will be greatly enhanced by a process which seeks to establish the truth through a public dialogue …." Both our research group and the leadership of the TRC have recognized the potential of ICT to work in service of such goals. Thus, for the past two years we have worked closely with the commission to develop new media technologies to support its operations.

Our work with Liberia's truth commission has focused on two principle systems along with a broader range of engagements. First, we have collaboratively developed the world's first truly interactive TRC Web site. This is the first online environment that allows a truth commission to accept formal sealed statements over the Internet. The Web site, www.trcofliberia.org, also supports video and audio storybooks (including live and archived streaming of formal hearings), news and information, discussion fora, and more. Additionally, we have developed a mobile, interactive kiosk which allows users to record videos of themselves and watch those recorded by others. Videos can be about the TRC

process, current affairs, their own thoughts on Liberia, or any other subject. In addition to user-created videos, the system features videos produced by the TRC explaining its mandate and activities. While the Web site is aimed at Liberians in the diaspora, the video kiosk is designed for use by Liberians in-country. Both of these systems are described more fully below.

Our challenge has been to apply appropriate user-centered or participatory design methods in the creation of both the Web site and the interactive kiosk. In the case of the Web site the community of users is readily available in Atlanta, GA. The system is designed specifically for use by Liberians in the diaspora and Atlanta has one of the world's largest populations of Liberian expatriates.

However, in the case of the kiosk, our user population is Liberians within the country, both urban and rural. Liberia's limited telecommunications infrastructure allows some forms of remote consultation via email and telephone, and these proved essential in our experiences. But bandwidth is not sufficient for some real-time engagements such as video-conferencing or remote desktop control, making many design exercises unfeasible. Further, to develop such a system entirely in-country is also unrealistic due to scarce bandwidth, costly and limited equipment inventories, and a lack of fabrication tools. As a result, during the early-stage design process at our facilities in Atlanta, we have relied on Liberians based in that city as surrogates to our target user population.

Below, we describe our experiences and lessons learned from both projects.

Design *for* Diaspora

To design an online portal for the TRC, our research group sought the direct involvement of representatives from the end-user group, Liberian expatriates having arrived in the Atlanta within the last 15 years. We also directly consulted the project's client (the TRC itself) and on one occasion sought advice from visiting Liberian dignitaries. All sources provided substantial direction for our designs.

We met with our informants in a variety of physical environments. We chose a formal conference room at the Institution campus to meet with representatives of the TRC and other elites. Meanwhile, more informal meetings were held at Mina's Kitchen, a local Liberian restaurant and popular meeting place for some Liberian expatriates.

In total, eight meetings took place with our informants, to cover the requirements gathering, user analysis and initial design evaluation phases. This series of meetings was begun in the first quarter of 2007. Based on information gathered from these meetings we formulated an initial list of requirements for the site, which included:

- Support for online entry of formal written statements to the commission
- Repository of multimedia content resulting from TRC proceedings
- Communication channel with the TRC
- Moderated discussion forum and collaboration space for discussion and interaction
- Secure, encrypted storage of submitted official statements and prominently displayed security guarantee.

- Linkages with other TRC's as part of the global TRC movement

A preliminary user analysis was also included in this draft which described expected user groups. These included: Liberian victims and perpetrators of the conflict in the diaspora, TRC commissioners and personnel, news media, international NGOs, donor organizations, and scholars in relevant fields.

Figure 1. The previous Liberian TRC Web site design.

Having completed these preliminary exercises and evaluating the existing design for the website (Figure 1), our group chose next to conduct a series of focus groups with diaspora members, TRC representatives and Liberian government representatives. We describe the outcomes of three of the most fruitful of these exercises in brief below.

The first of these focus groups took place on the Georgia Tech campus, in an executive meeting room. This exercise involved representatives from the Liberian government and the Carter Center and turned our attention to the highly controversial nature of the TRC. While every Liberian we spoke to acknowledged the need for national healing, there was some sharp disagreement as to whether a truth commission was the best route to this goal. Many Liberians favored a war crimes court focused on retributive justice and considered a truth commission focusing on restorative justice to be unnecessary or even potentially injurious. Discussion often veered from technical issues to philosophical debates on questions such as the nature of justice itself. The passionate nature of these discussions, even given our informants' distance in time and space from the conflict, underscored the seriousness of our work and the delicacy required.

