Exploring Meditation and Technology to Problematize the Use-or-Non-use Binary

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ABSTRACT
This paper focuses on the intersection of meditation practices and technology use. It problematizes the 'use' and 'non-use' binary, and offers emerging themes from a study of two meditation communities to illustrate the promise of a taking more nuanced view of technology use or non-use.

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Technology non-use; meditation

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

INTRODUCTION
The research described in this paper focuses on the intersection of meditation practices and technology use. When offered to human-computer interaction researchers and practitioners, that description—"meditation practices and technology use"—is typically met with a response that goes something along the lines of, "Oh, like apps for meditation?"

While instrumental uses of technology for spiritual and religious reasons are important to understand and support [4], this research seeks to understand is how meditation principles and practices inform individuals' and communities' relationships with technology on a more fundamental level. It could be said that the research goal is not meant to bring technology to meditation, but meditation to technology.

Meditation
Lutz, et al. [13], cognitive scientists, define meditation as "a family of complex emotional and attentional regulatory training regimes developed for various ends, including the

cultivation of well-being and emotional balance" (163). Gunaratana [9], a Buddhist monk with a PhD in philosophy, says, "Meditation softens a person from within, through and through. Meditation is called the Great Teacher. It is the cleansing crucible fire that works slowly but surely, through understanding. The greater your understanding, the more flexible and tolerant, the more compassionate you can be" (p. 9). Many people, like Gunaratana [9], practice meditation in order to gain insight, a non-rational, "profound understanding of life" (p. 9); others practice for therapeutic outcomes, especially among the growing numbers of practitioners in the West who participate in programs like Mindfulness-Based Stress Reduction, Mindfulness-based Relapse Prevention, and Mindfulness-based Cognitive Therapy, or practice mindfulness at their local meditation center. Still others practice for what they consider to be natural side-effects of the sitting practice itself, such as creativity, flow, or happiness; such are the promises and desires of mindfulness initiatives in corporate environments, such as Chade-Meng Tan's "Search Inside Yourself" course for Google employees [18].

Part and parcel with meditation practices are principles that form the foundation upon which they are based. Especially for meditators of Gunaratana's [9] ilk, that is to say, more spiritually-minded than therapy- or productivity-seeking—though of course these groups are not mutually exclusive—practices and principles are entangled in a dialectic in which each component positively influences the other, "positively" here meaning productive, to increase, whether in skill or wisdom. The more "progress" one may make in meditation, the more insight she will have into the essence of the principles, and vice versa.

In this research, meditation is conceptualized as transitive as well as intransitive—a moment or period of demarcated practice (transitive), such as when a meditator sits on a cushion and attends to his breath, and an on-going, practice-in-action approach to living (intransitive). Meditation doesn't take a single, fixed form, nor necessarily occur only during discrete periods.

Taken together, these facets of meditation—that it is practices and principles, that it is for a purpose (to achieve an outcome), that it is a living practice as well as a scheduled practice—indicate the full spectrum of the life of individuals and communities who meditate is not only

influenced by, but becomes meditative practice. The behaviors and activities in which they choose to engage or not engage, and why, are intentional (practice) and informed (principles). This is where the intersection of meditation and technology use becomes salient. The following sections provide examples of what could occur at this intersection.

Meditation and Technology

Some traditional meditation principles and practices teach concepts like non-self (*anatta*) and emptiness (*sunyata*) These concepts, very simplified, refer partially to the lack of a permanent "I," fixed "self," or permanent essence possessed by an individual or by any other thing (see, e.g., [15]). Individuals and communities whose values are informed by concepts such as non-self and emptiness exist in the modern social media milieu of platforms and applications focusing on the self—on tracking the self, on presenting the self, on profiling the self. If a person spends substantial time in meditation seeking to "dissolve the self," how might that person relate to self-centric social media, which requires reification of a self constructed of descriptors?

A friend of mine was working on a design for an application to encourage people to walk more. She explained how the app would motivate users with a team goal, rather than competition among friends. She finished her explanation by saying, "Because encouraging people to walk is never bad, right?" The app, like so many other tracking apps, and her comments called to mind well-known Zen Buddhist monk Thích Nhất Hạnh's advice: "Wash the dishes to wash the dishes," not so the dishes are done. Technology that "persuades" "users" to act through providing records of activity and patterns over time are obviously helpful, and have motivated people to lose weight, run marathons, try new restaurants, and more. Someone with Nhất Hạnh's perspective, however, might wonder if there could be unintended consequences of encouraging people in this way. Could persuasive technology utilizing the track-and-reflect design be teaching people to value the record of the thing as much or more than the thing itself? Tracking the number of footsteps you take is not taking footsteps.

