

# Open Laptop - Already a Mistake: An American Zen Buddhist's Reflections on HCI Research and Design for Faith-Based Communities

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An American Zen Buddhist's Reflections on HCI Research and Design for Faith-Based Communities

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Computer science seems in opposition to Zen Buddhism, a spiritual practice best described (if it must be) as “without reliance on words or letters, directly pointing to the heart of humanity.” Yet with so much of today’s human experience bound up in computing, some words, and pixels and bits, to address their overlap seem necessary. In this short paper, first, I briefly describe Zen, a form of Buddhism dating to at least the 7<sup>th</sup> century CE in China. Then, I relate my background as an American and Roman Catholic who, more than 20 years ago, joined the global Kwan Um School of Zen. I share observations from my faith practice on how computing has proved both an obstacle and a support. Finally, I suggest academic practices to incorporate into human-computer interaction (HCI) research and design for faith-based communities. I hope that these reflections aid discussion and interest in defining our approaches to HCI for these personal and cultural domains.

CCS CONCEPTS • Human-centered computing ~ Human computer interaction (HCI) ~ HCI theory, concepts and models • Social and professional topics ~ User characteristics ~ Religious orientation • Applied computing ~ Computers in other domains

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## 1 OVERVIEW

Computer science seems in opposition to Zen Buddhism, a spiritual practice best described (if it must be) [16] as “without reliance on words or letters, directly pointing to the heart of humanity.” [27] Yet with so much of today’s human experience bound up in computing, some words, and pixels and bits, to address their overlap seem necessary. In this position paper, first, I briefly describe Zen Buddhism, a form of religion dating to at least the 7<sup>th</sup> century CE in China. Then, I relate my background as an American and Roman Catholic who, more than 20 years ago, joined the global Kwan Um School of Zen. I share observations from my faith practice that point to how computing has proved both an obstacle and a support. Finally, I suggest academic practices to incorporate into human-computer interaction (HCI) research and design for faith-based

communities. I hope that these reflections aid discussion and interest in defining our approaches to HCI for these personal and cultural domains.

## 2 ZEN BUDDHISM

Zen's origins appear first documented during China's Tang dynasty, in the 7<sup>th</sup> century CE [25–27]. At that time, Buddhism had already spread from Nepal, the birthplace of historical founder Siddhartha Gautama or “the Buddha,” throughout neighboring countries in Asia for more than 1,000 years [28]. The Indian monk Bodhidharma [26] is credited with introducing China to the *dhyana* practice of stillness and contemplation as a means to self-knowledge [28]. *Dhyana* (a Sanskrit word) predates the Buddha and is commonly described as his vehicle for achieving enlightenment, or the transcendence of his limited human existence, the means to which Buddhism was founded to transmit [15]. The renewed focus on *dhyana* can be considered part of a back-to-basics movement in Buddhism, in reaction to the increased intellectualism and ritualization of the branch known as Theravada, the “way of the fathers” [15]. The chief text of the newer Mahayana branch of Buddhism, of which Bodhidharma was a member, is the Heart Sutra, the English translation of which fits on one page [23]. Zen takes this minimalist approach even further, proclaiming the superiority of empirical knowledge gained through *dhyana* – renamed *ch'an* in Middle Chinese [25] - over scriptural learning or formal religious observance [15]. A famous poem of the Tang dynasty sets forth this formulation for Zen [15,27]:

A special transmission outside the scriptures  
Without reliance on words or letters  
Directly pointing to the heart of humanity  
Seeing into one's own nature.

Today, the largest Zen communities remain in China and also in Japan (the origin of the word *zen*), but the practice of Zen has spread throughout the world [29]. Like other Buddhists, who number in total 488 million worldwide [14], they venerate the “Triple Treasure” of small-b *buddha* (inherent enlightenment-nature), *dharma* (the teachings and practices), and *sangha* (their faith communities) [15]. Zen practitioners also particularly value *upaya* or “skillful means” (the ability of an enlightened being to tailor a teaching to a particular audience or student for maximum effectiveness) [30] and *mindfulness* (in Zen, the continuous, clear awareness of the totality of the present moment) [19]. Through seated meditation, alternated with practices such as chanting, bowing, and contemplative walking [15], a Zen Buddhist aspires to a state of mindfulness that will facilitate their own perception of buddha-nature and help them express this enlightenment in daily life, especially for the benefit of others [25]. To check the validity of their meditation experiences, Zen practitioners are urged to consult with a teacher in an established lineage who is certified to guide others in enlightenment [15]. Among a teacher's “skillful means” are stories or riddles known as *koans* (Japanese), *gong-ans* (Chinese), or *kung-ans* (Korean) [7,15]. Such consultations will help Zen practitioners achieve a “before-thinking,” other-centered orientation and avoid self-centered fallacies, e.g. “wanting enlightenment is a big mistake” [16].

