

Paper Summary 2: The Familiar Stranger: Anxiety, Comfort, and Play in Public Places

Adam Mikeal

7 March 2005

CPSC 671-600

- Title:** The Familiar Stranger: Anxiety, Comfort, and Play in Public Places
- Source:** Proceedings of the 2004 conference on human factors in computing systems
Vienna, Austria
April 24—29, 2004
Year of Publication: 2004
ISBN: 1-58113-702-8
- Authors:** Eric Paulos, Intel Research, Berkeley, CA
Elizabeth Goodman, Intel Research, Berkeley, CA
- Sponsors:** SIGCHI: ACM Special Interest Group on Computer-Human Interaction
SIGWEB: ACM Special Interest Group on Hypertext, Hypermedia, and Web
ACM: Association for Computing Machinery
SIGCAPH: ACM Special Interest Group on Computers and the Physically Handicapped
SIGGRAPH: ACM Special Interest Group on Computer Graphics and Interactive Techniques
SIGGROUP: ACM Special Interest Group on Supporting Group Work
SIGDOC: ACM Special Interest Group on Systems Documentation
- Publisher:** ACM Press, New York, NY, USA

Those of us who live in urban settings—especially large, dense cities such as New York or Los Angeles—interact every day with a diverse set of people, some familiar, others less so. Between the distinct realms of “friend” and “stranger” lies the distinct and usually larger set of those individuals whom we observe, but with whom we never directly interact: the *Familiar Stranger*. The authors of this paper assert that understanding and leveraging these relationships—while still maintaining the “delicate, yet important constraints” that society has dictated shall govern them—would be added by the use of personal, wireless devices [1].

Early in the paper, the authors envision the following two scenarios: a woman who has recently graduated and moved to an unfamiliar city uses such a device to reassure her that the strangers she continually encounters are really not so strange – increasingly she is surprised at how many people she has encountered before. Secondly, an urban professional has had a frustrating day and feels closed in by all the familiar people he encounters throughout his daily routine; for lunch today he wants to be where *nobody* knows his name. His device then provides feedback as he walks down the street toward a new area of town, letting him know that he is unlikely to encounter a familiar face. In a sense, the whole of the paper is establishing the theoretical background of these scenarios, and devising a system (devices and infrastructure) that would make them possible.

The authors establish their claims regarding the Familiar Stranger by citing psychologist Stanley Milgram's 1972 experiments, and conclude that Familiar Strangers 1) must be observed, 2) repeatedly, and 3) without any interaction [1]. To provide a baseline on how much, if any, Milgram's original experiment results have changed in the past 20 years, they updated his experiment, originally taking place in New York, and re-administered in Berkely, CA. They found that while the percentage of people who recognized a "Familiar Stranger" in a regular, public place had dropped slightly, it was still very high at 77.8%.

A second experiment conducted by the authors consisted of "urban walking tours" in which an interviewer followed one subject on a 45-minute walk between four proximate but functionally distinct locations, such as a park or a post office. The subjects were then interviewed at each stop regarding their "perceived sense of comfort on a scale of 1—5", asked to identify any familiar people, and then asked to rank the following three characteristics in order of how influential it was in determining the sense of comfort: 1) people around you, 2) physical characteristics, and 3) current environmental attributes. The goal in this experiment was to gather data that enabled building a data set of people and their degree of social comfort at a given location; using the different axes of 1) amount of familiar people around, 2) how familiar these people are (history), 3) have other familiar people visited this place, and 4) do other people here (familiar or not) visit other places I do?

Based on the results of these experiments, the authors then proposed a tool they dub the *Jabberwocky* (after the famous poem by Carroll). The *Jabberwockies* are small, personal digital devices, either wearable by individuals, or able to be affixed to a non-mobile object (like a restaurant or a bus stop). The implementation described in this paper was patterned after a device called the iMote (also developed at Intel), and looks like a small, multi-colored button whose color and intensity indicated to the wearer the degree of familiarity of their present location. They also mention a software implementation that would run on a Bluetooth-enabled phone, but this paper is only concerned with the Mote-based platform.

The most interesting thing about their device is the lack of infrastructure necessary to enable it to work: each *Jabberwocky* stores a record of any other *Jabberwockies* it has encountered (and where, possibly), and in so doing gradually builds up a personal database of "familiar" people. The general state of familiarity would be the intersection of any currently detected Familiar Strangers with the history of those previously recorded. Additionally, there are two user-definable areas (represented on the Mote interface by smaller, different colored sections) to allow a user to associate certain Familiar strangers with specific locations or groupings. By pressing the button associated with these "special" sections, any detected people nearby are associated with that color, and will show up there in the future.

Concluding the paper, the authors state that the concepts of place and community are both being challenged by the influx of ubiquitous, wireless devices that change our communication paradigms. They claim that any discussion that involves these issues must include the role of the Familiar Stranger, and assert that this paper starts the groundwork for that discussion.

There are several problematic issues with the author's proposal, the most obvious being the privacy and security concerns that they themselves raised in the paper (mostly in response to user concerns), but failed to adequately address. Although they claim that the lack of a central server to "store, manage, or process" the data stored in a device such as a *Jabberwocky* prevents any single entity from "owning" the data, I remain quite skeptical that such a system could gain widespread use without large corporate sponsorship, and the consignment of privacy rights associated with such interactions. The temptation for a large telecom, for instance, to periodically read the data off an embedded *Jabberwocky* application in a mobile phone, and use the results for targeted marketing campaigns would, I fear, be too great.

A second potential problem pertains to the central thesis, or more precisely, the original statement of the problem. It could be argued that the initial use cases the authors cited at the beginning of the paper (the displaced graduate and the frustrated professional looking for lunch) are contrived scenarios, and don't map well to real-life situations. There was a feel—especially in the second—that the scenario was created in order to find a justification for the sort of device the authors claim the scenario argues for; thus trapping them in a circular argument.

While there are several areas that would warrant further research and/or consideration, the expansion of mobile digital devices into the arena of the Familiar Stranger is a fascinating look at an often overlooked social phenomenon.

REFERENCES

1. Paulos, E. and Goodman, E. The Familiar Stranger: Anxiety, Comfort, and Play in Public Places. In *Proceedings of CHI 2004*, 223—230. ACM, 2004.