

International Journal of Religious Tourism and **Pilgrimage**

Volume 8 Issue 7 The Impact of COVID-19 on Religious Tourism and Pilgrimage

Article 13

2020

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Recommended Citation

Dunn-Hensley, Susan M. (2020) "Virtual Pilgrimage in a Time of Pandemic: Lessons from the Shrine of Our Lady of Walsingham," International Journal of Religious Tourism and Pilgrimage: Vol. 8: Iss. 7, Article

doi:https://doi.org/10.21427/ncaj-y766

Available at: https://arrow.tudublin.ie/ijrtp/vol8/iss7/13

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Volume 8(vii) 2020

Virtual Pilgrimage in a Time of Pandemic: Lessons from the Shrine of Our Lady of Walsingham

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The COVID-19 pandemic has already cost billions to those in the tourist industry. According to the United Nations World Tourism Organization (UNWTO), this pandemic is 'by far the worst crisis that international tourism has faced since records began' in 1950. People who rely on the pilgrim trade are similarly suffering. In this short exploration, I argue that the success of virtual pilgrimage and the history of pilgrimage's adaptability suggest that people's appetite for pilgrimage will experience a resurgence once local and national governments lift travel restrictions. In order to assess the future of pilgrimage, I will consider the popularity of virtual pilgrimage (including participation in virtual walks and viewing of religious rituals online). I will use history as evidence, arguing that pilgrimage has shown a remarkable ability to adapt to changing circumstances including plague and war, and that virtual pilgrimage is not a new concept. I will focus in particular on the Shrine of Our Lady of Walsingham, arguing that, if virtual interest in the Shrine gives us any indication, pilgrimage will recover despite the strains placed on it by the pandemic. More importantly, however, the experience of virtual pilgrimage might actually add a new and exciting component of inclusion to traditional pilgrimage.

Key Words: virtual pilgrimage, Shrine of Our Lady of Walsingham, Kerry Camino, adaptability, accessibility

On Monday, May 25, 2020, the village of Little Walsingham in Norfolk, England should have been alive with activity. In a normal year, on the first day of the National Pilgrimage to the Shrine of Our Lady of Walsingham, the tiny village welcomes thousands of people from all over the UK and Europe, swelling the population, which according to 2011 census data rests at 613 people (Coleman 2016:57). Church groups arrive in cars and large buses. Hundreds of clergy in white robes process through the streets singing. Onlookers watch the procession of the statue of Our Lady, draped in her fine robes and surrounded by roses (Figure 1), make its way to the site of the ruins of the medieval priory. Under the high altar, all that remains after Henry VIII's 1538 attack on the Shrine, an Anglican priest offers a noon mass surrounded by the faithful. At lunchtime, people set out picnic lunches, often bringing their own chairs and folding tables. Those who had not brought lunch grab a snack at Norton's Café Bar on the Shrine grounds.

This year, however, Walsingham was quiet. Kevin Smith, Priest Administrator at Walsingham, spoke of the 'strange silence and stillness' that hung over the Shrine

(walsinghamanglican.org.uk). The narrow streets were not lined with pilgrims; the grassy lawn was not covered with families and picnic baskets. No pilgrims prayed the stations of the cross. Restaurants were shuttered, shops were closed, and tour buses were nowhere to be seen. Faced with global pandemic, the Shrine cancelled the public gatherings associated with the pilgrimage.

Figure 1: 2019 Annual Pilgrimage to Walsingham



Photo Graham Howard - https://www.walsinghamanglican.org.uk/photo-gallery/national-pilgrimage-2019/#images-40

Every spring at Walsingham brings life and excitement to the village (Figure 2 &3), but this year was to be particularly exciting. Two months before the National Pilgrimage, Walsingham was set to host its biggest event in decades – the rededication of England to the Virgin Mary. This historic event would have drawn large crowds to Walsingham. In addition, Catholic believers in cathedrals all over England were to join those at Walsingham in prayers of rededication. Clergy had planned for the rededication and the pilgrimage was to include thousands of pilgrims. However, in the wake of pandemic, church leaders had no choice but to conduct the events privately in sacred spaces empty of worshippers. These bleak images of ritual conducted in empty shrines suggest that COVID-19 has wielded a significant blow to pilgrimage and the industries that rely on it for revenue.