## 3 PERSONAL EXPERIENCES AND OBSERVATIONS

My own experiences with Zen are Western. I began in my teenage years, when I bought a secondhand copy of D.T. Suzuki's *Essays in Zen Buddhism* [17] and was intrigued by his discussions of *satori*, the Japanese word for enlightenment. I had already liked what I had heard about Buddhism during a unit on world religions at my (Catholic) grade school. However, it wasn't until I moved to the U.S. state of Indiana that I was able to connect with an in-person group, practicing in the Kwan Um School of Zen (KUSZ) in the lineage of Korean Zen Master Seung Sahn. I began sitting with the Indianapolis

Zen Center sangha once or twice a month as my schedule permitted: 30 minutes of seated meditation bookended by a 20-minute prelude of chanting and a 10-minute epilogue of a reading and announcements. I progressed to sitting weekend retreats and to taking precepts (like Christian baptism, this signifies formally joining the faith). Eventually, I studied for and became a KUSZ dharma teacher - qualified to explain subjects such as meditations forms and the history of Zen, but not to guide people to enlightenment. In KUSZ, such teachers are called *Ji Do Poep Sa Nim* (JDPSN, for "dharma master") or *Soen Sa Nim* (Zen master). I have studied with both types of "enlightenment" teachers at the Indianapolis Zen Center and with a group in Pittsburgh, PA, while helping as a dharma teacher.

### 3.1 Computing as Obstacle to Zen Practice

As a Zen teacher, I do not take a binary view of computing as good/not good or useful/not useful [6]. The "middle way" [28] is to acknowledge that it is a dharma aid in some contexts and a distraction in others. My advice to beginners is to turn off their smartphones completely because a buzz or ding is liable to take not just one practitioner but the entire room out of the moment. For the sangha, I model a best practice by taking out my phone or smartwatch, silencing them, and turning them face-down on my meditation cushion, so that I cannot see the flash of a notification. I prefer to use such manual safeguards for attention rather than the "Do Not Disturb" settings, because enacting the exercise of putting away our digital helpers is an important signal to our bodies and minds that what we are doing is important and different from the everyday flow of our distracted lives. In the same vein, I recommend use of a battery-operated analog clock over a smart device for timing seated meditation, because it will not tempt you into checking messages.

In the world of COVID-19, much of our group Zen practice has joined others online [5]. Now, it is no longer possible to physically remove ourselves from our internet-connected devices. I am grateful to be able to see and hear my fellow practitioners even at a distance, but I miss having the break from my busy digital life and from the allure of its distractions. The "Do Not Disturb" settings help, to a point. Sitting in front of my MacBook, however, I catch myself touching my mouse and calling up screens whenever I experience a fleeting thought about, say, the status of a project. Meditating from home also means interruptions from family members, pets, or internet outages. I confess that I do not have enough "dharma energy" to avoid breaking my stillness in response to my cat waving her tail in my face!

Going forward, this type of Zen Buddhism will benefit from HCI research and design to solve similar problems of distraction and focus as those faced by those working from home or who are "digital nomads," connecting to their customers or clients via the internet away from an office [12]. I would love to flip a switch inside my home environment and be free from all ability to access Netflix or Slack while I hunker down on either a CHI paper or a kung-an. Even better, if the "switch" is a timer, so that I do not forget to turn off my "Do Not Disturb," or a learned routine of my home network, so that it is context-aware and picks up on the signals that I am ready to concentrate. I use Siri now to set a meditation timer by voice, although the screen and keyboard is still nearby, and it would be better for my ability to stay in concentration if "she" could turn off everything at the same time and then turn it back on again after the timer ends.

However, like the meditators in Markum and Toyama [13], I am wary of letting technology intrude too far or replace in-person experiences. I am doubtful it will no longer necessary to visit a Zen center or monastery for the sustained concentration required for intensive practice. My Pittsburgh group has returned to offering a weekly in-person (and masked) practice so that people can get a break from remote meetings and reap the benefits of in-person group meditation. I look forward to the day when we can begin traveling to other temples and learning *in situ* about others' spiritual practices, perhaps with the assistance of interactive displays or augmented reality overlays [18,20].

