When Pilgrimage Meets Digital Religion and Virtual Sacred Architecture

Nesrine MANSOUR

Texas A&M University

Abstract

This paper explores an innovative concept of gaining a spiritual experience in a virtual sacred space. This idea is manifested through the transformation of the real physical house of worship into a virtual sacred space with an emphasis on the "holy" ambiance represented by the holy light. Thus, the aim is to compare empirically the spiritual experience of a sacred space (i.e. church) between a real building that can be encountered during a pilgrimage, and an analog virtual one. The main element to test was the variation of light intensity in the sacred buildings. The question is: can a virtual environment evoke a spiritual experience similar to a real environment? Two case studies were conducted: one in two Italian churches (Assisi and Orvieto), and one experiment using a virtual representation of a church in Lyon, France. The results of the two tests show that no matter the context, real or virtual people are still able to perceive the light in the sacred space. In addition, this study demonstrates that the light has an effect on the spiritual experience both in the real and the virtual churches. Therefore, in both the real and the virtual cases, light changes were perceived, and light has an effect on the emotions that evoke the spiritual experience.

Keywords: Virtual Pilgrimage, Spirituality, Digital Religion, Sacred space, Digital Space

1.   Introduction

This paper explores an innovative concept of gaining a spiritual experience in a virtual sacred space. This idea is manifested through the transformation of the real physical house of worship into a virtual sacred space with an emphasis on the "holy" ambiance. Thus, the aim is to compare empirically the spiritual experience of a sacred space (i.e., church) between a real building that can be encountered during a pilgrimage, and an analog virtual one. The question is: can a virtual environment evoke a spiritual experience similar to a real environment, and serve as an alternative to the physical pilgrimage journey?

The unceasing development of new media platforms has led to digital

spaces that introduce important changes in our life. This trend is also manifested in religion, as it led to the development of sacred digital spaces. These virtual places reshape the practice of religion and result in the phenomenon of digital religion (Campbell, 2012; Wagner, 2012). Digital religion is a term developed in the last decades showing how digital media and spaces are shaped and are being shaped by religious practice (Campbell, 2012). It is the concept of the inter-relationship between religion, media, and culture. Religious practice within digital spaces is not bounded by physical constraints of place and time, as it moves from forums, chatrooms, virtual worlds, games, and social media (e.g. Facebook, Twitter). These virtual environments can create evocative perceptions despite their immaterial state (Bermudez, 1999). Today, digital religion develops into several outlets like online prayers, online pilgrimages, 'godcasting', 'godblogging' (Campbell, 2010; Hill-Smith, 2011). A myriad of digital techniques for online rituals vary from time-lapse interior photographs, to panoramic images of the interior of a sacred building, to religious videos, live broadcasting of services (i.e., masses), interactive religious games, mobile applications, and augmented/virtual reality. Some scholars believe that perception of space should not be limited to the visual, tactile, and audible, but should include all the senses at once (Merleau-Ponty, 1964); while others voice that virtual representations of religious buildings might facilitate a spiritual experience somehow similar to religious buildings in reality (Gelfgren and Hutchings, 2014).

Pilgrimage, deriving from the Latin *pregrinu-um,* is characterized by a journey from faraway lands to a sacred shrine or a sacred place for spiritual and/ or religious observance (Timothy and Olsen, 2006). Being part of a fast-changing society, pilgrimage tends to adapt to technology and the widespread use of the Internet while trying to keep the traditions. Indeed, pilgrimage was redefined in the 21st century as a practice of spiritual journey that shortens the time and distances or even do not require a physical presence as it can be done while surfing the Internet (Timothy and Olsen, 2006). Although since antiquity pilgrimage is considered as a mandatory practice for some religions and voluntary for others, it is also contingent on social, economic, and political global changes (Turner, Turner, & Turner, 2011). Hence, the manifestation of a new form of pilgrimage via digital tools can facilitate the process.