This meeting also established an important over-reaching design principle. Our expatriate informants stressed that the original TRC Web site echoed the bureaucratic structures of the commission itself; the site was organized around the offices of the commissioners, the various commission departments, and so forth. (This Weberian structure is, we find, the standard for most institutional sites.) In contrast, they argued that the TRC site should instead be structured around the reconciliation *process* and the various constituent goals of this process. Thus, the first site mock-up was structured about processes and goals including: speaking the truth, forgiveness, reconciliation, and justice.

A second focus group also took place on the Georgia Tech campus and involved a group of eleven diaspora Liberians, TRC and Liberian government representatives, and Carter Center and Georgia Tech scholars. This group touched on all of the design issues we were facing but had the most significant outcomes

on the visual design implications. We realized that the choice of the site's visual imagery would be both centrally important and difficult. While visually conveying the ideals and 'Liberian-ness' of the TRC was essential, finding appropriate and universally acceptable images was difficult given Liberia's ethnic and linguistic diversity. Bias toward any one such group was especially important to avoid, given the ethnic nature of the conflict. These considerations affected choice of color scheme, icons, and other decorative imagery.

For instance, when we asked, "What is Liberian?" people would usually say only, "The Liberian flag." Most traditional Liberian practices for showing acceptance or settling disputes such as sharing a kola nut or discussing issues in a palava hut are common across West Africa and not unique to Liberia. Some suggested we use the Liberian colors of red, white, and blue, while others felt that this would make the TRC, an independent commission, appear too closely aligned with the government. Still others pointed out that in traditional cultures red was commonly associated with blood, war, and violence.

Another main result of this meeting was the addition of several user-generated multimedia content areas to the site, including a photo, audio, and video galleries. These features were suggested by our Liberian informants as areas where memorials of the conflict could be recorded in various media. We were compelled by this suggestion and the multimedia areas were added to the design.

Figure 2. Design iterations: Our first process oriented prototype and the first professionally produced design.

Further design recommendations from this second meeting included an avoidance of government-related imagery and an incorporation of strong affordances for interactivity (as opposed to the static appearance of previous TRC sites).

Subsequently, our first mock-up, seen in the background of Figure 2, was refined, and a team of professional Web designers joined the group. They worked to stylize existing design elements, and suggested additions intended to heighten the 'Liberian-ness' of the site. One such element was a photograph of a *Strophanthus Gratus* flower, selected based on the advice of a botanist at New York's Museum of Natural History who claimed that the species was endemic to Liberia. The designers translated these additions into a new design proposition that can be seen in the

foreground of Figure 2. However, at a later focus group, the choice of flower was rejected out of hand by our Liberian informants, who were certain of never having seen such a flower. The more familiar palm frond was chosen instead.

At our third focus group meeting, held at Mina's Kitchen, we had several patrons of the restaurant comment on what they would expect to see in a Web site such as the one proposed. The group consulted further on design elements, and reassured us that people would likely be comfortable with giving statements online. They also reported that Internet access is fairly widespread within the diaspora community.

Following this and several other design exercises, the site was finalized, tested, and launched in October 2007, with the design presented in Figure 3.

Design *with* Diaspora

While the Web site focused on Liberians living in the diaspora and other stakeholders with Internet connectivity, we wanted to design a media system that would be useable and available to Liberians living in-country, where Internet access is scarce and costly. Indeed, enabling the participation of this latter group is of the utmost importance, since communications and dialog are held to be central to the reconciliation process [16].

Thus, in consultation with TRC representatives, we envisioned a mobile kiosk system to support the sharing of personal messages and stories, as well as the promulgation of official TRC content, via an interactive video viewing and recording kiosk system.