The pandemic has already cost billions to those in the tourist industry. According to the United Nations World Tourism Organization (UNWTO), this pandemic is 'by far the worst crisis that international tourism has faced since records began' in 1950. The UNWTO predicts that the impact of the loss of demand in international tourism could be as high as '850 million to 1.1 billion international tourists' and 'US\$910 billion to US1.2 trillion in export revenues from tourism,' which poses a risk to '100 to 120 million direct tourism jobs.' The owners of shops, restaurants, and hotels along pilgrim routes and near shrines are feeling this loss of revenue. However, while we cannot underestimate the potential long-term economic consequences of the pandemic on pilgrimage, we should note that despite the lack of inperson contact, pilgrimage has not ceased.

Around the world, thousands of people are engaging in virtual pilgrimage using various apps such as *The Conqueror Virtual Challenges* and *Walking 4 Fun*. The Conqueror app allows pilgrims to walk wherever they are and chart their progress on a map of the Camino route. At any point in the route, pilgrims can see pictures of what their location would look like on the Camino. Further, although Walsingham was quiet this spring, neither the rededication of England to the Virgin nor the National Pilgrimage was cancelled. Instead, both occurred in a virtual space in front of thousands of international viewers from countries around the world. People on Twitter and Facebook mourned the loss of community in that specific sacred space, but they continued to participate in the ritual nonetheless.

Major world pilgrimage sites such as Rome and Santiago de Compostela will undoubtedly welcome large crowds in the future. However, one might wonder how pilgrimage sites in the British Isles and Ireland will fare when they open again. These sites are often not as wellknown, and some have only recently begun to welcome pilgrims. Indeed, before COVID-19, pilgrimage in the UK and Ireland was beginning to thrive. Inspired by the success of the Camino, established pilgrimage sites were in the process of expanding and other sites were opening. Three examples will suffice. At Walsingham, the Catholic Shrine had plans to renovate the Slipper Chapel, build a new restaurant, and expand parking lots. In Ireland, the Kerry Camino, established in 2012 on a route also known as the Dingle Way or St. Brendan's Way, was making inroads into 'reviving Kerry's links with pilgrims of the past' (KerryCamino.com). This Kerry route, which is





modelled on the Camino de Santiago, features passports, stamping stations, and certificates. Meanwhile, this spring, Durham Cathedral, which had designated 2020 as the year of the pilgrim, was set to open six new Northern Saints Trails leading to Durham Cathedral. According to the Northern Saints website, they have paused the opening of those routes because of COVID-19.

Had COVID-19 not shut down the churches and the infrastructure that supports pilgrimage, the UK and Ireland would undoubtedly have continued to open more sites and welcome more pilgrims. One might well ask, however, if the building momentum can survive the lockdown. While it is not possible to predict the future, in this short exploration, I will argue that the success of virtual pilgrimage and the history of pilgrimage's adaptability suggest that people's appetite for pilgrimage will continue. In some parts of Ireland and the UK, the infrastructure might be compromised by the lockdown. Nonetheless, I would suggest that, if virtual interest in the Shrine of Our Lady of Walsingham gives us any indication, pilgrimage will recover despite the strains place on it by pandemic. Indeed, local travel to places such as Walsingham might even increase as people avoid airports and go to destinations closer to home. Most importantly, however, the experience of virtual pilgrimage might actually add a new and exciting component of inclusion to traditional pilgrimage (See Figure 4 for examples).

In order to assess the future of pilgrimage, I will consider the popularity of virtual pilgrimage (including participation in virtual walks and viewing of religious rituals online). I will use historical information to argue that pilgrimage has shown a remarkable ability to adapt to changing circumstances including plague and war, and that pilgrimage via surrogates is not a new concept. Although Ireland and the UK boast many important sites for pilgrimage, in the brief space of this article, I will primarily focus on the Shrine of Our Lady of Walsingham.

A Story of Rebirth: Historical Background on the Shrine of Our Lady of Walsingham

During the medieval period, the Shrine of Our Lady of Walsingham was one of the most popular Catholic pilgrimage sites in England, 'an international center of pilgrimage rivaled only by Santiago de Compostella in Spain and Rome itself' (Gibson 1989:141). The Shrine, which was destroyed in the iconoclasm of the Reformation, was rebuilt by Father Hope Patton in 1922. Today, the shrine is under the care of the Anglican Church.