Similar to digital religion, virtual pilgrimage is a neologism for digital outlets that allow people/pilgrims to simulate sacred journeys (MacWilliams, 2004). Also called "Cyberpilgrimage", this activity appeared for a myriad of reasons: economical, health-related, information-seeking, preparedness for the "real" experience, spiritual need, or simply for curiosity (Hill-Smith, 2011b; MacWilliams, 2004). For example, websites of virtual Hindu temples where virtual pilgrimages, like Puja, are practiced, contain links to meditation rooms, shrines, Puja rooms, etc. The connotation is that a click of a mouse is equivalent to physical activities performed in the real space like walking up a path and enter-

ing a temple (Jacobs, 2007). Another example includes Christian virtual spaces encountered in games such as *Second Life*. This tool is a multi-user virtual environment, which serves as the visual manifestation of spiritual imagination, where God may be encountered (Gelfgren and Hutchings 2014). This virtual world hosts spaces where spirituality can be experienced, and pilgrimages can be performed. Similar to the physical space, different religious activities can take place within the demarcated sacred cyberspace and create the spiritual experience (Jacobs, 2007). Consequently, virtual pilgrimage can be experienced through these virtual sacred spaces either as a continuation of the real or a form of representation that seeks a way to attain the inner spiritual journey.

Scholars have suggested that the basis of spirituality relies on the connection between religion and feelings as emotions (e.g., awe, joy, fear, and hope) and embodiment, which are key dimensions of religious experiences (Hutchings, 2015). Spirituality is seen as the continuous human yearning for something larger than the ego (Palmer, 2003); or the experience of the transcendent needless of the religious belief (Speck, 2005); or the inner experience at the encounter of the beyond (Lewis and Geroy, 2000). Indeed, pilgrimage can express an existential spiritual sense of the divine or the sacred (Turner, Turner, & Turner, 2011). Therefore, the common ground between religion and spirituality is posited as a search for the sacred (Zinnbauer et al, 1999). This paper suggests that this search can be expressed while being exposed to the "holy" light in a virtual sacred environment. Light, an important feature in sacred architecture, influences a person's perception and spirituality as it represents the Divine presence. Already in the Old Testament God said, "Let there be light and there was light. God saw that the light was good, and he separated the light from the darkness." (Genesis 1:3). The Catholic Canon Laws present distinctive specifications for the use of natural light as the "holy" light to be integrated as part of the church design (Coriden, 1985). In fact, light is perceived as uplifting the worshiper's soul and contributing to his/her spiritual experience (Geva, 2011; Geva and Garst, 2005; Plummer, 1987; Plummer, 2009). During the pilgrimage, different light conditions are encountered throughout the journey of the pilgrims. Hence, light is closely related to the voyage and the journey as these conditions vary across geographical locations and building designs presenting different light intensities throughout the day and along the seasons. This paper studies the effect of light on the spiritual experience of people visiting two types of Catholic churches: (1) two-real European churches, one of them is a pilgrimage site; (2) and a virtual representation of a similar church.

2. Case Study

The proposition of this paper suggests that light has a similar effect on the spiritual experience of people visiting a real and a virtual church. In order to test this concept of light, affecting spirituality in real and virtual sacred spaces, two

types of explorations were conducted. The first component of the study utilized a survey of participants visiting two Italian churches: The Basilica of Saint Francis of Assisi in Assisi, and the Orvieto Cathedral in Orvieto (Figure 1 a&b) This component was conducted with sixteen architecture students participating in a study abroad program in Italy in 2017. The students visited the churches during the fall season. Both visitation days had particularly clear and sunny sky conditions. The students walked through the churches without any prior knowledge of the hypothesis of this study. After each of their two visits, they were presented with a questionnaire. The questions targeted their perception of light in the sacred space, and the emotions that evoked spirituality.

The same questionnaire was used in the second component of the study. This component consisted of a controlled experiment where participants were exposed to a digital/virtual representation of Saint Jean Cathedral in Lyon, France (Figure 1c). The video consisted of a "walkthrough" in the virtual church nave. The experiment was performed in two different contexts: (a) a visualization laboratory of the Digital Humanity Center at Texas A&M University displaying a large screen[1] (Figure 2); and (b) on the participants' personal computers in the location of their choice. The participants were randomly exposed to the two scenarios of the 'walk-through': one scenario using high light intensity and one low intensity. (Figure 3).

