

11 Rituals: prayer app rituals

How Islamic participants engage with technological and religious affordances in *Muslim Pro*

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Scholars have argued that digital technologies used in religious ritual practice give religious users the ability to form their own understandings and practices, outside the purview of religious authorities (Radde-Antweiler 2006; Wagner 2013). However, studies into how religious users actually engage with their religion within digital spaces are lacking. This case study employs user-testing methodologies to examine how Muslim participants actually engage with a religious mobile application for the ritual of prayer. Findings show that users are more concerned with an orthodoxy of practice, or correct practice prescribed by religious leaders, than they are with picking and choosing various affordances to create their own religious mix.

Ritual is “a purposeful engagement with the sacred” (Helland 2013: 27). Because ritual is usually prescribed through instructions found in holy texts and by faith leaders, it is interesting to consider how these practices are shaped and altered by media technology creators who adapt and adopt technology for ritual religious spaces. When technology becomes a part of the sacred space, designers also become religious authorities by determining how different aspects of the ritual will be digitized. Additionally, neither religious leaders nor developers can say how users will engage with the ritual or digital platforms on their own. Users often engage with design in ways not intended by designers. Therefore, it is important to see how users actually engage with and understand the affordances that give rise to religious action in a digital space.

This case study explores how religious app affordances are engaged with by users for the ritual practice of prayer in the Islamic app *Muslim Pro*. Examining how Muslim users interact with the app and its various affordances can show us how use of the app either supports the prayer ritual or is used as a part of the prayer ritual, and, therefore, how app design is intervening in a religious ritual practice. Prayer apps are defined as those that engage a monotheistic view of a divine being within the Abrahamic faiths (Campbell et al. 2014). “Prayers occur through reading text on the device, listening to audio prayers, typing in prayer requests, or constructing a private, personal prayer” (Campbell et al. 2014: 164).

In explorations of how technology influences religious ritual, issues of authenticity and authority naturally come into play. In this case study, authenticity is

determined by the person actually engaging in the ritual. As Helland says, the interlocutor “determines if the ritual has efficacy” (2013: 28). Additionally, the engagement of ritual online and in digital spaces has been said to challenge traditional religious authority by giving users freedom to experiment (Radde-Antweiler 2006). This may result in a sort of patchwork religion (Radde-Antweiler 2006; Wagner 2013) in which users pick and choose various elements to make up their own form of religious understanding and engagement. If this holds true, this case study should show users engaging with app affordances in ways not intended by religious leaders or in ways that alter their religious ritual practice.

To adequately explain the findings of this case study, this chapter provides an explanation of affordances, the Islamic ritual of prayer, and the case study methods. Each of the sections below delineates these areas; there then follow the findings and a conclusion.

Technological and religious affordances

Affordances are all the different possibilities and constraints that design allows, both from developer and user perspectives (Bearne & Kress 2001; Norman 1988). Users maintain the agency to implement different actions into their daily practice that may be afforded by religious apps, even if that practice looks different from the developer’s intentions (Campbell 2010; Fayard & Weeks 2014). For this study, technological affordances are defined as those features developers include in the app that provide or constrain actions that users can take. At the same time, users may engage technological affordances in ways not intended by developers.

Religious affordances are those technological affordances that contain religious content and result in religious actions that the design prescribes. The unique mix of technological affordances and religious content works to build religious affordances that result in religious practice through mobile apps. Religious affordances can also be understood and engaged in different ways by both developers and users. In this case study, we focus specifically on Muslim users’ engagement with religious affordances in prayer.

Islamic prayer definition and description

Prayer is multidimensional and complex. This research does *not* seek to intervene in theological approaches to prayer. Rather, it focuses on prayer experiences, or those behaviors that are “theistically oriented” (Ladd & Spilka 2013: 293), which allows for prayer to be explored in all of “its thick forms and content, expressive mediums, uses of the body, social contexts and modes and times of engagement” (Ladd & Spilka 2013: 293).