According to the official narrative, the origins of the Shrine of Our Lady of Walsingham stretch back in time to the twilight of the Anglo-Saxon period, in 1061, just five years before the Norman Conquest. According to the legend recounted in a fifteenth-century poem called the 'Pynson Ballad,' a rich widow named Richeldis de

Faverches had a vision in which the Virgin Mary took her spirit to Nazareth and instructed her to build a replica of the Holy House where the Annunciation took place. This focus on the Annunciation, on Mary's body and on maternity, would be reinforced by the Shrine's famous Holy Relics—vials of the breast milk of the Virgin Mary. In this site, focused on female fertility, the domestic and the dynastic meet, for the shrine became one of England's most popular pilgrimage sites, frequented by English monarchs, including Henry VII who brought his battle standard to Walsingham as a gift to Our Lady for her help in his fight against his enemies.

The story of Walsingham reveals the persistence of pilgrimage. As a site of devotion, it drew criticism even before the dissolution of the monasteries. Indeed, perhaps because of the wealth and popularity of the shrine, it became a target of abuse for those who feared that pilgrimage had become little more than a license to travel and to reject social norms. The response of some sixteenth-century reformers went beyond a desire to reform the shrine, however, and became a plan for utterly obliterating Walsingham and its sister shrines. In July of 1538, in the heat of Reformation, the Holy House was burned to the ground, the Priory was destroyed, except for the arch over the high altar, and the image of the Virgin Mary, the focus of intense devotion for centuries, was dragged from the chapel and brought to London. A month later, reformers cast the statue of Our Lady of Walsingham, Our Lady of Ipswich, and possibly other Marian images into a bonfire.

Utter destruction was not the end of the shrine's story, however. The Shrine lingered in memory and in literature as Gary Waller discusses in *Walsingham and the English Imagination*. In the 1920s, Father Hope Patton began the work of rebuilding the shrine. Today, the shrine features a church, containing a replica of the Holy House; pilgrim housing; and a visitors' centre. According to the Shrine's website, every year as many as 300,000 people visit this unique site of memory and contemporary worship. Anglicans and Catholics both have a claim on the Shrine. While the Anglicans administer the reconstructed Holy House, which is not far from the original site of the medieval shrine, Catholic worship is centred around the

Slipper Chapel a mile away from the original shrine. Neither contemporary shrine sits on the land once occupied by their medieval predecessor. Henry VIII gave former monastic lands to his supporters, and the site of the original shrine and the ruins of the Augustinian priory are still on private land. Fortunately for the pilgrims, the owner of the land allows pilgrims to visit (for a small entrance fee) and allows the churches to use the land for the annual pilgrimage and other religious events. These compromises and performances found in contemporary Walsingham are a testament to the adaptability of pilgrimage. Indeed, the history of Walsingham is a story of renewal and restoration.

Once again, however, the Shrine faces a threat – this time in the form of global pandemic. If history provides a clue, the shrine will survive the threats that it faces and even adapt to reach a larger audience.

Practical Concerns

I argue in the section that follows that pilgrimage will continue to thrive and that, in fact, the success of virtual pilgrimage will even add a positive dimension to the pilgrim experience. However, one would be remiss not to acknowledge the real problems that the pandemic poses for those who make their living from pilgrim travel. In a June 5 interview with *Catholic News Agency*, Msgr. John Armitage, shrine rector at The Catholic National Shrine of Our Lady of Walsingham, explained

Normal pilgrimages aren't going to resume for at least 18 months to two years, which puts us in a very challenging financial situation, but along with the rest of the world. It's not just that we don't know where our next penny is coming from, many people don't. We are sharing that anxiety.

