DIVISION OF RESEARCH PROGRAMS

Narrative Section of a Successful Application

The attached document contains the grant narrative of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and applicants are urged to prepare a proposal that reflects their unique project and aspirations. Prospective applicants should consult the Research Programs application guidelines at https://www.neh.gov/grants/research/collaborative-research-grants for instructions.

The attachment only contains the application narrative, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

The application format has been changed since this application was submitted. You must follow the guidelines in the currently posted Notice of Funding Opportunity (see the Notice posted on the Collaborative Research program page linked above).

Project Title: Shared Churches in Early Modern Europe, 1500-1800

Institution: University of Arizona

Project Director: Marjorie Plummer

Grant Program: Collaborative Research

2.1 Project Overview

We are applying for an NEH Collaborative Research Grant (digital scholarly project) to develop an interactive map and searchable web-based database exploring the widespread phenomenon of shared churches, which housed multiple denominations or congregations, in early modern Europe (1500-1800). We bring together scholarly experts on devotional practices, architectural and spatial studies, soundscapes, religious history, social and parish interactions, material culture, and political and legal shifts during the early modern period with experts in mapping, archival and data curation, and digital storytelling. We will create a digital map of these churches with visual and textual components and a searchable, relational database to facilitate a new way to analyze spiritual, spatial, and political aspects of shared sacred space. We expect to complete the creation of the infrastructure of the database, mapping capabilities, and webpage by the end of December 2025. In addition, we will add basic descriptive and location information for 1000 churches, expand spatial location and descriptive data for about 300 churches in six selected regions, and incorporate detailed visual, archival, and descriptive spatial content into 50 of those churches by that date. Using the infrastructure developed during this project, we will continue to expand the information about the churches currently mapped and invite others to participate in adding data and descriptive and visual content for these and other churches through 2031, when we plan to finish the project.

2.2 Statement of Significance and Impact

Between 1500 and 1800, sharing any devotional, ritual, and sacred spaces created internal complexities to social, political, and economic relationships in Europe and beyond. Global colonization and the Protestant Reformation brought diverse religions and new Christian denominations into regular contact. This research project, which includes digital and print components, investigates the local arrangements made for sharing churches and sacred spaces in early modern Europe to draw broader conclusions about the abilities and limitations of the human capacity to accommodate religious differences.

Our research project examines the forms and subjectivities of religious belonging. Rather than merely map geographies of official religion, the *Shared Churches in Early Modern Europe, 1500–1800* Project (SCP) starts from the premise that most regions in Europe were religiously diverse, increasingly so after the early sixteenth-century religious reform movements. This diversity obliged parish communities, regional networks, and political and spiritual authorities to decide how the newly emerging relationships between belief, kinship, social belonging, gender, and political power should play out in the arrangement of sacred, physical spaces. In its most fully articulated form, the sharing of church devotional spaces involved the rule-bound subdivision of church interiors into religiously homogenous spheres.

The SCP tracks a fundamental mutation, the slow shift away from the parish as a microcosm of Christendom (*corpus Christianum*) and toward a more subtly complex set of cultural structures, in which community, parish, and denomination were not always coterminous. The parties involved in shared churches arranged sacred space either to uphold religious supremacy or to distribute it based on rough coequality. Conflicts and accommodations over shared space also created new forms of diversity and new exclusionary conventions. The SCP thus aims to distinguish the history of religious coexistence from the history of religious toleration, moving away from a singular dominant norm toward an understanding of coexistence rooted in shifting and complex patterns of social and cultural practice and pragmatic decisions necessitated by economic and financial constraints.

The complete project will last a decade and will explore various aspects of the phenomenon of shared churches. We have broken the project into phases to explore various topics related to shared churches and expand the digital framework. During our first planning phase, we explored where exactly these churches were located and mapped their coordinates. The basic map we produced is in the Appendices. The second phase, which we are undertaking for this project, moves to a more complex mapping and spatial analysis. We will explore how shared churches functioned spatially, including their

regional location in relationship with other shared churches, and how relations between religious denominations within a parish influenced the reorganization of internal space in a church. The denominations might erect a wall to separate the two groups, assign a side-aisle or chapel to define the spatial distinction between the congregations, or regulate times when a denomination could use objects and spaces that they held in common, such as courtyards, belltowers, external chapels, graveyards. The third phase of our project (2025-2028) will explore the political and legal implementations and implications of sharing arrangements. These developments include changes in parochial rights, jurisdictional conflicts, filing of legal cases against the non-coreligious congregation, and the social and ritual shifts in education, marriage patterns, ritual calendars that occurred when once unified communities grappled with their spiritual differences. The final stage of our project (2028-2031) will create publicly accessible educational materials for educators and university students and focus on creating public history web content. These materials will include translated documents, bibliographies, short videos, Virtual Reality, apps, and other digital media and content for non-specialist audiences.

By mapping shared churches, the SCP shows how diverse understandings of holiness could—and could *not*—coexist under a single roof and how that space functioned to separate and unify diverse faith groups. It shows how patterns of conflict and accommodation mutated through social practice over time and circumstance. It also explores how ideas about pollution and the inherent sanctity of places and objects shaped the patterns of interaction across denominational barriers. The SCP digital platform on shared churches will allow scholars, students, and a broader non-academic audience to investigate how mixed-religious communities utilized their devotional space. The results will shape how future scholars explore the dimensions and extent of religious diversity in these regions and study the role that geographic location, spatial cohesion, and separation played in maintaining tolerance and intolerance in small communities.