The system would be positioned to help fill the gap in Liberia's communications infrastructure created by years of ruinous civil conflict. Design requirements were many, including support for non-print-literate and non-computer-literate users, physical ruggedness, and operation in off-grid areas, in addition to the cultural concerns described in the previous section.
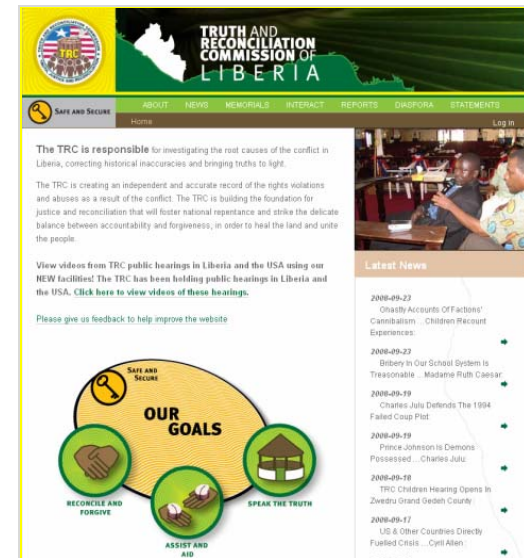

Figure 3. The finalized Web site design.

Similar to the case of the Web site, we consulted communities of Atlanta-based Liberians throughout the early stages of the design process for the kiosk system. In particular, we sought to involve those who had recently arrived, and who would thus be more similar to our target user group. In total, we held 11 meetings with these and other participants, at various locations including the Geogria Tech campus, Emory University,

the Carter Center, Mina's Kitchen, and the Atlanta Civic Center.

Our first exercise involved paper prototypes of our initial design, and employed a think aloud protocol. Participants were asked to imagine a scenario in which our system had just arrived in a Liberian village. They were assigned goals involving video browsing, playback and recording, and attempted to complete them using the paper prototype while a member of our group responded to their inputs.

We learned two main things from this first exercise. The first was that a change in navigation structure was necessary. Several users had trouble with the hierarchical, multi-screen system which formed the initial design. Given that the content admitted to a flatter navigation structure without sacrificing much functionality, we resolved to change it. Second, the importance of more carefully designing the system's voice prompts became clear. A typical prompt might consist of a set of alternative actions of the form "If you want to do X, press the Y button. If you want to do Z presss the W button." We found that users almost always pressed whichever button was announced first, without considering the other choices. Ostensibly, they were not understanding or recognizing the conditional part of the statement, and treating it as a command. We suspect that both this observation and the previous one could be the result of cultural differences between researcher and designer (such as familiarity with hierarchies). However, isolating the specific causes goes beyond the scope of this work.

Based on these insights, we produced a second design, which featured a flat, one-screen navigation structure,

improved visual imagery, and refined voice prompts. A higher-fidelity Flash prototype was produced from this design.

A second exercise was organized with this working prototype, which resulted in further recommendations regarding iconography. In general, iconography prevailed as an area of critical interest from most of our participants.

Our third usability study was held shortly thereafter at Mina's Kitchen, where participants were selected at random from the restaurant's clientele (Figure 4). The main result from this exercise was that users, especially recently arrived Liberians with minimal computer experience, were still having trouble understanding several of the more advanced features of the system. We resolved to further simplify our design. On the other hand, we found that the addition of a conversational agent to the design was very well received. The agent's job is to provide verbal assistance to guide users through the system, and to suggest ideas for watching and recording videos. In these initial exercises, the voice agent was played by one of our experimenters according to a predefined script. Nonetheless, it was clear that our participants were more comfortable with a verbal mode of interaction. This realization would greatly inform future designs.

In January 2008 a member of the research group left for Liberia to make preparations to deploy the system, including the purchase of suitable mobile power equipment and a vehicle to house the kiosk. Meanwhile the Atlanta team continued to refine the software design, and began work on the physical housing.

