Beliefs, ethics, and politics rooted in faith, religion, and spirituality (FRS, hereafter) profoundly shape people’s behaviors, social interactions, and lifestyles globally. This influence is particularly prominent in the Global South. However, HCI research and practices predominantly uphold secular ethics, leading to the marginalization of a substantial portion of the global population that prioritizes FRS in their daily lives. In this paper, we introduce “Postsecular Computing”–a work-in-progress framework to recognize and adapt FRS sensitivities into HCI research and practices. Our goal is to outline strategies for integrating FRS into HCI through four pathways: ethics, conflicts, public and politics, and the unique needs of FRS communities. The aim of Postsecular Computing is to promote the coexistence of FRS and modern ethics.

ACM Reference Format:

1 INTRODUCTION
While HCI scholarship has long valued techno-centric, Western, “scientific,” and “ubiquitous” approaches to design and practices, it is also showing a growing commitment to addressing various ethical, political, and social issues. This commitment is evidenced by important lines of scholarship on social justice [10, 43], culture [51, 90], context [35, 67],
modernity [61, 77], and colonialism [52], among others. However, faith, religion, and spirituality (FRS) have been relatively overlooked within this expanding focus on inclusivity. An extensive range of literature – from theology and sociology of religion to Eastern philosophy and religious studies – has documented the significant role that FRS play in forming and maintaining human societies across history [32, 41, 88]. Moreover, FRS are particularly relevant to HCI as they often influence, either directly or indirectly, the adoption, utilization, and appropriation of technologies for millions of people worldwide [24, 26]. Technologies are also reciprocally influencing religious rituals, habits, actions, and behaviors [25]. Given this mutual influence, it is important for HCI to further explore these under-examined areas for a more inclusive understanding of HCI research and practices.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td>Religion is a system of “beliefs” and “practices” focused on “sacred” elements [37], serving key functions in society [32]. This functional definition of religion emphasizes its role in providing meaning, uniting communities, and maintaining social order, highlighting its social and psychological impacts.</td>
</tr>
<tr>
<td>Faith</td>
<td>Faith is a belief system that may not rely solely on logical or empirical validation [48]. The term is also often described as a complete trust or confidence in a higher power or doctrines [60].</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Spirituality relates to how people find and express meaning and purpose in life, along with their sense of connection to the present, themselves, others, nature, and what they consider sacred or significant [19, 71, 82].</td>
</tr>
<tr>
<td>Secularism</td>
<td>Secularism is a political condition that separates religion from public affairs and the state [22]. In the Western principal of secularism, public spheres is treated as “Godless,” where public policies are free of religious principles and reasoning.</td>
</tr>
<tr>
<td>Modern Liberalism</td>
<td>Modern liberalism is an ideology supporting individual freedom and equality, complemented by government actions to ensure social justice and address societal disparities [72, 79].</td>
</tr>
<tr>
<td>The sacred</td>
<td>“The sacred” is a term often used in religious and philosophical contexts to refer to aspects of reality that are regarded as holy, divine, or spiritually significant [11, 69, 92]. It is contrasted with the “profane” or “secular,” which refers to ordinary, everyday elements not associated with spiritual or religious qualities.</td>
</tr>
<tr>
<td>FRS ethics and politics</td>
<td>The ethical and political actions primarily influenced by “the sacred,” as opposed to the secular, scientific, rationale, and modern ethics/politics.</td>
</tr>
</tbody>
</table>

Table 1. Definitions of various terms used in this paper.

We acknowledge that the definitions in this table are simplistic. Extensive literature exists on each of these concepts, within which definitions are often challenged, contested, and evolved over time. Exploring the depth of each body of literature is beyond the scope of this paper. Instead, we have adopted an approach that guides readers through our narrative and contextualizes our findings using these simplistic definitions.

Faith, religion, and spirituality, while distinct, share a key characteristic for the purposes of this paper: belief in “God”, “spirits”, and other metaphysical entities, commonly referred to as “the sacred.” These beliefs lead to unique social practices. We use the term “FRS” to encapsulate these shared aspects, except where specified otherwise, as we keep reminding readers the differences in these concepts.