At its conclusion, the SCP database and website will allow users to dive deep into early modern experiences of religious accommodation. It will show where and when shared churches came about, how long such sharing agreements lasted, what groups shared churches and why, and what types of official and unofficial arrangements those groups developed to coexist in such spaces. It will also explore what happened when conflicts emerged and when they led to spatial modification or permanent separation of groups by establishing new churches or devotional spaces outside of the church.

2.3 Substance and Context

For this grant, our digital scholarly research project concentrates on creating the database and web-based mapping and data visualization infrastructure for our specific research on spatial environments on the micro and macro level and for the project's entirety. During the research trips for the proposed project, the research team will investigate two interrelated spatial questions:

- How do faith groups with diverse understandings of sacred space share places of worship?
- What challenges resulted from different devotional practices and objects present in shared space?

When diverse faith groups occupy the same worship space, their differing religious customs, rituals, and practices can trigger extreme reactions in local communities. Most recently, conflicts and concerns about cultural preservation surrounding shared sacred space in the Mediterranean, the Middle East, and Northern India regularly make the news and occupy the attention of religious leaders, politicians, and international agencies (For example, UN, "Ring of Peace" [2019]). However, religious groups just as often coexist and practice tolerance while sharing communities, holy sites, and churches (Barkey). Some religious leaders, community activists, and architects even advocate the potential of sharing space and consciously creating such multifaith spaces as a route to peace and understanding. (Sharingsacredspaces.org; House-of-one.org; Biddington). Other scholars have posited that creating neutral devotional spaces is unattainable because they always retain some symbolic vestige of partiality toward one group or another (Crompton, 2013, Crompton/Hewson, 2016). Recent sociological, anthropological, and political studies argue that discord and harmony exist in precarious balance in most mixed religious communities (Hayden, Walker; Barkan, Barkey; Albera, Couroucli; Brown).

Typically, shared sacred spaces possess long histories that shape the attitudes of faith groups that participate in them and require scholars who study them to excavate centuries and or even millennia of layered complexity in relationships and space. A lack of physical evidence or written documentation about these devotional communities often hampers tracing the historical emergence of religious tensions or analyzing their long-term resolutions in shared space. As sixteenth-century European religious reform movements introduced diverse religious practices, they brought new Christian denominations into regular, intimate contact. In its time, this was a novel development. The division of previously homogenous devotional communities into multiple faith groups left a rich documentary record of their interactions because it coincided with an explosion of printing, record-keeping, purchasing of objects, and space reconfiguration. The tense relationship between Christian groups spread beyond Europe with global exploration, trade, and colonization.

Sharing churches was not new in the sixteenth century. Throughout the Middle Ages, monastic and collegiate congregations shared their churches with lay congregations; nobles shared their private devotional spaces with their servants and tenants; and merchants, pilgrims, and crusaders shared local churches on their travels (Heale; Mersch; Arvanti). These earlier manifestations of sharing rarely provoked sustained doctrinal antagonisms. With the pluralization of Christianity in Europe during the sixteenth century, however, the sharing of devotional, ritual, and sacred spaces became more contentious. Pluralization also changed how groups defined community (Halverson, Spierling; Spicer, Hamilton). Locations where two or more self-contained religious communities perform more than one devotional practice within a single sacred space represent a unique case study of devotional simultaneity.

We use parish churches, many located in small towns and villages, as the focus of this project. These sanctuaries illuminate the long history and complex everyday experience of secular and spiritual community in Europe; religious conflict, accommodation, and toleration; and secularism and diversity in the early modern era. Beginning with the early Reformation movements during the sixteenth century and continuing into the nineteenth century, many congregations lived in proximity and often worshipped with those of different beliefs, devotional traditions, and denominations in their regions, towns, parishes, and even households in unexpected ways. They left written and visual records of their reactions, conflicts, resolutions, and accommodations. Such arrangements sometimes lasted only a day or a few years while others shared religious spaces officially and unofficially for decades and even centuries, with some of these arrangements still ongoing.

Our previous research shows that these surviving records included contracts, court cases and other legal documents, city council minutes and territorial records, parish visitation records, local chronicles, church inventories, parish accounts, and church books listing baptismal, marriage, and burial records. We will locate these items in six regions (Brandenburg, Upper Palatinate, Bas Rhin, Baden/Electoral Palatinate, Thurgau, and the counties near Nassau and Limburg) for this project by conducting our research in the archives in Amberg, Berlin, Düsseldorf, Freiberg, Limburg, Karlsruhe, Potsdam, Siegen, Speyer, Strasbourg, and Thurgau, listed on the bibliography. To answer our research questions about spatial environments and the role of objects and space in how groups interacted, the research team will examine those archival records showing how and when groups shared space and undertook architectural changes and alterations, additions, and removal of devotional objects, material culture, and sacred art. We also will visit a total of 50 churches in those six regions to do onsite inventories and assessments of space and religious material culture to chronicle what changes occurred or did not occur in shared parish churches.