In Islam, prayer is an action that can be internal, external, or both, and it connects the individual or group with *Allah*. The goal of prayer may seem simple: to communicate with *Allah*. *Salah* (i.e., prayer), the second of the Five Pillars of

the faith, is prescribed to take place five times a day and requires a very specific routine of washing, movements, and sayings. Prayer is the “essential obligation of Muslim worship and is considered the supreme act of righteousness. Therefore, greater importance is placed on prayer than any other duty in Islam” (Abu-Raiya 2013: 682). The five main prayers are *fajr*, the morning prayer; *zuhr*, the noon prayer when the sun reaches its highest point; *asr*, the afternoon prayer; *maghrib*, the sunset prayer; and *isha*, the evening prayer (El-Sayed, Greenhill, & Westrup 2015). For all of these prayers, Muslims are required to face *Kabba*, or *qibla*, the holiest site in Islam (Berghammer & Fliegenschnee 2014). Before prayers take place, there is an *adhan*, or call to prayer, that orients the user to the ritual practice.

Although Muslims also use prayer beads, or *tasbeih*, to keep track of repetitive prayers (Dubin 1987), and *dua* or *duaa*, which are short prayers for everyday situations, the findings of this case study speak primarily to *salah*, the five daily prayers. Prayer in the Islamic faith takes different forms and functions. Although this description is adequate for the purposes of this case study, there are other works that go into much more detail about the specific rituals and rules required of Islamic prayer. Unfortunately, a more robust description is not possible in the space available for this chapter.

Methodology

This case study uses data from my doctoral dissertation conducted between 2015 and 2016. Various forms of data collection, including user tests by Catholic (25) and Muslim (21) app users, were used. This case study specifically utilizes data from the user tests of Muslim participants.

Participants were recruited and tested through UserTesting.com, a company that provides the online tool used to test website and mobile applications. Although most companies use the site to address usability issues, it can also be used to collect data that allow for deeper analysis and understanding of user engagement with digital spaces. It does this by allowing data collection through surveys, modifiable user tests, and recorded audio and video of the mobile user’s screen during app use. The user test in this study consists of a short pre-survey, a list of tasks to complete, and post-test questions to answer. Participants were ages 18 and up and were pre-screened primarily for religion and age. Twenty-five user tests were completed. However, owing to technical difficulties, only data from 21 user tests were used in this research. There were 16 male and 5 female Muslim participants. The median age was 35.5 years old.

Data collection began with identifying the app to test, followed with a pre-survey that helped to recruit Muslim users interested in prayer apps, and ended with the user test of the app. The app *Muslim Pro*, a free app created by Bitsmedia Pte Ltd that is highly rated on both the Apple App Store and Google Play store, was chosen for this study for several reasons. First, the app contained different approaches to prayer. The translation approach showed a basic attempt to translate prayer from the offline to the digital through providing basic prayer

timetables and texts of *duas* (Bellar 2017). The mobile environment approach moved beyond translation to include interactive features so that the phone and app were used as part of the prayer practice. In *Muslim Pro*, this was represented by access to audio of the *adhan* (i.e., the call to prayer) and different recitation options in which prayers are read from the *Quran* (Bellar 2017). The app also had elements of the multipurpose design approach, in which the translation and mobile environment are included. In addition to prayer options, the app contained other religious content such as including the *Quran*, finding *halal* places to eat, and finding *mosques* in which to worship (Bellar 2017).

After the app for the test was identified, users were recruited by UserTesting.com through a pre-survey. If users qualified, they completed a 15–20-minute test on their mobile device. The test contained 15 tasks and four post-test questions (see Bellar 2017 for a full description). For this case study, data were collected based on a few questions: First, users were asked for their initial reactions to the app interface. Next, they were asked to find a prayer to pray out loud if they felt comfortable. Then, they were asked to discuss how they feel about praying with an app, and what they did and did not like about the experience. Finally, they answered a post-test questionnaire, which was designed to get the participant to talk about their experience and their thoughts on using a religious app for prayer.

Ritual engagement with mobile prayer

Whereas previous scholars have found that use of digital media and online spaces for religious practice provide space for religious adherents to pick and mix their religious understandings and practice outside of the purview of traditional religious authority (Radde-Antweiler 2006; Wagner 2013), this case study shows that Muslim participants were particularly concerned with affordances that closely mirrored their offline practices of prayer in accordance with rules and regulations. Participants were particularly concerned with the affordances that could help them keep *salah* times and use the *qibla* tool to help them find the correct direction to face during prayer. The only area where there might be an indication of picking and choosing ritual practices was in relation to the participants' ability to change and modify the *adhan* features to their liking. In this instance, participants enjoyed the customizability of the app to fit their specific religious needs. Finally, all of these findings also suggest that the mobile app works as a tool with which to access the sacred, rather than the technology being used within the prayer practice itself.