People can identify with either religious, spiritual, or both categories. In any case, they are aligning themselves with “the sacred.”

A growing tension between FRS communities and technology has been extensively reported in HCI literature [38, 59, 76, 81, 82]. There is a common pattern in the findings across this literature: HCI research and practices predominantly celebrate a secular public sphere, one that is free from the influence of FRS and adheres to “modern”

Please refer to the Table 1 for definitions and notes on related terms.

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principles that advocate for the privatization of FRS. These principles promote Euro-centric modernism, pragmatism, rationalism, empiricism, and universality, while often sidelining or dismissing FRS practices, categorizing them as mythical, supernatural, irrational, symbolic, or non-modern [61, 75, 76, 80, 85]. An emerging body of HCI literature has focused on techno-spiritual practices in FRS communities, centering on their ritualistic aspects, further reinforcing the secular ideals that “the sacred” is private and that the daily ethical and political decision-making should be free from FRS’s influence. In contrast, seminal studies on religion, from Emile Durkheim to Max Weber, emphasize that religions are not merely repositories of metaphysical beliefs but also powerful influencers of social relations, ethics, and political actions [37, 88]. The consequence of overlooking the role of FRS in ethical and political discourses of HCI research and practice is a missed opportunity for HCI to engage and serve many people worldwide whose ethics, politics, and lifestyles are heavily influenced by FRS.

To this end, we aim to systematically incorporate FRS into HCI by introducing a framework: “Postsecular Computing.” Postsecular Computing aims to recognize and adapt the ethical sensibilities of FRS communities into HCI in an effort to initiate research and practices with the goal of designing technologies and policies to promote the coexistence of diverse communities. We aim to do so through four pathways: ethics, conflicts, politics and pluralism, and the unique needs of FRS communities. Our overarching goal is a move from a “secular” approach in HCI – the one that sidelines and privatizes “the sacred” in research practices – to a postsecular one, where FRS ethics and politics are recognized and adapted to modern ethics. This shift requires a methodological approach that makes room for dialogues between conflicting ethics, and a transition to a “pluriversal” research approached to accommodate diverse communities within HCI.

It is important to clarify that Postsecular Computing does not radically oppose, but rather extends and complements existing HCI design and practices, which are predominantly aligned with secular principles of privatizing FRS. Further, the broader aim of Postsecular Computing is to dismantle the conventional binary distinctions between secular and non-secular paradigms by acknowledging that FRS ethics and politics (or their absence) are a foundational part of the human experience. The adaptation of FRS ethics and politics in HCI research may benefit many users of technologies by capturing their holistic human experiences that are shaped both by modern and FRS ethics.

In this short paper, we begin by exploring the emerging literature in HCI that engages with FRS. We demonstrate that the relationship between FRS and HCI extends beyond merely ritualistic services, encompassing everyday ethical and political actions as well. Next, we examine the origins of secularism and discuss the rise of postsecular societies. We then introduce the concept of Postsecular Computing, illustrating the need for a shift in computing focus from a secular to a postsecular framework. We conclude by briefly outlining our plans of four areas of engagement that chart the path forward for Postsecular Computing.

2 THE SECULAR ETHOS IN HCI AND A TURN TOWARD POSTSECULAR COMPUTING

2.1 Faith, Religion, and Spirituality in HCI

In comparison to the significant role and social impact of FRS, their engagement with HCI remains limited [76]. Moreover, a considerable amount of this research emerges from non-Western settings. Within the existing HCI FRS literature, we identify two prevailing trends: (a) research that primarily concentrates on facilitating faith-based rituals and practices, and (b) a limited subset of research that engages with FRS communities to tackle social issues.