As scholars have shown previously, negotiations over such sharing or multidenominational arrangements often determined whether members of different religious communities interacted peacefully or whether conflicts ensued (Te Brake). As some scholars have argued, communication mattered in how these groups interacted (Hacke). Community leaders like local clergy or mayors could influence developments within the church by facilitating collaboration and compromise or stoke fear and hatred of certain groups and conflict through invective or denigration (Ellerbock, Schwerhoff). Theological, legal, and philosophical conceptions of religious freedom or exclusionary rhetoric influenced these leaders in turn.

Scholarship on the Protestant and Catholic Reformations and the religious movements they inspired during the early modern era (1500–1800) has neglected the existence of these shared churches. The tendency has been to focus on individual religious groups rather than on how religious diversity developed and continued. This perspective has influenced the way that scholars present parishes and devotional communities. Researchers missed these shared churches and religious plurality in European and global history because they have emphasized the creation rather than the blurring and crossing of religious and political boundaries (Johnson et al.). Thus, many scholars have presented shared churches as a rare phenomenon in early modern Europe that occurred in a few locations. They also claimed that such churches only existed after the 1648 Peace of Westphalia ended the Thirty Years' War (1618–48), a major religious war, or treated it as a legal construct (Schäfer). This intellectual focus has impacted how scholars and cartographers visually present the early modern religious reform movements and later religious identities and political developments (Murdock 2015; Murdock 2017; Truillot).

During the mid-twentieth century, a few scholars noted the significant presence of shared churches within and beyond supposedly rigid political, legal, and geographic boundaries (Meyer; Munier; Hencke). Recently, scholars motivated by a growing interest in questions of tolerance, intolerance, and coexistence have revisited these churches (Kaplan 2007; Jalabert; Luebke 2016; Spohnholz 2011; Christ). As scholars investigated locations where refugees settled or that officially recognized more than one Christian religion, they noticed that the interactions were often unexpected and complex in ways that did not fit the narrative on denominational separation (Frijhoff; Fehleison; Grell; Hacke 2007; Louthan; Luria; Safley; Wallace; Walsham 2006). They found that sociability and conflict often existed in precarious balance as towns sought to continue worshipping together even when individuals and large groups suddenly espoused new religious practices, converted, or arrived from outside the communities (Lotz-Heumann, Missfelder, Pohlig). As scholars have explored these pluralistic communities, they discovered that these tensions, accommodations, and concerns about religious differences spanned many more centuries and more territories than understood previously (Head; Luebke 2016).

Recent scholars have focused on how early modern people experienced devotional practices and on uncovering the experiences of those with often overlooked histories. This focus, influenced by anthropology, sociology, and art history, considers new dimensions and sources for understanding space, worship practices, and material objects (Löw; Truillot; Mohan, Warnier). When a church had to accommodate different worship services, people often looked for ways to demarcate interior spaces or provide access at different times of the day, even as such accommodations generated visibly more discernible divisions between faith groups (Barkey 2018). Exploring devotional rituals provides one crucial way to understand how these changes affected individuals and communities (Bell; Karant-Nunn; Spohnholz 2008). As individuals and families went through their life cycles, the local church was the space in which significant rites of passage, like baptism, marriage, and burial, took place. Sharing arrangements sorted an individual's visual, aural, and tangible experience of sacred space and its devotional objects and material culture according to the faith group to which that person belonged (Fisher; Hahn; Heal; Missfelder; Lambert; Plummer 2017). Scholarship on material culture has analyzed the role of devotional objects and physical items in worship practices and individual spirituality (Bynum 2011, Bynum 2020, Spicer 2020).

During late antiquity, parish churches became the centers of Christian worship and created spiritual and social communities over the following centuries (Yanin, Kümin). By the late Middle Ages, churches' construction and interior decoration had become an expression of spiritual values, shared communal identity, and economic situation (French, Heal, Byng). Thus, these church spaces were the most affected by more than one Christian denomination in a community. For all these reasons, the proposed project examines material culture, rituals, and their role in defining devotional space to answer our research questions for this phase of the project on spatial environments.

Our preliminary research and prototype map already confirm a different picture of religious interactions with its widespread distribution of shared churches, even in areas assumed to be religiously uniform. Until now, most scholarship focused on local or regional case studies or on the 64 shared parish churches that continue to exist in Germany. In doing so, they have missed critical developments that

unfolded across many regions and over long periods. Plummer and Luebke each did research on aspects of shared churches before we established this project. They discovered that mixed Christian congregations shared the same church building in at least 900 parish churches and 100 convent churches in early modern Germany and began considering how mapping might enhance their work. Their research reveals that this sharing of sacred space was far more common, lasted much longer, and had a more significant social, political, and spiritual impact than previously understood (Luebke 2016, Plummer 2017). The other two investigators (Lotz-Heumann, Spicer), our advisory board, and research affiliates have done similar studies showing intrareligious shared churches in Ireland, France, Scotland, Switzerland, the Netherlands, Poland, and even globally.

The devotional space of the shared churches often remains in continuous use. Intact devotional space, even when altered over time, allows the research team to analyze environment and space and undertake a detailed inventory of space and material culture, adding another rich source for analysis of shared sacred spaces. Understanding the historical and contemporary dynamics leading to diverse outcomes will engage broad scholarly interest.