Meanwhile, we sought a voice model for the conversational agent. With the help of the diaspora community, we contacted a former Liberian radio DJ living in Wichita, KS, who was willing to help with the project. We provided him with a script, which he recorded in his home studio and mailed to us in CD-R format. While we were initially happy with the results, it turned out that his Liberian accent was unnatural to some Liberians in-country, perhaps due to his time in the U.S. Once our project manager was established in Monrovia, we recruited a new voice model and re-did the recordings.

Figure 4. Usability study at Mina's Kitchen, a Liberian restaurant and meeting point.

Based on findings from the design of an interactive system in India [17], we also undertook the production of a *full-context video,* intended to be shown at the start of a kiosk session in order to familiarize the user with the system. In cooperation with the Georgia Tech film club, we recorded the short video which

dramatized the purpose of the kiosk, and contained instructional scenes on mechanics of the interface. It featured two main characters, a narrator, and several extras, all drawn from Atlanta's Liberian diaspora community. However, once the video arrived in Liberia and was shown to users, our project manager found that the performance of the diaspora members was found to be unnatural to those in-country. This, again, was most likely due to accents, and perhaps in this case also due to dress.
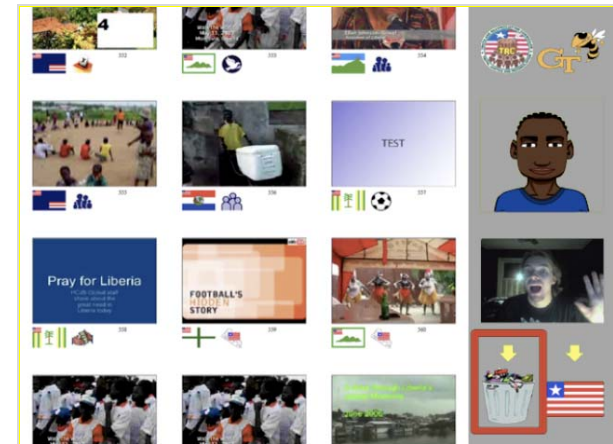

Figure 5. The current video-sharing kiosk user interface.

A final series of user studies took place before the system was sent for field testing in Liberia. In these several sessions, researchers from Georgia Tech, employees of the Carter Center, patrons of Mina's Kitchen, and members of the Liberian Association of Metro Atlanta volunteered to test our latest design. After some bug fixes and minor enhancements resulting from these exercises, the system was shipped to Liberia in late April 2008. The finalized user interface is shown

in Figure 5, while Figure 6 shows the system in use shortly after its arrival in Monrovia.

Figure 6. A user interacting with the kiosk in Monrovia.

Lessons Learned

The processes of designing the TRC Web site and video-sharing kiosk have provided our research group with extensive experience in designing both for diaspora as well as using diaspora members as surrogates for users in-country. Below, we describe lessons learned from those experiences.

The diaspora perspective is indeed valuable
In designing the kiosk, we found that diaspora members served as a well needed and unique reality check on our designs. In particular, working with recently arrived Liberians with little computer experience made clear on several occasions that our design needed big changes. As a result of our studies, we empasized verbal interaction and carefully designed voice prompts, we abandoned a hierarchical navigation structure in favour of a flat, one-screen design, and we eliminated advanced features such content filtering via iconic tags or map locations.

The diaspora community also proved highly valuable in the design of the Web site. This is demonstrated perhaps most markedly by their keen interest and insight on the topic of visual imagery and symbolism in the design. As we have described, the information they provided is often not readily available in, or sometimes even disagrees with, that available from written sources.

Content is sensitive
Both our exercises involving content produced in the U.S. for consumption in Liberia (voice recordings, full context video) ended up being unsuitable for the intended audience. This suggests that while some design work may be carried out in the U.S. with the help of the diaspora community, content appears to be more acutely sensitive to cultural nuances (such as in speech and dress), and is best produced in-country.

Diaspora contact can educate designers
Many members of our design team, while highly technically qualified, knew little of Liberia or its culture at the outset of the project. Most team members had never visited the country. This is obviously an important discrepancy, and we feel that our considerable experiences within the diaspora community served as something of a cultural education, albeit a brief one.