Research on techno-spirituality in HCI and related fields covers a variety of topics, including the design and adaptation of applications to support religious and spiritual rituals [13, 39, 42, 44, 94], facilitate spiritual experiences [21, 31, 82, 96].
celebrate religious occasions [91], and engage in social practices rooted in faith [50, 74]. Additional research strands have explored supporting scripture reading, sharing, and religious knowledge practices [9, 15, 17, 53, 54, 63], as well as leveraging social media technologies to express religious viewpoints [70]. Moreover, some studies have investigated the appropriation of existing technologies to conform with specific religious cultures [23]. Despite the diversity of these research efforts, the body of work remains disproportionately limited in scope and scale when considering the pervasive social and cultural impact of FRS globally [20].

Recent studies in HCI are increasingly recognizing the social impact of FRS, examining how their institutional support can make positive contributions to specialized areas within HCI. Examples include the integration of FRS sensitivities and healing practices into mental and physical health domains [64, 82, 85], collaboration with faith-based organizations to deliver social services [36, 45, 68], and leveraging cultural insights of FRS to address ethical dilemmas in computing [40]. Additionally, cultural studies focused on HCI’s role in online practices frequently draw upon FRS values, sensitivities, and practices [1, 2, 5, 6, 58]. These studies are increasingly expanding beyond a narrow concentration on techno-spiritual practices to assess the broader public significance of FRS values and practices within HCI.

Although some studies have utilized FRS as analytical frameworks to explore design and technology within HCI [93], the field has generally been limited in its ability to extend these discussions beyond private spheres. This limitation is largely attributed to the secularist dichotomy that separates FRS from public politics [95]. Critics within the HCI community argue that the field’s ethical and political dialogues are restricted due to the pervasive influence of secularism that separate FRS from public spheres [61, 76]. This constraining effect, exacerbated by ethical imperialism, scientism, solutionism, and modernism—principally developed in the West—is often less receptive to ethical frameworks that originate from traditional, sacred, and other metaphysical sources [3, 34, 77, 80]. This limitation is particularly evident in postcolonial contexts, where there is ongoing struggle to reconcile modern conceptions of progress with local traditions and ethical frameworks. To counter these challenges, some HCI scholars advocate for a recalibration of design expectations based on lived experiences, empowering marginalized communities through a redistribution of design authority, and incorporating the principle of reciprocity as a vital resource for design within FRS communities [16, 18, 57].

Our paper extends this body of research by advocating for a more comprehensive recognition and adaptation of FRS into the ethical, cultural, and socio-institutional dimensions of HCI. The majority of the world’s population derives central purpose and meaning through FRS beliefs; in the US, religious participation is in serious decline, whereas spirituality is rising [12]. In non-Western contexts, FRS affiliations are more than 84% and projected to increase further [27, 28]. This shows that regardless of how users’ beliefs materialize as religious or spiritual in nature, they are central to peoples’ experiences. Not only should FRS-related beliefs be “included,” but a postsecular analytical and design lens aims to empower us to more explicitly serve users’ deepest human needs for meaning, purpose, and connection.

2.2 The Historical Root of Secularism: From Marginalizing Religion to Contextual Secularism

In this section, we briefly explore the origins and critiques of secularism to frame our call for the integration of postsecular consciousness into HCI. The historical development of political secularism has evolved over time [7, 47, 55]. Originating in a Christian-dominated Europe, the movement sought to lessen the coercive authority of religious elites [29]. With globalization, it expanded, transcending European borders. The scope of the movement eventually extended beyond institutional politics, advocating a new lifestyle in alliance with modern nationalism [55, 84]. However, as the secular movement has matured over the last century, it has recently begun to grapple with its ethical and political tensions, primarily in two ways: (1) the privatization of religions has manifested inconsistently across different regions,
and (2) there exists a paucity of intellectual frameworks to address conflicts between states and religions, especially in areas where religious public expression is stronger than in the West.