2.4 Methods and Execution

Combining traditional research methods and digital technologies allows us to observe shared churches through changes in space and time. The availability of new dynamic digital mapping and relational analytical tools offers new ways for scholars to explore religious interactions and social relationships using geographic and spatial analysis in ways that static maps or descriptive texts alone cannot (Lelo; Cunningham; Sebastián Lozano). For instance, we can map networks of clergy and churches interacting with a shared church or visualize geographically where (and when) congregations used rood screens to maintain separation within the churches. Observing maps, objects, and space using digital technologies can challenge traditional understandings of gender, social interaction, private and public, and secular and sacred space (Mileson; Pinchbeck; Prus). Scholars have also shown the value of reading traditional literary and historical texts with a greater consciousness of location and environment (Terpstra; Kinniburgh). These methodologies and technologies prompted the research team to integrate these new analytical methods such as relational databases, data visualization, and spatial modeling when examining shared churches. Using these techniques, the SCP digital platform, with its multiple forms of mapping and visual presentation, will show the significant impact these churches had creating and preserving religious diversity in early modern Europe.

For the onsite research portion of the proposed project, the research team will investigate the physical environment of shared churches in six selected regions. We will establish shared churches' geographic location in relationship important sites (city hall, nearby churches) in its local community and regionally. We will conduct onsite visits to 50 churches to inventory and photograph the external and internal architectural space. These include the church's sacred spaces, the objects that decorated the church's devotional space, and any physical and chronological delineation of separation of denominational congregations and the rituals within each church. We will utilize the standard controlled language advised by the Library of Congress VRA Core "data standards for descriptions of images and works of art and culture" to describe and identify the space, visual culture, and objects. Maintaining this consistency in terminology will ensure consistency in our data collection and searchability for public use of our database and improve digital discoverability.

During the proposed project, the onsite research we will conduct in churches and archives will make our static map of locations dynamic by expanding the database and adding mapping interactivity. We will add and show information on the chronology of these churches, which groups shared the space, architectural modifications, spatial usage, devotional objects, and religious rituals (see appendices on data points). In doing so, we will investigate the static and changing historical use of space, spatial decoration, location of objects, and the resulting social interactions. We use archival sources, the church spaces themselves, and printed descriptions of interior church spaces and externally shared spaces attached to

churches such as cemeteries and churchyards to analyze how early modern contemporaries conceptualized and practiced this sharing.

We will locate, read, and analyze original documents from the sixteenth, seventeenth, and eighteenth centuries using our diverse paleographical and linguistic skills and decades of research experience in European archives and libraries. The relevant collections to answer our research questions for this phase exist in archives in Belgium, France, Germany, the Netherlands, and Switzerland. Before each trip, the Division for Late Medieval and Reformation Studies (DLMRS) research assistants will use online finding aids available for each location (see links in Bibliography) and the macro search engine of Archivportal-D and Archives Portal Europe to create a preliminary list for us to order in advance. From these documents, we will extract testimony from participants in legal cases, petitions, discussions of religious issues in city council minutes and territorial correspondence, and agreements on religious matters about church space. We and our research assistants will read these archival documents and records to find instances where they describe the use of devotional space, religious practice, and community interactions with those objects.

In addition, we will analyze how material and liturgical objects and their usage, visual art, architecture, and soundscapes influenced early modern communities and their willingness to share space with members of a different denomination. To do so, we will use the scholarship conducted in the last decade by members of our advisory board and research affiliates. We have chosen the regions we will visit during our two summer research trips based on the number of shared churches, the physical survival of shared church buildings, adequate archival records, and examples of differing sharing agreements. We will do church space inventories and take photographs in select churches in six selected regions we identified as representative from our prototype map. We also concluded that we could complete comprehensive research on 50 churches for this project based on what we could accomplish during our preliminary test onsite church visits in 2018-2019.

We will augment this onsite research by reviewing available architectural blueprints and engravings of church interiors in print books and study the digital images of churches and material and devotional objects such as altars, dividing walls, and church pews taken during site visits. To identify and acquire additional digital images of relevant devotional objects, we will look at relevant church inventories, historical photo collections (ex. https://www.slub-dresden.de/en/explore/art-photography-design/deutsche-fotothek), and museums with relevant religious art and liturgical object collections. These items will help us reconstruct church spaces, study how the material objects functioned within these spaces based on location and usage, and discover when and why groups removed some objects.

To analyze this material in our presentations in Story Maps and print scholarship, we will bring together the standard techniques of social and cultural-historical methods of collecting and comparing documents produced by and about social groups, ritual studies as conducted anthropology and sociology, and recent theories developed in studies of space, architecture, and material culture. We will also employ research techniques drawn from GIS mapping and spatial reconstruction methodologies, geohumanities, spatial reconstruction, and book and manuscript digitalization.

We are currently using commercial software—Filemaker and ArcGIS—to organize church coordinates and basic descriptive information. We also plan to continue using Excel, Word, and Adobe Acrobat when receiving information from our research affiliates until we develop an online entry form in Year 3 of the project. In the first quarter of Year 1 and Year 2, we will build an integrative, dynamic interactive map, relationship database, and curated digital image archive with the initial assistance of a professional data application designer and archival specialist. The GIS professional will design the database and mapping framework using the open-source program PostgreSQL for online relational databases, transfer our current database information saved in Comma Separated Values (CSV) formatting from Filemaker, and fix any anomalies that might occur. The Archiving Database Specialist will design the digital preservation database, using the open-source Archivematica for archiving digital photos and images of churches and devotional objects, and create a protocol for curating images for accessibility. During the first four months of Year 2, they will integrate our image database into web and PostgreSQL databases; and refine the protocol for curation and final archiving. At the same time, the DLMRS research

assistant will begin inputting new content based on the research on 50 churches that they do during the semester and, in the fall, integrate the summer archival and onsite research into the database.

