

AltarNation: Interface Design for Meditative Communities

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ABSTRACT

AltarNation allows physically isolated individuals to participate in communities of meditation and tailor their own meditative practices. By lighting candles, users enter a shared virtual community of users represented by a field of stars, each associated with a sound sample of a prayer, song, joy, or concern of another user. Existing practices of individual meditation and candlelight vigils inform this work. This paper describes implementation and design approaches of the AltarNation system.

Keywords

Ambient media, tangible interfaces, prayer, spirituality, meditation, community, worship, telepresence, co-presence

MOTIVATION

After the terrorist attacks in the United States on September 11, a popular email asked its recipients to carry a lit candle outside. NASA, it reported, would capture the millions of candles on film. While the satellite photograph was a hoax, this was, nonetheless, a call to action, as it spawned spontaneous vigils. Neighbors spilled onto streets and comforted one another, demonstrating the collective strength of individuals mourning together. Meanwhile, in the first weeks after the attacks, one-third of Internet users exchanged prayer requests and another one-quarter sent messages of consolation [8]. AltarNation addresses these two real urges and the ongoing needs of individuals who want online life to be more tangibly spiritual.

INTRODUCTION

David, a teen with fundamentalist parents in a conservative state, sees his daily online exchanges as a refuge. He belongs to the Church of the Larger Fellowship (CLF), a virtual faith community of religious liberals. With no nearby church, he feels isolated from like-minded individuals. Text exchanges on CLF lack these senses of religious community: aural (live music), visual (candles, eye contact), and tactile (hand-holding, hugs). As David begins reading posts on the CLF server, he lights candles, plays soft music, and eliminates other distractions. Rev. Jane Rzepka, the minister to CLF, described how David must worship alone because of present circumstances,



Figure 1. Altar niche.

others opt to join online faith groups like CLF to augment religious practice. [personal communication]

We do not seek to replace the role that traditional faith communities play in the lives of their followers. Time, geography, or mobility may cause spiritual isolation, however. Target populations include aging adults, rural dwellers, night shift workers, travelers, military personnel, prisoners, hospital patients, or all who are similarly unable to participate in a tradition of their choosing. They might already engage in private spiritual practices in their homes, setting aside a sacred space for their prayers or reflections.

Internet users have used electronic communication for “comfort during periods of personal grief, or deeply emotional support during times of trouble” [6]. This points to a desire by users of technology to relate to others in a spiritual, meditative context not limited by geographical or temporal proximity. Many of the online religious communities we discovered in our research were text-based interfaces relying on user literacy. Meditation by its very nature is ambient, and when done in community direct speech is often less effective than other cues from nearby meditators: breath, presence, heartbeat.

Spiritual spaces like chapels, synagogues, and mosques establish serenity where one can escape the hectic pace of daily life. The modernist architect Le Corbusier orchestrated light inside the Cathedral at Ronchamp. Peace and calm is achieved by muting exterior sound. To establish this in a home, the niche housing AltarNation creates a small, quiet space, separate from the activities of the house. (Figure 1)

RELATED WORK

Like the tangible interface AmbientRoom [9], the star-field display provides information peripheral to the direct meditative use of the space. AltarNation explicitly invokes the value of a telepresent, shared community, and so its

interface embodies the interactions of many-to-many (as in an online chat room), rather than one-to-one as with inTouch [2]. Work such as Aura [3] emphasizes the beauty of flames as a medium for expression and interaction. In Candle Altar [1], candles serve as objects to “externaliz[e] a problem or event that had spiritual significance” by voicing prayers. The designers felt its installation was not private enough to achieve the desired result. The popular websites belief.net, Peace Candle [7], and Light a Candle [4] provide non-immersive graphical user interfaces which demonstrate web-based meditative interaction.

USER INTERACTIONS

Unlike digital technology currently connecting members of religious communities through mailing lists and chat rooms, AltarNation aims to imbed digitally augmented interaction in existing, familiar objects of traditional spiritual practice—namely, the sound and candlelight that is used in diverse traditions to focus meditation.

A user enters the space, lights a candle, and meditates. Meanwhile, other users are already meditating in their own sacred spaces. An ambient display of stars, projected onto fine copper mesh, shows the population of users in the co-present virtual community. Entering and exiting are indicated with brief animation. To hear the near real-time thoughts of other community members, users move their candles to shine on stars. To submit a song, a prayer, or reflection for other users to access, a user shines candlelight on her own star. Voices and sounds may overlap, just as they do in face-to-face gatherings, or played in loops. The users design their own personal meditative experience. Upon leaving and blowing out the flame, the user is logged off the virtual community. No new stars are added to the display, but it gradually dims as users who were co-present in the system extinguish their candles, one-by-one.

IMPLEMENTATION

The tangible interface of AltarNation consists of a physical, ambient space and interactive, networked technology (Figure 2). The system, coded in Java, includes both a client application and a remotely hosted web service. True color images detected with computer vision and converted to threshold images are processed with the visual pattern algorithm [5] to recognize the candle flame.

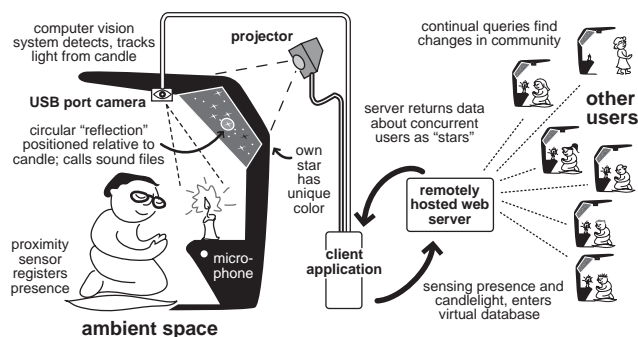


Figure 2. The AltarNation System

CONCLUSION AND FUTURE WORK

The candle appears in altars of diverse religious traditions, such as Hindu, Catholic, Buddhist, Santeria, and Pagan, and secular traditions such as vigils by political activists. AltarNation’s candle interface initiates a longer dialogue about how technology can play a role in domestic experiences of religion and community. Future work includes incorporating elements to strengthen the connection between users through touch, smell, and temperature. We cannot replicate the experience of being in a house of worship, nor do we want to. AltarNation provides a different kind of worship space—an environment where those who understand spirituality as a function of community design their meditative experience and overcome isolation.

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