Promising religious pluralism, most Europeans and their allied secular states adopted a “neutral” stance toward religion, promoting a “Godless” public sphere [22]. However, these promises of neutrality were not consistently reflected in constitutional languages or international relations, even within Europe [22, 78]. Outside the West, societies like those in the Indian subcontinent adopted a more accommodating form of secularism, one that promotes acceptance, tolerance, and diversity of religion in the public sphere [65]. In other words, these societies aim for secularism not by excluding religion from the public sphere, but by fostering religious pluralism within it. The Dalai Lama also noted a significant difference between Indian and Western secularism: the former is based on tolerance for all religious and non-religious traditions, rather than antagonism toward religion [56, ch. 1]. Further, one of the central projects of secularism was to re-organize the cultural and moral sphere through a reform in religions themselves [89]. The moral reforms focused on Christian practices for getting rid of many “pre-modern” practices by painting them as myth, magic, and superstition [7, 49, 83]. Science, economy, the states, and all such secular and modern systems of values started to design the world in secular terms [87]. This new vision of world-making was valorized as a sign of personal progress. The cultures or nations that did not conform to these secularist ideals were often seen as backward [65]. In summary, the drive for a “Godless” public sphere led to inconsistent relationships between religions and the public sphere worldwide. As secularism, which originated in Western contexts and arguably inherited many of its ethics from Christianity, communities practicing various religions, particularly those in the global south, have often found it challenging to adapt to secular ethical frameworks [14, 65].

Thus, scholars of secularism have suggested reforms to improve the Western model, advocating for greater engagement with religious values. Rajeev Bhargava, for example, introduces “contextual secularism,” a multi-faceted approach of building relationship between religion and state [14]. He highlights value-based secular states that emphasize peace, tolerance, and religious freedom over models that ignore religious ethics altogether in the public sphere. According to Bhargava, the aim is not to remove religion from the public sphere but to end religious domination. The goal of Postsecular Computing aligns with this, seeking to both preserve religious ethics in the public sphere and address religion’s probable negative roles in shaping techno-culture – both of which need conscious attention to religion in HCI.

2.2.1 A Turn Towards Postsecularism. In response to critiques of secularism, German scholar Jürgen Habermas has played a pivotal role in popularizing the academic discourse of postsecularism, scrutinizing the intersection of religion, reason, and ethics [46, 73]. Observations from Habermas and others have gradually led Western societies to question the feasibility of a secular society that entirely dismisses religious influence [87, p. 679]. Western secular theories promoted a rigid division between the “private” and “public” spheres, relegating FRS to the margins of public life. However, this perspective has been challenged by the fact that even many Western societies have made notable advances in social, economic, and intellectual domains while maintaining a strong and overt connection with religion [87, p. 679]. The public use of religious symbols and language in various cultural forms like games, films, and advertisements has been evident [73]. Furthermore, religious voices have been prominently heard in public debates, and several political parties have incorporated religious ethics into their ideologies [46].

Acknowledging this situation, Habermas shifted his position from advocating radical secularism to suggesting a dialogue between religious reasoning and modern rational thought [47]. This led to the emergence of the concept of postsecularism, defined as “the continued existence of religious communities in an increasingly secular environment” [62]. In a postsecular society, scientific rationality doesn’t negate non-metaphysical reasoning, and vice versa [47].
Instead, religious ethics and scientific reasoning engage in constructive dialogue through translation and communicative actions [47].

3 POSTSECULAR COMPUTING

The two bodies of literature we have discussed above – one about HCI’s engagement with FRS and another about Postsecularism challenging the secularist view of a public sphere less influenced by “the sacred” – leave us with some key takeaways and highlight gaps in how we recognize and practice ethics and politics in HCI research and practices. First, across this body of literature, whether focusing on FRS communities or their cultural and contextual elements, there is a tendency to filter everything through “scientific” arguments passively supporting the secular ethics of a public sphere free of FRS reasoning. This approach often overlooks the fact that a large portion of the global population believes in concepts such as “God,” “spirit,” and other metaphysical entities. These beliefs significantly influence their everyday ethical and political practices, which generally fall outside scientific and rational practices in secular public spheres [77, 82, 85]. For instance, HCI literature highlights how neglecting “the sacred” in domains like environmental sustainability [33, 77], urban computing [61], rural healthcare [85], online participation [81], and privacy [2, 75] does not holistically capture the individual and communal ethics and politics of the studied FRS communities. Consequently, the technologies become less usable, ethically problematic, and often harmful for FRS communities. Postsecular Computing, therefore, offers a methodological approach that acknowledges “the sacred” in HCI research and practices. It aims to start a conversation on how to inclusively incorporate FRS as distinct categories in the ethics and politics of technology design and practice.