For instance, upon entering Mina's, one has the sense of being transported to Monrovia—both the décor and the food serve as key examples of the Liberian aesthetic. In the language of Foucault et al. [13], Mina's is a real-world *cultural capsule*. Also, on several occasions members of our group attended screenings of Liberia-related films organized by the diaspora community. Each such event proved to be educational. Even being in the company of a group of Liberian expatriates can be a compelling experience, providing exposure to Liberian speech, mannerisms, gestures, and dress.

Certainly none of these activities is a full substitute for time spent in-country, but we feel that they are of definite value in establishing a basic understanding.

'Book' knowledge, diaspora knowledge, and in-country realities may differ
All computer interaction design can confront a mismatch between some forms of "book knowledge" (e.g be sure to localize the English health information system to the native Hindi language for use by rural nurses in Northern India) and the in-country ground realities actually confronted (e.g. but don't localize to their native Hindi when the rural nurse's entire work-flow is conducted in English and they may not know the health terms in Hindi). Additionally, we have found that by relying on diaspora as surrogates of actual end-users a second level for potential design-reality gaps can arise, that between the diaspora informants and the in-country end-users. This phenomenon was demonstrated both by the rejected choice of the *Strophanthus Gratus* flower, and the case of the full-context video.

Diversity is important
Liberia is a small country with a population less than that of many U.S. states, and the fraction of its expatriate population which happens to reside in Atlanta is much smaller. This makes it tempting to think of the diaspora population as a cohesive, homogeneous group of Liberian expatriates. As we have learned, however, this is far from the truth—many distinct demographics and communities can be identified within the broader group.

We have found that time since emigration is one significant differentiator among expatriates—some having arrived relatively recently, others having fled the war earlier, and still others having chosen to emigrate to the U.S. before war broke out in 1989. Predictably, such groups exhibit differing levels of integration to U.S. society, and differing levels of immediate connection to social networks back in Liberia. As described above, we also found that this factor often determined the nature of feedback we received during focus groups and other exercises.

Geography and diversity are related
Related to the previous lesson is the realization that the subgroups described above are distributed geographically within Atlanta. For example, recently arrived refugees mainly reside in the Clarkston area in the east of the city (also the location of the Liberian restaurant Mina's Kitchen). This is due specifically to a U.S. government refugee resettlement program. Several clusters of expatriates are centered around churches with largely Liberian congregation: one in Norcross in the northeast of Atlanta, and one in College Park, to the south. Still other expatriates, usually those that have been in the U.S. for a longer time, are

scattered throughout the metropolitan Atlanta area. This is illustrated in Figure 7.

We have found that this geographic phenomenon holds several implications for our research efforts. First of all, as shown in Figure 1, the fact that Georgia Tech is located roughly at the center of these various enclaves turned out to be a convenient coincidence. Not only was it about equally easy for members of each group to travel to the campus for meetings, we also felt the location conveyed a sense of neutrality.

Second, as alluded to above, we found that members from different geographic groups offered feedback according to differing perspectives, resulting in different kinds of advice. For example, feedback from longer-time residents of the U.S. included suggestions for site features such as multimedia galleries, while more recent immigrants were less tech savvy, but could offer more accurate advice on cultural considerations.

We expect that this geographic phenomenon is the result of systematic factors and likely to be common to many diasporic communities.

A variety of physical environments can be appropriate
Just as geographic location of meetings varied depending on the target demographic or social network, so did the nature of the physical environments in which meetings took place. We point to two examples to illustrate this point. The first is a conference room at Georgia Tech. The room is quite well appointed, and several degrees more ornate than a standard academic conference room. Meetings at this room were usually catered for lunch by the university's catering services. In total, these elements created a

