Designing Tangible Interactive Artifacts for Religious and Spiritual Purposes

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ABSTRACT

From candles to prayer beads to icons and more, tangible artifacts have long played a central role in religious and spiritual life. However, despite growing interest in HCI on design within religious and spiritual contexts, the intentional design of tangible interactive artifacts for religious or spiritual purposes is still relatively uncommon. This workshop aims at advancing our understanding of tangible interactive artifact design in religious and spiritual contexts and how religious and spiritual purposes may offer alternative approaches to design. We invite those interested from all professional and religious/spiritual backgrounds to imagine and design tangible interactive artifacts for religious or spiritual purposes such as beliefs, practices, or rituals. The workshop will include the demonstration of (imagined) artifacts, reflection on designing for religious/spiritual purposes, and hands-on design sessions.

CCS CONCEPTS

• **Human-centered computing** → **Interaction design**.

KEYWORDS

spirituality, religion, design, tangible interaction, embodiment, rituals

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1 INTRODUCTION

Designers have long created artifacts that align with non-religious purposes, such as to make our daily activities easier or more efficient (e.g., sharper axes, faster smartphones, more ergonomic vacuums, etc.). This pragmatic focus of design has been extremely successful in delivering many goods that improve our lives, but there are open questions about how the singular focus on these types of purposes, in design and in living, fall well short of supplying full and rich lives [19]. This workshop offers a possibility to explore an alternative approach to the design of artifacts used in our daily lives and to the purposes which guide design. More specifically, this workshop aims at bringing together individuals who are engaged in (or interested in) designing for religious and spiritual purposes (e.g., increasing faith, investigating beliefs, supporting spiritual practices, etc.) that have long held importance in individuals' lives but are often neglected in traditional design processes. In its orientation toward alternative design goals and practices, this workshop shares much with aspects of the design futures proposed by *slow design* [6], *reflective design* [20], and *value sensitive design* [4] but with a specific focus on incorporating and supporting religious and spiritual purposes in the design of tangible interactive artifacts. Inspired by centuries of religious and spiritual wisdom and practices that utilize tangible artifacts (e.g., prayer beads, candles, altars, relics, etc.) to engage with the intangible (e.g., god, the divine, the transcendent, etc.), this workshop centers on the speculative creation of (and reflection upon) tangible interactive artifacts for religious and spiritual purposes.

While HCI has made strides around the concept of *technospirituality* [2], such as the design of a resource for the spiritual activity of cloistered nuns [5] or the utilization of interactive technologies to support Sabbath day observance among Orthodox Jewish families [23], the intentional design of tangible interactive artifacts for religious or spiritual purposes is still relatively uncommon in HCI. Recent exceptions, however, include an interactive prayer altar inspired by Buddhist rituals [22] and the work of Hemmert et al. [9] who designed tangible user interfaces inviting novel engagements with Catholic beliefs. For example, to examine how "all humans are equal" could be explored and fostered through a tangible user

interface, Hemmert et al. designed an interactive seesaw that counterbalances people's weight [9]. The proposed workshop draws inspiration from this speculative work around designing tangible interactive artifacts and invites potential participants to further explore how tangible interactive artifacts may support religious and spiritual purposes as well as shape, influence, or inaugurate religious and spiritual practices.

Through this workshop we seek to leverage the act of creation itself as a means of thinking and "giving form to formlessness" [1]. Building on theories of embodiment [e.g., 3, 11], we draw upon the power that creating tangible artifacts offers in enabling the expression of tacit knowledge ("thinking through doing") and facilitating communication and understanding between religious and spiritual traditions. Religious and spiritual development is frequently the outgrowth of directed acts of attention, reflection, contemplation, and practice [14, 18], and the design of a tangible interactive artifact offers a novel means of acting which may lead to new ways of "knowing". Additionally, these tangible interactive artifacts, and more specifically the artifacts that will be created for this workshop, also become means by which we are able to express principles, beliefs, and values to others, through the artifacts' meanings and the practices that surround them [15]. Thus, by bringing together practitioners, designers, and the artifacts they create, we utilize the method of "thinking through doing" in religious and spiritual contexts to reveal new understandings. We also offer a space to engage in dialogues around artifacts created by individuals from different religious and spiritual traditions that may provide opportunities for further self- and interspiritual-understanding.

2 WORKSHOP MOTIVATIONS AND THEMES

This one-day, in-person workshop expands previous activities by the co-organizers in religious and spiritual contexts. Most notably, we aim to continue to support collaborative research and design work that explores, defines, and contributes to a growing subfield in HCI centered on design within religious and spiritual contexts [12, 17]. Through previous workshop activities, post-workshop analysis sessions, and the establishment of a transdisciplinary research and design collective (the Spirituality, Religion, and Interactive Technology Design (SPIRITED) Collective), we have sought to create a space within the field of HCI for the collaborative exploration of topics centered on religion and spirituality. One preliminary outcome has been a set of emerging core themes of what designing within religious or spiritual contexts might mean. Building on this previous work, the workshop will engage with some of the emerging themes and offer them as a means for participants to explore the design of tangible interactive artifacts for religious or spiritual purposes. Those themes are:

- centering the everyday and reframing design beyond formal religious/spiritual spaces and practices,
- embracing openness, uncertainty, and ambiguity in design in religious/spiritual contexts, and
- reshaping design by incorporating religious/spiritual values, rituals, and practices into design practices.