### 3.2 Computing as Support to Zen Practice

I was tempted to add “reading” to the Obstacles section. After all, it is clear from my above summary that “words and letters” are considered a hindrance in Zen tradition, and modern teachers will also sometimes advise Zen students to avoid reading to help them break their habits of over-thinking. However, one of the paradoxes of this spiritual practice is that reading is often the first step undertaken by someone who wants to try meditation and/or to learn more about Zen Buddhism’s techniques for understanding themselves and shedding their barriers to fully connecting with the world. As Bell has noted [2], the global spread of internet access has been enormously helpful for spreading Zen knowledge and for connecting seekers with faith communities that can help them put their reading into action. My sanghas have made use of the same computing affordances as other interest groups: websites, for publishing information for members and guides for visitors referred by search engines; online communities, such as Facebook groups and pages that facilitate member discussions, marketing, and event discovery; secure payment methods such as Venmo and PayPal, for donations.

I will always prefer in-person Zen practice. But, like the online group members in Derthick’s work [5], I now can join a Zen meditation session or a retreat from anywhere in the world. I can take part in a distant reading group or a book club (we have those!). I can receive an interview via video and audio from a variety of Zen teachers, not just someone who is in residence near me or visiting for the weekend, and who may represent diverse cultures or traditions such as Rinzaï. These options are wonderful for all Zen Buddhists and for the seekers who may not have access to a local faith community to aid them in their explorations. For people who are not interested in or ready to connect with a faith community, apps such as Headspace or features such as Apple iOS’s Mindfulness can introduce them to everyday meditation practices such as contemplating peace or following their breaths. Headspace (my university provides all of us with a free subscription) dims the screen so that you can use it to wind down and prepare for sleep.

Going forward, the main item on my wish list is better audio support for remote Zen practice. We have experience glitches in teacher interviews where one person trips over the other person’s statements, adding to the problem of not being present to pick up on nonverbal cues to turn-taking such as angling back or tilting forward [31,32]. Worse, audio problems have almost killed our group chanting. This is unfortunate because, in my tradition’s Zen practice, chanting is essential for aligning participation and building an energy within the group that supports its focus. Participants cannot stay in sync – the farther from the source, the more obvious are the transmission delays. Our Zoom apps also struggle to figure out which voices to prioritize, instead of blending every audio source into a unified output. For now, the workaround is for everyone to mute and only listen to the leader’s chanting. We need an app similar to JamKazam or Jamulus [9,24,33], which were designed for musicians to play together online and at a distance. Such an app will need to integrate with our existing remote meetings and be usable by anyone.

## 4 SUGGESTED BEST PRACTICES FOR HCI PRACTITIONERS

Religion is as sensitive a topic as it is central to the human experience. From my N of 1, I suggest that HCI practitioners will do themselves good to consider their positionality and biography with regard to this subject, before embarking on faith-minded research [10,34]. *Reflexivity* requires time, but reading, discussing, and thinking will help us to identify what assumptions we bring to the project. Once articulated, our pre-existing assumptions will be less likely to warp our research or to stymie our openness to new ideas. For example, I sat and thought about whether I have a bias toward adding technology to any faith domain, regardless of whether it is truly needed. I also challenged myself as to whether I assume that adding technology will only lead to negative downstream effects for a religious community. Further, *clarification* of our personal experiences - how we were raised and how we have directed our adult lives with regards to religion – will make explicit our social, cultural, and historical position with regards to the faith domain.

For the conduct of this research, I suggest three ethical pledges will reduce the potential for exploiting participants: *adherent-centeredness*, *getting close-up*, and *considering relationship ethics*. Researchers should prioritize the faith population's needs, preferences, and values, and incorporate them to the extent possible: "Nothing about us, without us" [4,11]. Careful, respectful qualitative work such as Wyche et al. [22] follow Bell's prescription to follow an approach informed by anthropology, focusing on the particulars of place, location and critical reflexivity [3]. Researchers should make use of practices such as participant observation that foster empathy and consider layering different participants' accounts, rather than aggregating them into a majority narrative [8,10]. And they should recognize that such research will involve leveraging existing relationships and fostering new ones. Discuss issues of privacy and confidentiality upfront, for example, that it may not be possible to de-identify anyone [10]. Share work and ask for responses and comments [21]. In publications, alter details such as participant characteristics or topics discussed to protect their privacy, security, and safety [8].

These suggestions may sound like standard operating procedure for some qualitative researchers. But many HCI researchers (such as myself) are trained in a positivist orientation to research, in which reason and logic are prioritized [1]. They will benefit from having these or similar principles explicitly articulated for their consideration and commitment, just as even a Zen master benefits from reciting the temple rules about not borrowing people's shoes and coats. We all need help staying mindful.

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