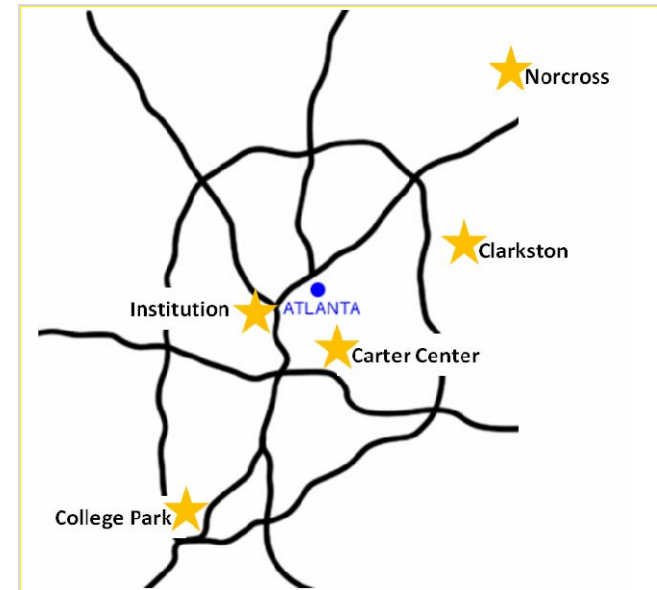decidedly formal environment for the meetings.

Figure 7. Location of the described sites within the Atlanta metro area.

We describe these details for two reasons. First, the creation of such an atmosphere is part of standard protocol for receiving elite informants such as Liberia's ambassador to the U.S. and others. Inviting such persons to meet at a casual establishment such as Mina's Kitchen would clearly be inappropriate. Secondly, we found that the formal atmosphere lent a sense of significance, importance, and ownership to the work of the focus groups. We suggest that this phenomenon may be due in part to the more pronounced respect for formality and protocol characteristic of Liberian culture, especially as compared to contemporary Western culture.

The second location that repeatedly played host to our meetings was Mina's Kitchen. As stated, Mina's offered a far more casual environment, as well as a vastly different décor. Thus while the conference room may have exuded importance and formality, the Liberian-ness of Mina's Kitchen perhaps made for a space more conducive to the imaginative think-aloud exercises we performed there.

Trusted insiders and institutions are helpful to elicit participation
Gaining access to members of the Liberian expatriate community proved to be a non-trivial undertaking, certainly a more challenging than the usual practice of dipping into the institute's subject pool. We found that trusted insiders were extremely helpful in finding participants for our exercises. For example, one of our contacts worked with newly resettled communities, and was able to encourage them to join our meetings. This connection was especially vital, since while those communities offered a valuable perspective given their more recent time in-country, they also proved most difficult to establish contact with, due to fears related to their tenuous immigration status.

Like individuals, institutions are also valuable tools in reaching out to the diaspora. In addition to the aforementioned geographic and cultural relevance of Mina's Kitchen, it also provided a trusted and legitimizing environment for our activities (as did Mina herself). The Liberian Association of Metro Atlanta (LAMA) was another helpful ally, and one which is likely to have counterparts in other diaspora communities.

Religious communities were of great importance to our work. As stated, several of the geographic pockets of Liberian expatriates are based around churches. The relationships we established with the leaders of several of those churches proved extremely useful, including the provision of facilities, eliciting of participation, and, more broadly, the legitimization of our work within the community.

Conclusion and Future Vision
In this report we have described our experiences in the design of new media technologies *for* and *with* the Liberian diaspora community. In the case of design with diaspora as a surrogate, we acknowledge that a diaspora community is not a full substitute for substantive design exercises and field testing in-country. Indeed, now that our project's personnel and equipment is more firmly established in Liberia, we expect our reliance on the diaspora community to taper off. Nonetheless, we feel that our experiences make a convincing case for the potential value to be derived from such communities, especially in the early stages of design. We further hope and believe that some of the lessons we have reported will be generalizable to other similar efforts.

We also note that our experiences have been extremely enjoyable. The communities with which we have worked have been cooperative, hospitable, insightful, and genuinely enthusiastic about the work. We feel privileged to be a part of such a vibrant community and such an important discourse.