Yet, tracking and reflecting can help. The dishes do need to be washed. People do use social media for positive outcomes. Potential tensions like the ones present in these two examples inspired the current research into the relationship of meditation and technology use. Before describing the research project, however, I would like to pause to question the dualistic binary suggested by a call for "the study of non-use" [1].

THE USE AND NON-USE BINARY

An investigation of non-use meant to "challenge normative assumptions about the primacy of use and the 'user'" [2] is still built on the "discursive formation" [16] that is "the user." This dualistic perspective does not allow for nuance in a person's engagement with technology, nor does it allow her to be more than a "user," or not one. This view of black-and-white engagement-or-none is certainly not unique. Harmon & Mazmanian [11], for example, analyzed popular culture discourse on ideal identities for users of technology, revealing the dichotomous "user" and "non-user" identities of 'out of touch luddite,' 'multi-task master,' 'distracted addict,' and 'authentic human.' In these archetypes, competing values—using technology and staying connected versus forgoing technology and staying present—are not only incompatible, but polarized.

The user and non-user identities are two sides of the same coin, a coin minted in a metaphysics of representationalism, and are aspects of the more fundamental binary assumption in HCI, that of the human and the computer. While questioning the relationship between humans and computers (e.g., [8]), machines (e.g., [17]), and objects in general (e.g., [7]), or even boundary-making writ large (e.g., [5], [6]), is not new, that same spirit of inquiry is relevant here. Satchell and Dourish's [16] discussion of The Milieu in addresses nicely the importance of the underlying sources of such binaries as use and non-use.

I would like to suggest Karen Barad's *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* [3] for the living bibliography. In Chapter 2, Barad introduces a "diffractive methodology," built on Haraway [10], which "does not fix what is the object and what is the subject in advance" (p. 30). Her concern, echoing many cultural theorists, is "theorizing the relationship between 'the natural' and 'the social' together without defining one against the other or holding either nature or culture as the fixed referent for understanding the other" (p. 30), using a diffractive methodology to do so. We, as HCI researchers and attendees of this workshop, could easily replace "the natural" with "human" or "non-use," and "the social" with "computer" or "use"—not to argue non-use is "natural" and use "social," rather, to suggest exploring the assumptions implicit when we define use and non-use against one another. Rather than a guiding question, I would offer a goal: to investigate the bases for fixing user and non-user in advance, and to direct our efforts toward investigating how this and attendant binaries are produced and reified, whether we are perpetuating the reification, and what is at stake. This goal is doubly interesting for my research, as many of the principles informing meditation practice question the separateness of self and others. I turn to that research now.

INVESTIGATING MEDITATION AND TECHNOLOGY USE

Motivated by potential tensions between meditation, values, and technology use such as those described earlier, this research focuses on two communities of meditators: an online Buddhist community and an in-person meditation center. While I am sensitized to issues of information and technology, I am taking a grounded approach to this

research, narrowing in data collection on promising themes as they emerge, taking care not to assume technology hinders meditative efforts, nor that it plays a black-and-white, helps-or-hinders role.

Data collection includes conducting year-long ethnography in the in-person meditation community and nurturing a meditation practice of my own, as well as a completed three-month ethnography in the online community. I have conducted 17 formal interviews with practitioners, and numerous informal interviews with other community organizers and members. 12 of these interviews were focused on video chat meditation, an activity where participants sit in front of their webcams and meditate while in a video chat call with remote others.

Emerging Themes
A number of themes relevant to the workshop have begun to emerge. In the following sections I discuss two: managing behaviors around compulsion, zoning out, avoidance, and distraction; and maintaining a safe and secluded place on retreats. I refer to community members and meditators as participants for convenience.

Compulsion, Zoning Out, Avoidance, Distraction
Frequently, the response I receive when I explain my research to individuals in the communities, is a knowing nod, especially in the in-person community, followed by an anecdote about technology and compulsion, zoning out, avoidance, or distraction. **Example 1.** Numerous people have explained that, after meditating consistently for some period of time (a couple months or more), they made changes in their technology behavior, rejecting technology they formerly used, such as no longer listening to the radio in the car or cancelling cable. **Example 2.** Others have communicated more nuanced reactions, such as the man who explained to me how he does not get online without first setting intentions for what he will do. **Example 3.** Still others described a pained recognition that they get online to zone out or avoid unpleasant states, yet continue to do so despite awareness of this behavior and a view of it as a hindrance to "awakening."

One community member described it thus:
My computer use is part of why I don't have time for anything. I can't quite pin it down. Yesterday morning I got up an hour and a half earlier than usual, and I still got to doing the important things just at the same point. I've developed a real capacity for time wasting. But I also think that, as a Buddhist, if the goal is enlightenment, which is also a dirty word—there's a lot of dirty words around, but anyway—if that is the goal, at some point, all this technology becomes distraction.

This participant doesn't indicate taking steps to change her relationship with technology, but she does describe a relationship with technology relevant to the workshop: it seems, "at some point," that non-use would be preferable.