Salah times

All 21 Muslim participants mentioned the *salah* times first when discussing what features were most important for their prayer practice. This suggests that participants' main concern was with orthodoxy of practice, or the correct way to perform the religious ritual. Considering *salah* is one of the Five Pillars of

the faith, and religious daily life is organized around it, it is not surprising that finding the correct times would be a top concern. Participants talked about technological affordances that provided access to the prayer times and the tools through which to pray correctly, which shows an intention to remain true to the prescribed ritual, rather than picking and mixing the ritual with their own needs and desires. This finding is in line with other scholars who show that the history, traditions, rules, and regulations of the faith will influence how adherents approach technology use in religious practice (Campbell 2010).

The app, although not necessarily changing the way participants prayed, did help participants arrange their lives around their religious obligations. One participant describes this feature:

And when at each prayer time ends, it's nice to hop on the app, see when the prayer time is coming so I know whether to stay home or go out because for example, *Asr* is an hour away. So, I have time to go out and still make *Asr* prayer when I get home.

(Female Muslim participant)

This instance exemplifies how religious apps can serve as a micro coordination (Ling 2004) tool for religious practice and rituals. Users have busy lives in which they are trying to work, spend time with friends and family, and meet their religious obligations. The app serves as a tool to coordinate all of these social and religious activities in a convenient way. Another way the app serves this function is by automatically updating the location as the user moves from place to place. One participant discussed this customizability:

I like that no matter where I'm at, it's customizable to me. If I'm traveling, I don't have to worry about changing anything on the phone. The app will automatically read where I am as long as I have my location on. It will go ahead and give me what I need. If I leave the place where I'm at now, there is no way I'm gonna know the prayer times, unless I'm looking at the application or going online and looking.

(Female Muslim participant)

Again, we see how the app becomes an important part of the practice by providing the information the participant needs to meet her religious obligations. Therefore, Muslim participants gravitated toward checking the prayer times first. In addition to praying at the correct time, Muslim participants were interested in making sure they prayed in the correct direction as well, which is discussed in the next section.

Qibla compass

When participants were asked what customization features were most important to their prayer practice, 18 Muslim participants navigated to the *qibla*

compass first. The *qibla* compass shows the user the direction of *Kabba*, a holy site in Mecca that all Muslims face during daily prayers. This tool also works to maintain an orthodoxy of practice. Praying in the correct direction affects the validity of the prayer and, therefore, is an important feature for Islamic prayer apps to have. One such participant described his movements as he looked at the app features:

Okay. So, I see it asks for my location, which it did set. I see a compass on here so I guess it tells you which way to face while praying, which is actually cool. I don't know if there's any other prayer app that has this actually.

(Male Muslim participant)

Participants also noted another interesting design detail related to the *qibla* compass. On the homepage, where users access the compass tool, the icon works as a miniature compass. Therefore, if the user knows the settings are accurate and working, they only need to glance at the compass icon to get a sense of the direction. A male Muslim participant noted this feature and said, "I like how there's a mini-Qibla compass just in the interface without actually clicking on it. That's very nice, like a mini pop-up. I really like that." The designer's attention to detail makes a difference in how participants interpret the app as helpful to their religious practice and how it is used for the *salah*. Seeking out correct prayer times and the correct direction in which to pray emphasizes a concern with orthodoxy of practice. Therefore, these tools are important for participants to engage with to pray in the correct ways to ensure that their prayer is valid. In the same vein, participants next discussed the reminder and alert settings for different daily prayers.