At the time of this writing the TRC Web site is approaching its one-year birthday while the initial kiosk design has been under field test for the past few

months. The Web site receives several hundred unique visitors a day, many of whom are focused on the frequently updated news items posted to the site, as well as videos from TRC formal hearing proceedings. It has also figured into the work of a number of international organizations, been used for press research, and so forth. The kiosk has been experienced by thousands of Liberians and we have accumulated several hundred videos in these first few months of field operation.

We have identified a number of next steps for both of these systems in their design and deployment. A significant next research step will be to perform significant formal evaluations. We are now in the process of refining protocols and instruments for this assessment work. The TRC is mandated according to a fixed-term and is expected to wind down its work next year. At that time we plan to shift our attention to a memorialization effort, in which we will research ways to use the content and capabilities developed thus far in the creation of a lasting memorial, both virtual and physical, to the civil conflict and its aftermath.

Acknowledgements

References

[1]   D. Schuler and A. Namioka, *Participatory design : principles and practices*. Hillsdale, N.J.: L. Erlbaum Associates, 1993.

[2]   H. Beyer and K. Holtzblatt, *Contextual design : defining customer-centered systems*. San Francisco, Calif.: Morgan Kaufmann Publishers, 1998.

[3]   A. Dearden, "User-Centered Design Considered Harmful," *Information Technologies and International Development,* vol. 4, 2008.

[4]   D. L. Cogburn, "HCI in the so-called developing world: what's in it for everyone," *Interactions,* vol. 10, pp. 80-87, 2003.

[5]   S. M. Dray, D. A. Siegel, P. Kotz "Indra's Net: HCI in the developing world," *Interactions,* vol. 10, pp. 28-37, 2003.

[6]   *Omitted for blind review.*

[7]   P. Bourges-Waldegg and S. A. R. Scrivener, "Applying and Testing and Approach to Design for Culturally Diverse User Groups," *Interacting with Computers,* vol. 13, pp. 111-126, 2000.

[8]   A. L. Chavan, "Another Culture, Another Method," in *HCI International 2005: 11th International Conference on Human-Computer Interaction* Las Vegas, Nevada, 2005.

[9]   D. Ramachandran, M. Kam, J. Chiu, J. Canny, and J. L. Frankel, "Social Dynamics of Early Stage Co-Design in Developing Regions," in *CHI 2007* San Jose, CA, 2007, pp. 1087 - 1096.

[10]   T. Parikh, P. Javid, K. Sasikumar, K. Ghosh, K. Toyama, "Mobile Phones and Paper Documents: Evaluating a New Approach for Capturing Microfinance Data in Rural India," in *CHI 2006* Montreal, Canada, 2006, pp. 551-560.

[11]   M. L. Best, D. Serrano-Baquero, H. Abbasi, C. L. Pon, D. L. Roberts, and T. N. Smyth, "Design of Video-Sharing Kiosks for Liberian Post-Conflict Reconciliation," in CHI 2008, HCI4D Workshop, Florence, Italy, 2008.

[12]   R. Srinivasan and K. Shilton, "'The South Asian Web': An Emerging Community Information System in the South Asian Diaspora," in *Ninth Participatory Design Conference (PDC 2006)* Trento, Italy, 2006, pp. 125 - 133.

[13]   B. E. Foucault, R. S. Russell, and G. Bell, "Techniques for Researching and Designing Global Products in an Unstable World: A Case Study," in *CHI 2004* Vienna, Austria, 2004, pp. 1481-1484.

[14]   S. Ellis, *The Mask of Anarchy*, 2nd ed. New York, NY: New York University Press, 2007.

[15]   P. B. Hayner, *Unspeakable truths: facing the challenge of truth commissions*. New York: Routledge, 2002.

[16]   W. J. Long and P. Brecke, War and Reconciliation: Reason and Emotion in Conflict Resolution. Cambridge, MA: MIT Press, 2003.

[17]   I. Medhi and K. Toyama, "Full Context Videos for First-Time, Non-Literate PC Users." IEEE/ACM International Conference on Information and Communication Technologies and International Development. Bangalore, India, 2007, pp. 140-148.