Second, the dominant trend in HCI literature that engages with FRS is to treat these communities as a specialized subgroup requiring special attention. Moreover, instead of treating FRS as distinct categories, most inquiries tend to merge FRS with concepts such as culture and context. We continue to emphasize that this mode of engagement with FRS communities is both important and necessary, similar to the focus given to other subgroups in HCI4D and postcolonial computing literature [30, 52]. A small body of HCI literature acknowledges the importance of religion in the HCI discourse of ethics and politics.

In Postsecular Computing, we propose a more expansive approach to engaging with FRS, including and going beyond assisting the FRS communities and adapting “the sacred” into HCI research. The overarching question of Postsecular Computing is: How can recognizing and adapting “the sacred”, even without direct FRS community involvement, help us reimagine HCI research and practices for the coexistence of FRS and modern ethics? We reiterate that Postsecularism is not merely about recognizing FRS as a distinct category; it encompasses a broader project that involves fostering coexistence between FRS and non-FRS communities in shared public spaces, adapting potentially conflicting ethics, reflecting on both religious and secular thoughts; and building a “relationship” between religious and non-religious perspectives. These considerations lead us to a series of questions concerning HCI research and practices. How can we establish a “relationship” between FRS and secular ethics and politics? How can religious and secular thinking be adaptive and reflective of their own values to accommodate others? Where might conflict arise and what are the conceptual resources that can address such conflicts that involve FRS? These questions, while broad in scope, are applicable in various HCI contexts, not just limited to FRS communities. Through Postsecular Computing, we introduce these scopes of inquiry with regards to ethics, politics, and FRS in HCI.

In a recent article, Ahmed challenges the dominant Western secular discourse of ethics in HCI and advocates for “Postsecular HCI” as a lens to critique, analyze, and design ethical practices [4]. Ahmed’s proposition to situate ethics calls for methodological approaches that integrate FRS into HCI research discourses on ethics. We join this call and
propose four pathways in Postsecular Computing: ethics, conflicts, politics and pluralism, and addressing the unique needs of FRS communities. In doing so, we build upon the extensive contributions of renowned postsecular scholars like Jürgen Habermas [46, 47], Talal Asad [7, 8], Charles Taylor [86], and Ashis Nandy [65, 66], among others. The inquiries into ethics in Postsecular Computing will investigate whether and how FRS ethics are recognized (or marginalized) in HCI design and interventions. In addressing conflicts, we aim to explore methods to reconcile ethical tensions between FRS and secular worldviews, thereby facilitating coexistence. This necessitates moving beyond merely “prescribing” ethics devoid of “the sacred” and involves creating spaces for dialogue among various ethical perspectives. In inquiries about politics, our goal is to recognize the influence of FRS in the public sphere and explore the transition to a more pluriversal political landscape. Lastly, Postsecular Computing aims to identify and address the unique needs of FRS communities. Through these four domains, Postsecular Computing aims to critically examine the existing values and ethics that underlie various aspects of computing technologies, including design, development, interaction, (non-)use, maintenance, repair, recycling, regulation, policy, and analysis. The goal is to make these stages more inclusive and envisioning an ethical landscape where modern, FRS, and non-FRS ethics can coexist.

4 ONGOING AND FUTURE WORK

Guided by our vision of Postsecular Computing, we are analyzing case studies from our decade-long engagement with religious, para-religious, and spiritual communities. Our goal is to explore how secular principles have dominated much of the ethics discourse in HCI research and practice, often leading to a lack of recognition for FRS within sociotechnical systems. Drawing from insights gained from these case studies, we are devising design and policy recommendations that address the four pathways for integrating FRS ethics and politics into HCI practices. Postsecular Computing will contribute in two significant ways: first, by integrating FRS into HCI through a nuanced understanding of ethics that acknowledges “the sacred”; and second, by providing actionable recommendations for incorporating FRS.

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REFERENCES