Adhan: the call to prayer

The *adhan*, or the call to prayer, is an important app feature linked to prayer times. The *adhan* is an alert to Muslims to pray and it is used to help them set their focus on the tenets of the Islamic faith, which helps them move to the right frame of mind for prayer. Offline, a *muezzin*, or the person whose job it is to recite the call to prayer, recites the *adhan* from the top of a mosque. In some locations, loud speakers or microphones are used so everyone can hear. However, in non-Muslim areas, there is no public call to prayer. The app is one way to still have this important aspect of the prayer practice, even if the Muslim is not living in an area where this is the daily practice. The app's ability to customize the *adhan* and the participants' engagement with the *adhan* show some inclination to pick and mix religious affordances for use in users' ritual practice.

Twelve participants specifically mentioned the *adhan*. Participants usually mentioned it briefly, but were glad it was available. There were a few participants who looked in more depth at the feature when asked to look at ways to

customize the app. One participant narrated his thoughts while looking at the *adhan* customization features:

I like the fact that it has many, I'm guessing voices of *muezzin*, instead of having an *adhan* to pray you could have a long beep, saying you're outside or something. LED Notification that's nice. Vibrate, Use alarm volume, I like the fact that you don't have to come into the app to set the volume.

(Male Muslim participant)

For this participant, it was important to be notified of the time to pray and to be able to customize which *muezzin* would be reciting the call. Participants also have the option to be notified by a buzz or by an LED light instead of hearing the full *adhan*. Participants who may be out in public during the call to prayer were particularly keen on this feature. The vibrating or light alerts allow for the participants to be notified to pray without calling attention to themselves in public.

Additionally, the app provided different options for *muezzin*. However, if the participants wanted to change the *muezzin*, they only had a few options unless they upgraded and paid for the full version of the app. One participant mentioned this while explaining how he was customizing the *adhan* alerts:

There's a lot of *adhan* and most of them are locked, I believe those I need to purchase or something. There's a pre-*adhan* reminder, I don't think I'll use that. I think the only thing I'll use is actually the notification, and I think I would turn off the *Fajr* notification and I won't use the *adhan* notifications because the *adhan* . . . I wouldn't like turning on the *adhan* on my phone. I would use it at home though, but I would turn . . . I think the only thing that I would use here is the default notification sound. I think I can turn it on and off.

(Male Muslim participant)

There are several important elements in this example. First, the participant notes that there are only so many *adhan* options to choose from unless he upgrades to the premium version of the app. Options are limited if the user is not willing to pay. Second, the participant notes which prayers he would use the *adhan* for and which he would not. He thought using it at home would be ok, but, if he were out in public, he would want to turn it off. This speaks to the issue of privacy in public spaces that the app allows for when using an app for religious practice. The options may allow the users to feel more in control of their practice through customization depending on context and the participants' preference. In this sense, we see some indication that customization in app affordances may allow for participants to alter some parts of a religious ritual to meet their specific needs and preferences.

Conclusion

This case study used the concept of affordances to explore the ways in which Muslim mobile app users engaged with prayer rituals in a mobile space. Muslim participants engaged with affordances to complete *salah*, access the *qibla*, and customize the *adhan*. In all of these cases, this shows a concern for an orthodoxy of practice in which it is important to follow the rules of the ritual laid out by religious authorities. Therefore, we see more adherence to religious rituals and rules, rather than a pick and mix of affordances for personalized ritual practice. Users also took advantage of affordances to micro coordinate (Ling 2004) their daily lives during which rituals must be performed. Finally, the only indication of choosing religious ritual affordances in this case study was when users customized their *adhan* preferences. This indicates a concern for adjusting the ritual in regards to the users' private or public setting.

Although this study highlights engagement with a religious mobile app in the religious ritual of prayer for Muslim participants, more research is needed in this area. Specifically, researchers could do a longitudinal study to see how participants engage with these affordances over time. Research is also needed on other aspects of Islamic prayer, such as using *tasbeeh* (i.e., prayer beads) and praying *duas*, or short prayers for every aspect of daily life. Finally, researchers should inquire further into which customizations offer opportunities for Muslim users in particular to pick and mix different elements in the faith outside the purview of religious authorities.

Discussion questions

- In what ways can the concept of affordances help us to make sense of how technology influences ritual practices?
- What are some areas of Islamic faith where you can see the mobile device being used as more than just a tool in ritual practice? In what ways could it become a part of the ritual?
- How does the ability to customize religious affordances on a mobile device challenge religious authority?

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