Research assistants from the University of Arizona GIST program and School of Information specializing in databases, archiving and curation, web design, and mapping will refine the databases and develop functionality to allow researchers and other users to search for specific information. We will move to open access software more suited to the public access. The first step will be to have the GIS consultant integrate the spatial database extender program PostGIS with the PostgreSQL database and integrate that into our web page. Of all the relational databases, we decided that these two programs are best suited to create a searchable database with mapping capabilities with content that will include the chronological information, textual entries, geographic coordinates, and curated objects. To create a platform for searchability, interactive maps, and data visualization, the research assistants in the summer of Year 2 will use the programs Leaflet, an open-source JavaScript library, and RShiny, an open-source application to build web applications, to filter and query data for analysis.

Finally, we will analyze the use of devotional spaces and religious material objects based on archival accounts and our analysis of church space. During the summer of Year 1 and Year 2 of the proposed project, the research team will assess churches, photograph archival documents, and gather spatial information during our onsite visits. Using the research conducted by the research team in Europe and the DLMRS research assistants during their library and web searches, we will develop descriptive and analytical content, such as discussions of specific objects (baptismal font, altar, bells) in several churches or in-depth discussions of the spatial relationships within one congregation, for select churches. Based on this material, we will use Esri's StoryMaps, a web map-based narrative and storytelling program, and Scalar, an open-source publishing program that supports media-rich digital scholarship, to imbed narratives and images into our existing map. We will begin by creating descriptive and analytical material in StoryMaps. As the research team gathers more images, archival, and spatial information during our onsite assessments, we will integrate these interactive descriptive, analytical texts into the map using Leaflet and Scalar. The research team, all experienced editors of journals and book series, and relevant experts will peer review these visual and narrative elements before online publication. We will also integrate multimedia methods into our scholarship. We will begin to reconstruct devotional spaces and religious material objects based on archival accounts and our analysis of church space.

2.5 History of the Project and its Productivity

The SCP project arises from the combined interests of the applicants in shared religious buildings and confessional coexistence. It builds upon Luebke's research on religious coexistence, including shared churches, and Plummer's work on confessionally-divided convents in early modern Germany. Spicer's work on the impact of Reformation on church architecture and Lotz-Heumann's work on confessional conflict and coexistence complement the project. The potential for collaboration on these inter-related research interests developed from informal conversations after Nicholas Terpstra's presentation about his digital mapping project on Florence during a conference held in Wolfenbüttel in June 2016 (Karant-Nunn, Lotz-Heumann; Terpstra; DECIMA). We agreed that digital mapping would be useful for our project.

A Faculty Seed Grant from the University of Arizona awarded to Plummer financed initial project development work on the Shared Churches Project. This grant allowed graduate students in DLMRS to find the geographical coordinates for 882 shared churches drawn from Luebke's research. The team developed a standard protocol for determining each site's geographical coordinates and fact-checking basic information about each site's status as a shared church. During this process, the team set up a dedicated workstation with a computer, the software necessary to manage and standardize the data, and a Box folder with unlimited data storage capacity to store project data and materials. In collaboration with Chris Lukinbeal, we used these standardized location details to create a basic static digital map of shared churches using ArcGIS. In addition, Lizeth Mora developed a prototype for the project's webpage (sharedchurches.arizona.edu).

The research team has also built effective collaborations through a series of meetings and discussions. During 2018–2019, we met at Wolfenbüttel, Germany, to discuss objectives and methodologies, with preliminary site visits to shared churches at Ammersleben, Althaldensleben, and Hildesheim. In a 2018 meeting in Tucson, Arizona, the team explored digital technologies, scholarship, and further project development. The third meeting in Strasbourg, France (2019) focused on identifying the potential funding sources for the project's further development. We also discussed disseminating research on Shared Churches through print and digital publication, represented by a collection of essays and a website and interactive map. We undertook a further site visit during this period. We also discussed the project's next phase at the Sixteenth Century Studies Conference at St Louis (17–20 October 2019).

In addition to these project team meetings, individual team members conducted archival research into some shared churches. Plummer researched shared convents and parish churches in Althaldensleben, Augsburg, Keppel, Soest, and Welver, among others. Luebke researched the shared church in Bautzen (June 2018) and multiple sites in Alsace and the Rhineland, including Heidelberg (March 2019). We also contacted individuals with similar scholarly interests, many of whom have joined the project as research affiliates. These conversations led us to organize conference panels to present research on aspects of shared churches and benefit from the subsequent discussions. These sessions took place at the Ecclesiastical History Society conference on the Church and Law, held in Cambridge, United Kingdom (24–26 July 2018), and the Sixteenth Century Society Conference in Albuquerque, New Mexico (1–4 November 2018). These contributions form the basis for the edited volume *Sharing Sacred Space in Early Modern Europe*, which we will submit for publication in 2022.