Because Walsingham Shrine is a destination, it may suffer more than many of the UK and Ireland's recently restored routes. The Kerry Camino, for example, does not require a tremendous amount of infrastructure. The merchants listed in the guidebooks provided by Camino Ways do not make the majority of their money from pilgrims, who merely trickle along the route most of the year. Their numbers may increase from time to time, for example,

BE REFRESHED AND INSPIRED AT ENGLAND'S NAZARETH

Figure 5: Banner from catholicireland.net advertising Walsingham - note surviving ruins of original site

during annual pilgrimages or special days of dedication. Similarly, the Durham routes are just opening and do not have established infrastructure. These routes should have no trouble reopening once the threat of COVID-19 has declined. Walsingham, however, is located in a small village that relies heavily on the money brought in by tourism. These practical concerns are real, and they cannot be dismissed. However, the history of pilgrimage shows that struggles often bring positive adaptation.

'Virtual Pilgrimage' can be one of these positive adaptations. As Mark MacWilliams argues, although 'virtual' tends to connote something that is not real or authentic, in fact the concept of the virtual allows for more complex and metaphorical readings. The word 'virtual' comes from the medieval Latin virtualis, which means 'strength' or 'power'; in scholastic philosophy the term 'refers to something that exists potentially rather than actually' (MacWilliams, 2002:317). Many aspects of Christian experience, including pilgrimage itself, which operates as a metaphorical reminder of the Christian journey to Heaven, exhibit this sense of the virtual. Pilgrims walk the material roads, which evoke the spiritual road on which they also journey. Using this definition allows us to see that journeying in one's own neighbourhood while virtually journeying to a Shrine, actually mirrors the experience of the pilgrim journeying on both the material and spiritual planes.

Glimpsing the Future Through Lessons of the Past

Examining the history of pilgrimage offers some glimpse of its future. Pilgrimage has shown itself to be very adaptable, and its adaptability has led to innovations. The popularity of the Walsingham Shrine and of other European pilgrimage sites such as Santiago de Compostella actually stems from the pilgrim's need to adapt. The primary site of Christian pilgrimage is Jerusalem. Ancient pilgrims undertook the arduous journey to Jerusalem for many reasons, ranging from penance to adventure. The expansion of the Muslim Empire in the seventh century made pilgrimage to Jerusalem more difficult. From then, until to the eleventh century, when the first crusade retook the Holy Land, travel to the Holy Land proved extremely dangerous. As such, pilgrims began to refocus their efforts on destinations closer to home. In the thirteenth century, Muslims retook control of the Holy Land, again complicating European pilgrimage to the Holy Land.

It should be no surprise that, as the routes to the Holy Land became more difficult, Europeans increasingly brought the Holy Land to Western Europe. Walsingham Shrine, which boasted a miraculous replica of the Annunciation House, referred to itself as 'England's Nazareth' (Figure 5) or 'The Holy Land.' Santiago de Compostela featured the body of St. James. These shrines, as well as many other sites that claimed to have relics brought from the Holy Land, attempted to recreate a sense of the sacred in Western Europe. In more modern times, this is still



being replicated. In the United States, pilgrim routes with connections to medieval shrines have sprung up, bringing memory of historical Christianity to the Americas. These Shrines could be considered twice removed from the Holy Land, as they evoke European Shrines that evoked the Holy Land. Alternatively, however, they might be said to suggest the entirety of the Christian tradition from its origins in the Holy Land through Christian history.

The Walsingham Shrine has faced various wars and pandemics during its five-hundred-year medieval history. However, nothing proved as destructive as the Protestant Reformation. Nonetheless, although the Reformation led to the destruction of the Shrine and the outlawing of pilgrimage, the Walsingham site continued to remain embedded in memory. When the site reopened in the twentieth century, Father Hope Patton attempted to restore pre-Reformation worship to the twentieth century. He did so by blending the modern and the medieval. According to Simon Coleman, Walsingham 'seems deeply 'impure' in its mixture of relics, religious props, a kitschy gift shop, but also in the sheer incoherence of the vision of Christianity that it presents' (2016:55). Thus, if Walsingham speaks to people, it is not so much through doctrinal statements and theology but through its material culture, 'which deals in paradoxes and 'mysteries'... that permit numerous forms of engagement, however,

glancing or ambivalent' (Coleman 2016:55). Walsingham offers a complex mixture of the medieval and the modern, the secular and the sacred, the personal and the political. This adaptability suggests the potential of pilgrimage to survive and even thrive despite obstacles.