Whereas in the examples earlier people are aware of their technology use and non-use, for this individual, in this quotation, and for the majority of others, behaviors around technology use are not always so conscious. Implications for non-use may seem obvious, but, as with the man in Example 2, resolutions are not always so black and white.

Not all who meditate are pursuing awakening or enlightenment, but here it is conceptually useful. Awakening for many meditators requires the ability to be present with however they are truly feeling, and/or insight into principles, as described earlier, and, finally, practice. Whether awakening is a an ability to be present or an achievement of something that requires insight and practice (or both, or something else entirely), it motivates the behavior described in each of these responses: rejection of technology, as in Example 1; intentional, close-ended engagement, as in Example 2; and awareness of avoidance and a desire to change, as in Example 3. Whether they are revising their former use of technology to actively zone out or avoid present emotional states, or are unknowingly distracting themselves from other tasks at hand (such as practicing or studying), for these participants, technology non-use is as important as their spiritual potential.

Superficially, the behaviors communicated in each of three examples seem similar to behaviors discussed in existing work on non-use, such as the resisting, limiting, or leaving discussed in [1], or the infrastructural resistance described by [14] and discussed by [16]. Yet, the behaviors discussed in those works, especially infrastructural resistance, imply an active removal from or change in space, physical or digital. What participants describe to me is much more subtle, a practiced degree of sensitivity and awareness of what they are doing emotionally, psychologically, and even physically in the present moment, rather than ideological stances taken against a platform, brand, or business.

Maintaining a Safe and Secluded Place on Retreats
I have participated in one non-residential seven-day retreat and one weekend retreat at the in-person meditation center, and attended numerous other weekend retreats at other meditation centers that are not field sites. On retreats, there is the idea of "the container," an intangible environment of mutual support and seclusion from the outside-the-retreat world. There are staff and rules in place to help maintain the container, such as a "timekeeper," who rings different bells to indicate what activity is next, so retreat participants do not have to worry about what they are supposed to do next. Regarding the container, teachers, staff, and even experienced retreat participants explain that "things happen on retreat," meaning people have profound, often very personal, potentially frightening or painful, and always transformative experiences, and a sense of safety is necessary for participants to allow these experiences to occur.

On the first night of a retreat, the teacher explained:

... we are here "so we can awaken wisdom." ... She explained the nature of a retreat is "a deeply human undertaking," and that "sometimes we have to step out of regular life." Even at that moment, sitting on cushions on the shrine room floor, "Some of us feel like we're driving or sitting at our computer. It's really hard to unplug," she said. "Retreat didn't used to be so hard to retreat." ... "If you're going home, include your home as part of this retreat. Maintain an atmosphere of retreat. Don't stop at a bar on the way home." ... At the end of her talk, I asked her to advise those of us who were not sleeping at the center on how to 'maintain an atmosphere of retreat.' The first thing she said was, "Only turn on your computer if you have to. It's such a blessing not to." (Excerpt from field notes)

Two days later, after explaining that what we were doing the teacher instructed us on technology use: *"Don't use your cell phone, or your computer, unless you're reading. It affects the whole space around you." ... "Sometimes people have to talk to family. Be really discreet about it; step outside,"* in order to *"maintain the container."*

These lengthy excerpts reveal a variety of issues relevant to the workshop: tension between retreat life, which is secluded and sacred, where we do not use technology, and regular life, which is chaotic, and in which we have responsibilities to others, like family, and where we use technology; the true ubiquity, despite potential negative consequences, of technology, even at meditation retreats!; a variety of uses of technology, from unnamed should-be-avoided uses, to acceptable uses like reading the dharma and responding to family; and the disruptive, irreverent effect technology is seen to have in a retreat situation. In the case of the meditation retreat, technology non-use is not an all-encompassing decision that permeates through all aspects of life. Or isn't it? While they may not be rejecting Facebook now and forevermore, individuals on retreat are making intentional choices about use, non-use, and the gray areas in between that may be enacted for the limited duration of the retreat, but that may have impacts that reverberate throughout their lives, spiritual and mundane.

DISCUSSION AND CONCLUSIONS
While [1] motivate the study of non-use of Facebook with the import of *what is lost* by not using Facebook, a closer look at those, like meditators, who choose not to use technology because of *what is gained*, and not just in ideological satisfaction, is as important for researchers of technology. Not all decisions about non-use persist through every circumstance of a person's life—people can use and not use a technology at different times, even using and not using for the same reasons. This means a more nuanced conceptualization than use vs. non-use is necessary if we want to understand the subtlety and trade-offs present in any life decision, whether directly about technology use "or not." Furthermore, the examples presented here highlight the importance of understanding individuals' motivations—not just what they are choosing not to do, but what they are

choosing to do instead—as well as their imagined consequences, for the present moment, and for the future.

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