The first two themes ("centering the everyday" and "embracing openness") serve as inspiration for the design of the artifacts, while the third theme ("reshaping design") will provide structure for the activities in the workshop sessions. In terms of "centering the everyday," we are motivated by providing space to explore HCI around the idea of *lived religion* [7, 13] and invite researchers, designers, and practitioners to consider how tangible interactive artifacts focused on religious and spiritual purposes can be embedded in the day-to-day lives of individuals. In the case of "embracing openness," we are inspired by the work of Gaver et al. [5] and the attempt to create "a design that leaves ample room for its users' own interpretations and appropriations" [5, p. 2056] and invite potential participants to consider how to intentionally design tangible interactive artifacts for religious and spiritual purposes that may invite or encourage responses or actions but don't overdetermine them. The final theme, "reshaping design," will guide aspects of the workshop where we will invite reflection and discussion that will offer workshop participants a means to rethink design processes and outcomes as well as how a religious or spiritual tradition's specific purposes may affect the process of design itself.

As such, this workshop, through the artifacts that will be created and the activities and discussions that will take place in the workshop sessions, represents a means to collaboratively explore these emerging themes, to articulate new themes related to design within religious and spiritual contexts, to contribute to existing bodies of work on design practices, and to consider how the design of tangible interactive artifacts may support religious and spiritual purposes in everyday life.

3 WORKSHOP GOALS

Our goal of this workshop is to contribute to design in religious and spiritual contexts in four main ways. First, given that very few novel artifacts come into existence in religious and spiritual traditions through current interactive design practices (as compared to updated, revised, or digital versions of existing artifacts), the intentional creation of tangible interactive artifacts may reveal much about how and why artifacts appear in religious and spiritual contexts as well as how these artifacts may alter existing practices or offer the means for completely new practices. Our workshop specifically seeks to engage with perspectives and practices from multiple spiritual and religious traditions, including those that are not always considered in HCI research [8, 10, 16, 21].

Second, through the design and utilization of novel artifacts focused on specific beliefs, practices, or rituals, there emerges the opportunity to reexamine the religious or spiritual purposes that inform the artifact's design and use. That is, the designed artifact itself becomes a lens through which important questions may be posed that usually occur only in the abstract. Thus, the practice of designing a tangible interactive artifact and the opportunity to collaboratively explore the meaning and use of the created artifacts in the workshop gives individuals a new (and embodied) means to understanding.

Third, the design of tangible interactive artifacts for religious and spiritual purposes can also reveal much about the practice of design, particularly how design motivations, frameworks, and goals may shift as a result of a specific religious or spiritual framework. Thus, the creation of novel tangible interactive artifacts by the participants and their collective exploration through the workshop activities offer a perfect opportunity for participants to explore how

religious and spiritual life (and purposes) may affect the practice of design.

Fourth, we seek to further explore and refine the current theoretically-deduced emerging themes from our previous work. The design of tangible interactive artifacts by participants from multiple religious and spiritual traditions can offer important support for (or correction to) these themes and provide guidance in the development and articulation of a core set of design principles and practices in religious and spiritual contexts.

4 ANTICIPATED OUTCOMES

The anticipated outcomes of this workshop are multiple. First, the workshop participants will have the opportunity to contribute their artifacts to a subsequent issue of the SPIRITED Collective zine. The development of the zine will allow for the participants to bring together their artifacts and to collectively articulate the religious/spiritual and design practices that were embedded in and evoked by their artifacts and the workshop activities. Second, further exploration and discussion amongst the workshop participants and SPIRITED Collective members will culminate in the publication of a pictorial paper for the 2024 ACM International Conference on Tangible, Embedded and Embodied Interaction (TEI) that exhibits the artifacts, discusses their creation, and offers a presentation of the core findings from the workshop. Third, this deepening examination and analysis will lead to the publication of theory- and method-oriented papers for the 2024 ACM Designing Interactive Systems (DIS) Conference that will articulate the theoretical and empirical insights that have been gained over the previous three workshops and communicate the design methods and recommendations that have emerged through this process.

5 CALL FOR PARTICIPATION

Inspired by religious and spiritual practices centered on the use of tangible artifacts (e.g., prayer beads, candles, altars, relics, etc.) in engaging with the intangible (e.g., god, the divine, the transcendent, etc.), this workshop explores the creation of tangible interactive artifacts for religious and spiritual purposes. We invite participants to design novel tangible interactive artifacts for religious/spiritual purposes (e.g., beliefs, practices, and rituals) while considering the following themes:

- centering the everyday and reframing design beyond formal religious/spiritual spaces and practices, and
- embracing openness, uncertainty, and ambiguity in design in religious/spiritual contexts.

The presentation of the artifacts (1-3 pages) may take the form of (among other things) pictorials, annotated portfolios, sketched visions, or written descriptions and should state what religious/spiritual purpose their artifact engages with and how. In the artifact's design, participants can pursue goals such as support, exploration, reflection, or provocation. For example, participants could design an artifact that fosters the development of a specific quality in daily life (e.g., patience in the Christian tradition or generosity (dāna) in the Buddhist tradition). We invite participants from all backgrounds to submit artifacts drawing on their own religious/spiritual experiences and purposes, those addressed in their research, or those encountered in everyday life. We particularly welcome artifacts

exploring novel methods of engagement with religious/spiritual purposes. We ask participants to submit the presentation of their artifact via email to **futureofparticipation@gmail.com**.

For the workshop, participants may create their artifact and bring it with them for exhibition and demonstration or may demonstrate the potential practice around the artifact via role-play, paper prototype, wizard of Oz prototype, functional prototype, etc.

ACKNOWLEDGMENTS

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