One can expect the shutdowns occasioned by COVID-19 to have an impact on and produce changes in pilgrimage. In particular, I would argue that these changes will involve a more wide-spread incorporation of virtual pilgrimage. Virtual participation in pilgrimage has faced criticism in recent years. However, virtual pilgrimage is not a new concept, having been a feature of devotion since the medieval period. The recent closure of sacred spaces has revealed the continued potential for virtual pilgrimage to play an important role in contemporary devotion. While in-person pilgrimages have ceased at Walsingham, virtual pilgrimage and participation in sacred rituals has increased, offering hope for the continuation of pilgrimage after all sacred sites reopen. Some of this virtual work was already underway before the shutdown. Armitage said in an interview with the Catholic News Agency that the shrine 'had already built up a following with its livestreamed Masses.' Faced with COVID-19 shutdowns, Armitage decided that the shrine would offer livestream 24 hours a day (Figure 6). In order to facilitate this shift to a virtual experience with



the shrine, Armitage devised a morning worship program that includes 'morning prayer, followed by Mass, Exposition of the Blessed Sacrament, a talk on faith, the rosary, the Angelus and another Mass.' In the afternoon, viewers can participate in 'Divine Mercy chaplet, the rosary, more Exposition, Benediction, the Angelus and Vespers, followed by all-night adoration' (Catholic News Agency).

The success of two major religious events, which were originally supposed to be in-person and were moved to virtual, also proves significant – both because these successes promise that pilgrimage will continue, but also because they suggest the need for opening pilgrimage activity up to those who cannot physically travel. Spring 2020 was to see two major events take place in Walsingham: the annual pilgrimage in May and the rededication of England to Our Lady on March 29, which was to be one of Walsingham's biggest events in

the past few decades (Figure 7). The original dedication of England to the Virgin occurred during the reign of Richard II. On June 15, 1381, after the Peasants' Revolt at Smithfield, Richard rededicated his land to the Virgin, calling it her dowry, a word which comes 'from the Latin word 'Dos' – meaning gift or donation.' The *Wilton Diptych*, exhibited in the National Gallery in London, depicts this original dedication.

Armitage and a number of others had spent three years planning the rededication, which was preceded by a two-year tour of England with the statue of Our Lady of Walsingham. In addition, a painting called 'The Dowry Painting' by Amanda de Pulford was commissioned to be sent to Catholic parishes throughout the country to allow people to share in this celebration. The plan to send the painting to parishes around the country already evokes a proxy or virtual experience. The plan had been for Catholics to gather at cathedrals across the country as the rededication ceremony took place at Walsingham. However, when churches were closed due to the pandemic, Catholics were asked to follow the ceremony live from their homes on the shrine's website instead. The amount of interest was unprecedented as so many people logged in that the server crashed (Catholic News Agency). According to Armitage,

The rededication of England was phenomenal. ... overwhelmed our server [and we] had to transfer to YouTube. That rather took us by surprise (Catholic News Agency).

Indeed, in an interview with the National Catholic Register, Armitage reflected on the fact that

We may have had no pilgrims at the shrine, but in its 1,000-year history, the shrine, on March 29, saw the biggest pilgrimage ever — albeit one that took place in people's homes: a virtual pilgrimage (Turley, 2020).

The large numbers of people tuning in to livestreams of pilgrimage and shrine events tells an important story. People long for connection with the Shrine even if they are not physically able to go to it. Armitage's interview suggests the real potential of virtual pilgrimage. He reports that he has been 'inundated with letters' from all over the world (Catholic News Agency), commenting that.

There are those who have been in lockdown, like the rest of the world. They're grateful that it's given them a spiritual framework during this time (Catholic News Agency).

He has also received letters from another type of wouldbe pilgrim, whom churches have often overlooked and virtual events have

given a spiritual framework for those who've been in lockdown for years. The elderly, the disabled, those who are never going to come out again (Catholic News Agency).

This suggests a very positive potential outcome of widespread implementation and acceptance of virtual pilgrimage – those who cannot physically make the trek can benefit from the pilgrimage nonetheless. Michael Xiarhos argues that, while

the virtual pilgrim does not have the same literal or physical connection to the sacred location or other pilgrims as does the physical pilgrim [this fact] does not necessarily mean that the experience may be any less significant or transformative (2016: 3-4).