We put further development of the project and planned research trips in Europe on hold during the COVID-19 outbreak and the concomitant travel restrictions and closure of archives and libraries. Being unable to meet in person, Luebke and Plummer started weekly meetings in January 2021 to discuss the project via Zoom and resume work on the edited book. Lotz-Heumann and Spicer joined them in August to discuss our plans for this project. These discussions included confirming and refining the phases and timelines of our project as outlined in section 2.2 above. In doing so, we decided to focus on establishing the complete web-based infrastructure of our digital project and use our scholarly focus on spatial environments, including its onsite visits to 50 churches, to determine how these systems will work together. Once we have this in place, we will move on to the subsequent two phases of our Shared Churches Project. The research we do for the SCP will also enable the research team to work on our articles and books using the queries and mapping functions. We will work on phase 3, on social interactions and legal changes, in 2025-2028, applying for foundation grants, European Union grants, and individual research grants. For phase 4, on public history outreach, in 2028-30, we plan to apply for an NEH Digital Projects for the Public, among others. We continue our weekly meetings via Zoom to coordinate our research efforts into the future since this has worked well for us.

2.6 Collaboration

The scholarly research team for this phase of the project—Marjorie Elizabeth Plummer (project director) along with Ute Lotz-Heumann, David Luebke, Andrew Spicer, and Chris Lukinbeal—is comprised of four established scholars of early modern history and one scholar of cultural geography and cartography, who have decades of experience in research and administering grants. Each team member brings significant geographic, thematic, and digital expertise to the project: Plummer's work in Germany on gender and tolerance, Lotz-Heumann's research on religious conflict and coexistence in Ireland and on German spas as meeting places of different social and religious groups, Luebke's studies of parish rituals and religious hybridity in Germany and Switzerland, and Spicer's expertise in church space and material culture in the Netherlands, Scotland, and France. Lukinbeal brings the digital mapping expertise and experience in geohumanities, the interdisciplinary techniques integrating scholarship of the arts and humanities with geographical analysis spatial environment, to bring the project to fruition.

The four specialists in Reformation and Early Modern Studies embody international research and employ transdisciplinary methodologies, drawing on theories and methodologies from anthropology, art

and architectural history, literature, classics, theology and religious studies, gender analysis, and cultural studies. We independently concluded that the sharing of religious spaces and religious diversity was more widespread in early modern Europe than previously believed. Our discussions on formulating a new theory about religion and social culture led us to develop this project. Already interested in early modern cartography and Germany, Lukinbeal has been expanding his research interests into this field with this project. He brings decades of experience with visualization, digital and mapping technologies, and social geographies that complement this project.

The project director Marjorie Elizabeth Plummer is Susan C. Karant-Nunn Professor of Reformation and Early Modern European History and currently Acting Director of the Division for Late Medieval and Reformation Studies at the University of Arizona. Her current research focuses on how female monastic orders often survived the sixteenth-century reform movements by creating religiously mixed convent congregations. Her monograph on this topic, *Stripping the Veil: Convent Reform, Protestant Nuns, and Female Devotional Life in Sixteenth Century Germany*, will appear with Oxford University Press in 2022. In her next book project, Plummer explores informal and extralegal ways of sharing sacred space in parishes located in the Soester Börde, including churches shared by convent and lay congregations, unofficial mixed denominational lay congregations, and networks of local churches and clergy supporting these diverse religious groups. Plummer's research implies that shared churches often existed beyond formal legal agreements. As project director, Plummer will be responsible for the administration of the project and for mentoring and supervising the graduate research assistants. She will also participate in six-week research trips during the summers of 2023 and 2024.

Project collaborator Ute Lotz-Heumann is Heiko A. Oberman Professor of Late Medieval and Reformation History and currently on sabbatical as Director of the Division for Late Medieval and Reformation Studies at the University of Arizona. Her research focuses on religious and communal interactions in two distinct areas. Her work on the relationship and interactions between a state-sponsored colonial Protestant minority and a Catholic majority shows the complexity of everyday arrangements in sharing sacred and communal spaces. Lotz-Heumann's current work on spas as places that regularly housed visitors of several different religions similarly draws attention to a broad range of practices in sharing religious spaces. Lotz-Heumann will work on this research and supervise the graduate research assistants in her leadership role at DLMRS.

Project collaborator Chris Lukinbeal is Director of Geographic Information Systems Technology Programs and a Professor in the School of Geography and Development at the University of Arizona. Lukinbeal's work focuses on the interconnections between media, space, power, and changing identities. He has participated in numerous digital projects, including recreating Old Tucson's film set (Lukinbeal 2018). As a Digital Humanities Specialist for the SCP, he contributes his expertise in mapping and imaging technology, including GIS, ERSI, StoryMaps, and 3D imaging, to the project. As Director of the GIST program, Lukinbeal will help us identify GIS graduates and graduate students during the academic year. He also will participate in the onside spatial evaluations during the summer.

Project collaborator David M. Luebke is Professor of History at the University of Oregon. In his prize-winning book *Hometown Religion: Regimes of Coexistence in Early Modern Westphalia*, Luebke showed how ordinary, self-identified Christians related to one another and their parishes as they differentiated gradually into denominational subgroups. Luebke's research focuses on the gradual emergence of initially informal shared churches that developed into more formal separation arrangements. He explores shared churches as the product of interaction between princely and local authorities on the one hand and evolving identities among the local communities on the other. He will engage in research over the summer.