<div align="center">(a)   (b)</div>

Figure 1. (a) Orvieto Cathedral; (b) Basilica of Saint Francis of Assisi; (c) Virtual Model of the St Jean Cathedral in Lyon, France by @Patapom.

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[1]   In the visualization lab, participants viewed the video in the presence of others, while at their PC they were alone.

(c)

Figure 1. (c) Virtual Model of the St Jean Cathedral in Lyon, France by @Patapom.

Figure 2. Digital Humanities Laboratory at Texas A&M University

Figure 3. Different Scenarios of Light Variations in a Walkthrough of a Virtual Church by @Patapom.

3. Results

The results of this investigation unfold into two levels: the real and the virtual churches. The first parameter to test in both components of this study was whether the participants are sensitive to variation of the light in the two churches (real or virtual). In the case of the Assisi and Orvieto churches, the statistical analysis of the collected data showed that the participants reported they experienced more light in Orvieto church compared to Assisi church.[2] The result is portrayed in Figure 4a and the difference between the means is statistically significant despite the small sample ($F(1,28)= 2.91$ $p<0.09$). In the second component of the study when participants were exposed to the virtual church, they also reported seeing more light in the scenario that had high light intensity no matter the context (Visualization Laboratory or Personal Computer). The difference which again is statistically significant is portrayed in Figure 4b.
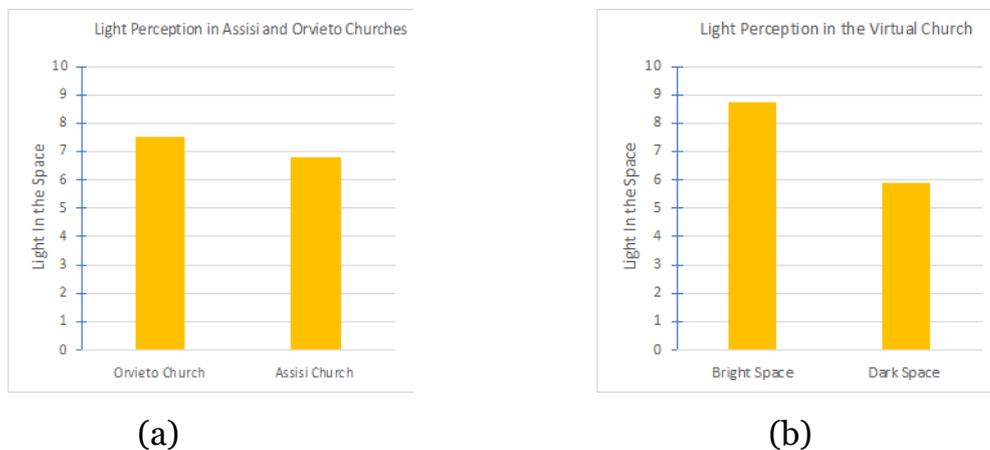

(a)   (b)

Figure 4. (a) Light Perception in Assisi and Orvieto Churches; (b) Light Perception in the Virtual Church.

The second parameter we tested was the spiritual experience - expressed along emotional scales - following the exposure to the real or virtual churches. The scales we used (and are based on prior studies) consisted of: awe, hope, joy, content, peace, spiritual feeling, fear, anxiety, and sadness.

The difference in the experienced light in Assisi and Orvieto churches was associated with distinct emotional experiences. As we reported earlier, Orvieto was perceived by our participants as having more light than Assisi. As expected our visitors reported more positive spiritual emotions in former church than in the latter. The scales that reflected this statistically significant pattern are *"awe"* and *"spiritual feeling"*. These results are illustrated in Figure 5a. It is of interest that the variation of light in the two real churches had no significant effect on the

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2   We used a scale that ranged from 0 to 10 (higher number reflects more light).

negative emotions (fear, sadness). When we addressed the findings in the virtual component of the study we found a similar pattern albeit with some interesting nuances. The digital/virtual church with more light elicited more joy (a positive emotion) than the church with less light. The difference is statistically significant and is illustrated in Figure 5b. Yet, in the "digital" environment, the lack of light triggered more fear (a negative emotion) than in the "bright" church. These effects appeared regardless of the context where the videos were presented (visualization laboratory or personal computer). Nonetheless, the context also had an effect on the spiritual experience. More awe and inner peace were reported when the videos were exposed in the visualization laboratory than on the personal computer (Figure 5b).