As Xiarhos sees it, even Victor and Edith Turner would agree that

much of the experience of pilgrimage is internal; meaning that its power to transform and its connection to mysticism all occur within rather than without (2016: 4).

Xiarhos and other scholars have noted that virtual pilgrimage is not a new phenomenon. Indeed, Felix Fabri, a fifteenth-century Dominican preacher and pilgrim, wrote chronicles of his two journeys to Jerusalem and Mt. Sinai. In the 1490s, a group of cloistered nuns in Medington and Medlingen asked Fabri to create the *Sionpilger*, a guide that would allow them to participate in pilgrimage despite the fact that they could not leave their convent (2016: 4-5).

As Mark MacWilliams points out, even the practice of praying the stations of the cross can be described as a virtual pilgrim experience. The fourteen Stations, which were typically paintings or plaques displayed on the wall of a church, depict the key moments on Christ's way to the cross. This practice of praying as one moves from one depiction to the next was popularised by the Franciscans in the late medieval period and offers

a symbolic substitute for traveling on the actual pilgrimage to the holy city of Jerusalem (MacWilliams: 2002: 317).

Conclusion

We cannot underestimate the economic impact of the closure of shrines and pilgrim routes for those who rely on pilgrim travel for revenue. However, the popularity of virtual pilgrimage suggests that people continue to crave the pilgrim experience. As such, once the pilgrimage routes and sacred spaces reopen, they should see a return of sacred tourists and pilgrims. Further, the widespread popularity of virtual pilgrimage reveals the potential for pilgrimage to become more inclusive. Various apps, livestreams, and other innovations should allow the further development of virtual pilgrim, which has always been part of the tapestry of religious devotion.

Bibliography

- Catholic News Agency (2020). Despite the pandemic, Catholic shrine enjoys 'biggest pilgrimage season' in its history. [online] Catholic Voice. Available at: https://catholicvoiceomaha.com/despite-the-pandemic-catholic-shrine-enjoys-biggest-pilgrimage-season-in-its-history/[Accessed 20 June 2020].
- Coleman, S. (2016). 'Purity as Danger? Seduction and Sexuality at Walsingham. In: M. DiGiovine and D. Picard,' eds., *The Seductions of Pilgrimage: Sacred Journeys Afar and Astray in the Western Religious Tradition*. New York: Routledge, pp.53–69.
- Gibson, Gail. 1989. The Theatre of Devotion: East Anglian Drama and Society in the Late Middle Ages. Chicago: University of Chicago Press.
- Kerry Camino. (n.d.). *About The Kerry Camino* | *Introduction* / *history* | *Kerrycamino.com*. [online] Available at: https://kerrycamino.com/about/ [Accessed 18 June 2020].
- MacWilliams, M.W. (2002). 'Virtual Pilgrimages on the Internet.' *Religion*, 32(4), pp.315–335.
- Shrine of Our Lady of Walsingham (2020). 2020 National Pilgrimage at Home. [online] www.walsinghamanglican. org.uk. Available at: https://www.walsinghamanglican. org.uk/the-shrine-2/national-pilgrimage-2020/ [Accessed 20 June 2020].

- Turley, K.V. (2020). *In a Time of Contagion: Walsingham and the Rededication of England*. [online] National Catholic Register. Available at: https://www.ncregister.com/daily-news/in-a-time-of-contagion-walsingham-and-the-rededication-of-england [Accessed 21 June 2020].
- www.unwto.org. (2020). International Tourist Numbers Could Fall 60-80% in 2020, UNWTO Reports | UNWTO. [online] Available at: https://www.unwto.org/news/COVID-19-international-tourist-numbers-could-fall-60-80-in-2020 [Accessed 22 June 2020].
- Waller, Gary. 2011. *Walsingham and the English Imagination*. New York: Routledge.
- Walsinghamanglican.org.uk. 2020 National Pilgrimage at Home. online video. viewed 20 June 2020. https://www.walsinghamanglican.org.uk/the-shrine-2/nationalpilgrimage-2020/
- Xiarhos, M. (2016). Authenticity and the Cyber Pilgrim. *Journal of Religion and Society*, [online] 18, pp.1–11. Available at: http://hdl.handle.net/10504/91849 [Accessed 22 June 2020].