Project consultant Andrew Spicer is Professor of Early Modern European History at Oxford Brookes University, UK. His research focuses on the archeology and material culture of sacred spaces, especially church buildings. He analyzes how the sharing of churches manifested in their interior architecture and material culture of worship, including church furnishings such as altars, baptismal fonts, and pulpits. He has broad geographical and thematic expertise, ranging from Scotland and England to the Netherlands and France. His edited collections about sacred spaces, *Defining the Holy: Sacred Space in*

Medieval and Early Modern Europe and *Sacred Space in Early Modern Europe*, both published in 2005, were instrumental in establishing research about sacred space in early modern historiography. Spicer will consult on the project during the research in the summers of 2023 and 2024.

In 2021, the project team has formed a Research Advisory Board composed of 19 leading academics from Canada, France, Germany, the Netherlands, Poland, and the United Kingdom with expertise in the Reformation era and religious coexistence to support the project team. We approached a further 20 research affiliates and confirmed their willingness to share their research on shared churches with the project team. We also reestablished our contacts and collaboration with digital specialists at the University of Arizona, initially involved in our 2018-2019 project discussions. We have confirmed their continued interest in the project and willingness to consult with us during this grant period. From these conversations, we have established a Digital Humanities Specialists Advisory board.

The SCP's Digital Humanities Specialists are University of Arizona faculty and staff who bring technical expertise in mapping, imaging, web design, research data management, and data curation to the project. In addition to their continued guidance throughout this project, they also have provided training to the research team and previous DLMRS research assistants in digital technologies through conversations and workshops. In addition, we will hire professional non-UA Digital Humanities Specialists as consultants with specific skills to assist us with the technical aspects of web-based database creation, interactive map construction, and website design each year.

The research assistants, including several who worked on the project in 2018-19, will be drawn from the pool of graduate students working with Plummer, Lotz-Heumann, Lukinbeal, and Bryan Heidorn, Professor, School of Information, and Director of the Center for Digital Society and Data Studies. One DLMRS student will work each semester during the academic year as a Graduate Research Assistant. The academic research team and DLMRS graduate students have the linguistic and paleographic skills to read, transcribe, and analyze the archival documents handwritten in Early Modern Latin, Early New High German, Middle Dutch, Middle French, and Early New English, using *Kanzleischrift* or secretary hand. We will hire graduate students from SOI and GIS on an hourly wage during the summer to work on aspects of the project within their areas of expertise, such as database management, archiving and curating documents, mapping, and web-based visualization. The timing of these hires is based on the project's needs and balancing the specific requirement of the students' academic program. The advanced, post-ABD DLMRS students, for instance, will be in Europe doing dissertation research and writing during the academic year but continue to work as research assistants while the GIS and SOI students often have internship and related course projects during the academic year and prefer to do project work in the summer. We have constructed the work plan with that in mind.

2.7 Work Plan

We have broken the work plan for this project proposal into yearly and semester-length phases designed to integrate our technological and scholarly goals of developing a fully functional web-based database and assessing the spatial environment of shared churches using traditional and digital methods. Each phase will build on the activities of the previous phase.

On the technical side, Year 1 will concentrate on building the framework of the PostgreSQL and digital archival databases, creating base maps for the mapping portion, and expanding and testing the functionality of the databases by adding textual and visual content. Year 2 will focus on integrating the databases and mapping elements into the webpage, creating relational search, query mapping, and chronological functions, and adding scholarship and images into these functions through Scalar and Story Maps. Year 3 will complete database integration, map functionality, and web design, including a form for the public to add additional churches. When this is complete, the website will be tested for any problems and then fully launched.

During the first semester of Year 1 and 2, we will hire an open-access GIS specialist identified by Chris Lukinbeal and an archival database specialist identified by Brian Heidorn to create and then integrate the architecture of the database into the web interface. During the summer of Year 1 and 2, we

will employ research assistants currently studying in the Geographic Information Systems Technology Program and School of Information. They will develop interactive maps for the project, create web-based databases, assist with adding digital scholarly content on the website, and undertake the data curation and archiving to hand to the library repository. During Year 3, during the summer, we will hire a full-time web designer for 62 days to make sure that all parts of the website function smoothly and prepare the project web page for launch.

On the scholarship side of the project, we work alternating between data entry and onsite collection. Throughout the project, one research assistant, the advanced DLMRS graduate student, will do research and data entry related to the project during the academic semester in the first and final third of every year. They will do background library and internet research on 50 churches to add extended spatial descriptive information to our database. Under the supervision of the project director, they verify specific data points such as the parish names, church names, GIS locations, dates when churches were shared churches, the religious groups involved (see complete list in appendices). They will also add from the research conducted by the research team specifics of the church buildings and devotional objects sharing. They will provide the research team with information sheets on archival materials available on 25 churches each summer. Finally, they will write text and organize images for digital storytelling.