While the spiritual effects that were reported do no reside perfectly on the same emotional scales - the pattern is there. More light, whether in the real churches or in the virtual churches, elevate positive emotions.
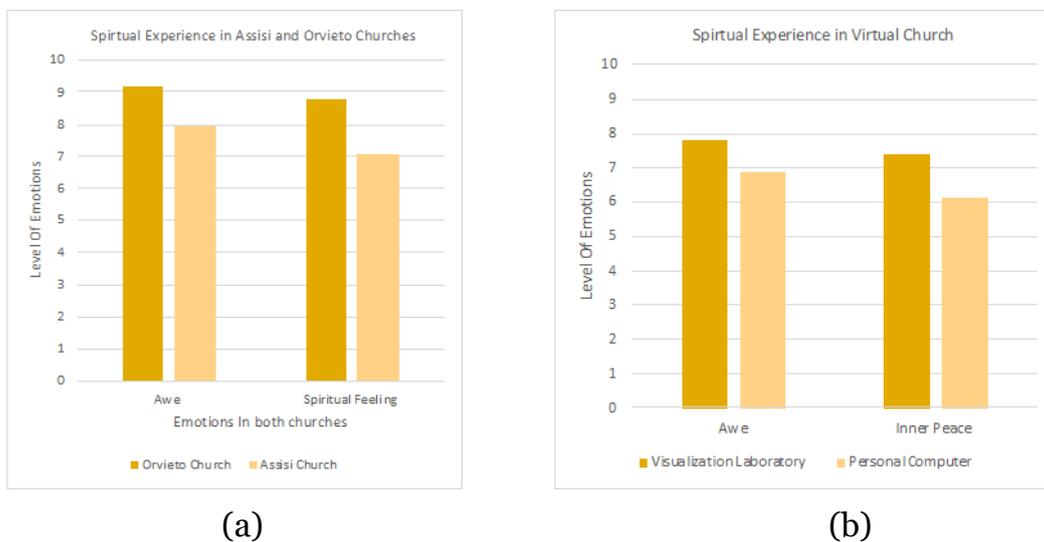

Figure 5. (a) Spiritual Experience in Assisi and Orvieto Churches; (b) Spiritual Experience in the Virtual Church in the two contexts.

The conclusion drawn out from these results shows that no matter the context, real or virtual, people are still able to perceive the light in the sacred space. As seen in the case study, participants noticed more light in Orvieto than in Assisi. This corresponds to the fact that the church in Orvieto includes more windows than the church in Assisi. Similarly, in the virtual church, the participants perceived more light in the bright space no matter the context where they performed the experiment. In addition to these findings, this study demonstrates that light had an effect on the emotions that evoke spiritual experience both in the real and in the virtual churches. In the real churches, awe and spiritual feelings were more significant, however in the virtual church joy

and fear were dominant depending on the light condition of the space. In addition, an interesting finding of more awe and inner peace were seen in the visualization laboratory, where participants were doing the experiment in a group, not as individuals. This can be comparable to a real church condition, which increases the concept of community. Furthermore, it should be noted that the size of the screen in the visualization laboratory being larger, showed more details of the interior of the church, which evoked more emotions similar to ones in a real church.

4. Conclusion

In conclusion, the comparison of the two cases: real churches where one is a pilgrimage site, and a virtual representation of a similar church typology, augmented two major concepts (a) the importance of light in real and virtual sacred architecture; and (b) virtual environments offer an alternative to practice pilgrimage when various conditions, such as economic, political, or health related conditions prohibit the physical presence in real pilgrimage sites. As such these solutions enhance more participation in the journey and its experience. These virtual pilgrimages offer a new form of liturgy that may not require a physical movement of worshipers. However, it raises a couple of questions that require further interdisciplinary investigations: (a) how ready are the institutional religions for that process? And how much it will influence the church?; (b) to what extent is pilgrimage about a spiritual journey rather than a physical touristic activity? And how much of the spirituality are we really seeking in comparison to leisure travel?