The research team will do complete onsite object, space, and usage inventories for 50 churches in six regions in Europe during the summers of Year 1 and 2. Using what we learned after four preliminary site visits to historical shared churches in 2018 and 2019, we developed a basic rubric, work protocol, and equipment list (cameras, iPads, measuring tape, pens/paper) to assess churches. We will take notes and photograph all relevant elements in the church and related devotional locations and elements located outside the church. With the addition of Lukinbeal to the onsite research team, we can complete detailed spatial and geographical measurements and scans. We will augment these onsite assessments with archival research in local, state, and church archives located in the selected regions where we will photograph archival documents.

During summer 2023, the research team will travel with Lukinbeal to Berlin, to conduct archival research in the Prussian Secret Archives in Dahlem and at the Brandenburg State Archives in Potsdam. We will also visit five nearby shared churches in and around the city. We will then spend two weeks centered in Wissembourg and two weeks in Speyer. From these locations, we will visit archives in Strasbourg, Karlsruhe, and Speyer and twenty churches in the district of Bas Rhin, in northeast France, and the regions of Baden and the Palatinate in southwestern Germany. During summer 2024, we will conduct onsite church assessments, make photos and scans, and do archival research for two weeks in Thurgau, Switzerland, two weeks on the border between Belgium and Germany; and two weeks in the Upper Palatinate, completing the assessment of 25 churches. We also plan to embed textual and visual descriptions from case studies on select communities from the archival research and scholarship of the research team and extensive group of research affiliates, to show visually how a shared church space functioned and devotional objects were used,

Despite the separate consideration of the work plan above, we intend for the technical and scholarly activities to intersect. For instance, the consultants in Year 1 and 2 will be working simultaneously with the DLMRS graduate assistant and they will communicate about and test various functions together. The graduate students, like the research team, have already begun collaborations through periodic workshops and meetings. We will continue to train the research assistants in digital technologies (StoryMaps, GIS, 3-D technology, Scalar) they need for the project through workshops, offered by staff from the [CATalyst Studio](#) and the [Data Cooperative](#) in the University of Arizona Library just as we will discuss the historical side with the digital specialists. This communication and collaboration are vital to the continued success of the project.

2.8 Final Product and Dissemination

The SCP is using and building new transdisciplinary methodologies and theories to provide insights into how these early modern communities navigated the challenges that arose when congregations willingly or

through necessity shared spaces of worship. Rather than map geographies of official religion, the SCP starts from the premise that most polities in Europe north of the Alps were religiously diverse and that their diversity obliged all to address questions about how relationships between belief, gender, kinship, social belonging, and authority should play out in the arrangement of sacred, physical spaces. In its most fully articulated form, sharing sacred spaces involved the rule-bound subdivision of church interiors into religiously homogenous spheres. In its less articulated forms, it involved ad-hoc arrangements and everyday accommodations.

This project will provide a comprehensive picture of the spatial and environmental factors that affect accommodating members of different faiths in a shared devotional space. By enhancing the mapping of these shared churches with an integrated database and digital storytelling, the SCP will show how diverse understandings of holiness could—and could not—coexist under a single roof; how patterns of conflict and accommodation between them mutated in social practice over time and circumstance; and how ideas about pollution and the inherent sanctity of places and objects shaped interaction across denominational barriers. By presenting our research findings in a digital environment (interactive map, website with searchable database, and visual storytelling), we will ensure access to the information for researchers in diverse fields in the humanities and greater dissemination of our research findings to a broader audience. Through public presentations on the project in conferences, print and digital publications, and community talks, we will do so. We will also utilize some of the new methods of social media dissemination.

We will expand the map into new subjects and focus areas during the next phase of our project (2025-28). We will examine the social and political interactions that occurred in these churches and the networks of the clergy, lawyers, and others involved in the preservation and destruction of these communities. This inquiry will involve research into the legal and political records chronicling conflict and resolutions. We also will create 3-D models of a selection of the most interesting of the churches. We know that many shared churches existed in Europe and beyond and will add those gradually once we have established the fully-functioning digital platform with database, map, and webpage. In addition, other shared churches have developed since the nineteenth century, which we will later add to our map in the next phase of this project. We expect that we and our graduate students and others will add in related projects from individual research projects and publications, which we can link to the webpage. To this end, we will be applying for additional funding.

By developing an interactive digital platform and searchable map to study shared churches, we intend to design a website that will allow exploration of religious accommodations, show how space and devotional objects functioned in shared churches, and the interactions that resulted to a variety of audiences with diverse interests in the topic. We recognize that different materials will be of interest to these groups. Our long-term goal for phase 4 (2028-31) will be to provide bibliographical references, access to archival documents, translated documents, and teaching resources alongside the map and website for those wishing to use the site for scholarly analysis, student research, or teaching. We also will create apps and other digital content designed for a broader public.

The Shared Churches Project website, related data, and databases will be hosted without additional cost to the research team or users at the University of Arizona's College of Social and Behavioral Sciences through at least 2031, at which point components of the project will sunset and archived as appropriate in University of Arizona Libraries research repositories (e.g., UA Campus Repository and the UA Research Data Repository (ReData)) in accordance with policies and best practices in place at that time. Upon completion of this funded phase of the project, a preservation-friendly copy of our database also be given a DOI number and deposited in ReData. The project director has undergone training in these processes and will continue to do so during the life of the project. As digital preservation strategies continue to evolve, UAL will work with the project team to revise this strategy for sustainment, sunsetting, and preservation as needed.