References

Bermudez, J. (1999). Between reality and virtuality: Towards a new consciousness. In R. Ascott (Ed.), *Reframing Consciousness* (pp. 16-21). Exeter, England: Intellect Books.

Campbell, H. (2010). *When Religion Meets New Media.* London, England: Routledge.

Campbell, H. (2012). *Digital Religion: Understanding Religious Practice in New Media Worlds*. London, England: Routledge.

Coriden, J. A., Green, T. J., & Heintschel, D. E. (1985). *The Code of Canon Law: A Text and Commentary*. Mahwah, NJ: Paulist Press.

Gelfgren, S. & Hutchings, T. (2014). The Virtual Construction of the Sacred— Representation and Fantasy in the Architecture of Second Life Churches. *Nordic Journal of Religion and Society*, *27*(1), 59–73.

Geva, A. (n.d.). *Frank Lloyd Wright's Sacred Architecture: Faith, Form and Building Technology*. [PDF]. London, England: Routledge.

Geva, A., & Garst, A. (2005). The Holy light: A comparison of natural and artificial light in a sacred setting. *SIGraDi 2005 - [Proceedings of the 9th Iberoamerican Congress of Digital Graphics] Lima - Peru 21-24 November 2005, 2*, 695-699.

Hill-Smith, C. (2009). Cyberpilgrimage: A study of authenticity, presence and meaning in online pilgrimage experiences. *The Journal of Religion and Popular Culture, 21*(2), 6-6. doi:10.3138/jrpc.21.2.006

Hoover, S., & Echchaibi, N. (2012). *The "Third Spaces" of Digital Religion*. Unpublished manuscript.

Hoover, S. (2013). Evolving religion in the digital media. In K. Lundby (Ed.), *Religion across Media: From Early Antiquity to Late Modernity* (pp. 169-184). New York, NY: Peter Lang Publishing.

Hutchings, T. (2015). Real virtual community. *Word & World*, *35*(2).

Jacobs, S. (2007). Virtually sacred: The performance of asynchronous cyber-rituals in online spaces. *Journal of Computer-Mediated Communication, 12*(3), 1103-1121. doi: 10.1111/j.1083-6101.2007.00365.x

Lewis, J.S. & Geroy, G.D. (2000). Employee Spirituality in the Workplace. A Cross-cultural View for the Management of Spiritual Employees. *Journal of Management Education, 24* (5), 682-694.

MacWilliams, M. (2004). Virtual Pilgrimage to Ireland's Croagh Patrick. *Religion Online: Finding Faith on the Internet,* 223-237.

Merleau-Ponty, M. (1964). Sense and Non-Sense. *Northwestern University Studies in Phenomenology & Existential Philosophy*. Evanston: Northwestern University Press.

Palmer, P.J. (2003). Teaching with Heart and Soul Reflections on Spirituality in Teacher Education. *Journal of Teacher Education, 54* (5), 376 – 385.

Plummer, H. (1987). *Poetics of Light*. A & U Publication Co.

Plummer, H. (2009). *The Architecture of Natural Light*. London, England: Thames & Hudson.

Speck, Bruce W. (2005). What is spirituality?. *New Directions for Teaching and Learning 2005*(104), 3-13.

Timothy, D. & Olsen, D. (2006). *Tourism, Religion, and Spiritual Journeys.* London, England: Routledge.

Turner, V., Turner, V.W., & Turner, E. (2011). *Image and Pilgrimage in Christian Culture.* New York, NY: Columbia University Press.

Wagner, R. (2013). *Digital Religion: Understanding Religious Practice in New Media Worlds.* Oxfordshire, England: Routledge.

Young, G. (2004). Reading and praying online: The continuity of religion online and online religion in internet Christianity. In L. L. Dawson & D. E. Cowan (Eds.), *Religion Online: Finding Faith on the Internet* (pp. 93-106). New York, NY: Routledge.

Zinnbauer, B.J. Pargament, K.I. & Scott, A.B. (1999). The emerging meanings of re-ligiousness and spirituality: Problems and prospects. *Journal of Personality, 67*(6), 889-919.