# **DIKTUON:** Getting Involved With the Digital Humanities in Theology, Biblical Studies, and Religious Studies

#### by Kent T. K. Gerber

It is of particular interest to my intentions here — encouraging theological and religious studies libraries and librarians to become more involved with the digital humanities — that the generally recognized pioneer of this movement was a theologian, and his project was theological in nature. Father Roberto Busa, an Italian Jesuit priest, developed in 1949 a computerized linguistic concordance of the works of Saint Thomas Aquinas. Busa's *Index Thomisticus*<sup>1</sup> took thirty years to complete, and early-on he recognized he would need assistance with this ambitious and momentous undertaking. "In 1946...I started to think of an Index Thomisticus, a concordance of all the words of Thomas Aquinas, including conjunctions, prepositions and pronouns, to serve other scholars for analogous studies....It was clear to me...that to process texts containing more than ten million words, I had to look for some type of machinery."<sup>2</sup>

In 1980, after the project was finally completed, Father Busa commented on himself as the pioneer of the digital humanities, or "humanities computing" as it was called at the time:

Although some say that I am the pioneer of the computers in the humanities, such a title needs a good deal of nuancing....Maybe others...may claim that they have worked in this area prior to me. Yet, isn't it true that all new ideas arise out of a milieu when ripe, rather than from any one individual? If I was not the one, then someone else would have dealt with this type of initiative sooner or later. To be the first one having an idea is just chance. If there is any merit, it is in cultivating the idea.<sup>3</sup>

Digital humanities are growing and thriving in higher education,<sup>4</sup> and, in the spirit of the pioneering work of Father Busa, it is important for theological and religious studies libraries and librarians to consider our roles and involvement in the current milieu of challenge and opportunity. The library and digital humanities communities possess many shared values and goals, including providing wide access to cultural information, enhancing teaching and learning, making a public impact, and benefiting from the invigorating, though not salvific, effect of technology to their efforts.<sup>5</sup> In the last five and a half years as Digital Library Manager at Bethel University, I have observed this effect through increased interest in digital collections of unique historical artifacts and scholarship, and how these foster new partnerships with faculty, staff, and administration. Bethel's collections include publications, papers, and images of the university and its sponsoring denomination (Converge, formerly The Baptist General Conference), Doctor of Ministry dissertations, a Biblical Archaeology collection, an archive of historical materials from Bethel's signature Christianity and Western Culture course, and an exhibit featuring a timeline of Bethel's Early History.<sup>6</sup> Digital collections or archives featuring religious or theologically related content are one way of engaging the digital humanities in theological or religious studies libraries.

<sup>&</sup>lt;sup>1</sup> Roberto Busa's *Index Thomisticus* is now freely available online at <u>http://www.corpusthomisticum.org/it/index.age</u>.

<sup>&</sup>lt;sup>2</sup> R. Busa, "The Annals of Humanities Computing: The Index Thomisticus," *Computers and the Humanities* 14 (1980), 83. <u>http://www.alice.id.tue.nl/references/busa-1980.pdf.</u>

<sup>&</sup>lt;sup>3</sup> "The Annals of Humanities Computing: The Index Thomisticus," 84.

<sup>&</sup>lt;sup>4</sup> Nancy L. Maron, "The Digital Humanities are Alive and Well and Blooming: Now What?" *Educause Review*, August 17, 2015. <u>http://er.educause.edu/articles/2015/8/the-digital-humanities-are-alive-and-well-and-blooming-now-what.</u>

<sup>&</sup>lt;sup>5</sup> Micah Vandegrift and Stewart Varner, "Evolving in Common: Creating Mutually Supportive Relationships Between Libraries and the Digital Humanities," *Journal of Library Administration* 53, no. 1 (January 25, 2013), 70.

<sup>&</sup>lt;sup>6</sup> https://www.bethel.edu/library/digital-library/digital-collections/collections-list/

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## What is/are Digital Humanities (DH)?

Arriving at a single comprehensive and concise definition of digital humanities is a difficult task. This is illustrated by Jason Heppler's webpage <u>What is Digital Humanities</u>?, which presents a new definition from over 800 self-identified digital humanities practitioner-scholars each time the page is refreshed.<sup>7</sup> I feel, however, that Lisa Spiro's definition (from 2011) is an especially good one for the purposes of introduction, as it captures the breadth of the concept while also specifying the activities and the ethos of the digital humanities community:

I define digital humanities, loosely, as the use of computers and the Internet to advance research, teaching, and scholarly communication in the humanities, as well as the study of computing's significance for the humanities. Many activities would fall under this definition, including building tools and collections, using tools and collections to discern patterns in humanities data, communicating the results of humanities research through multimodal and/or interactive publications, linking together classes using social networking technologies, and analyzing the significance of networked culture. I also define digital humanities by its community and its ethos, which I view as being committed to openness, experimentation, collegiality, transdisciplinarity, public knowledge, and innovation.<sup>8</sup>

Beyond concise definitions, a four-part series in *Digital Humanities Quarterly* by Patrik Svennson offers one of the best introductions to the complexities of digital humanities, explaining its transition from humanities computing,<sup>9</sup> its landscape,<sup>10</sup> its infrastructure needs,<sup>11</sup> and its potential as a visioning movement for all humanities.<sup>12</sup>

## What are some specific/unique opportunities/applications for digital humanities in theological or religious studies?

Another way to understand digital humanities is to look at project examples. Figure 1 illustrates major genres of digital humanities methods, and highlights the ones in which libraries and archives are most frequently involved.

Table 1 includes sample projects from each genre related to Theology, Biblical Studies, or Religious Studies.



Figure 1: Digital Humanities Genres Frequently Involving Libraries and Archives

<sup>&</sup>lt;sup>7</sup> <u>http://whatisdigitalhumanities.com/</u>. Heppler created the dataset running under his webpage with definitions collected from the annual "Day of DH" online community publication between 2009 and 2014. For more on Day of DH see "Day of DH: Defining the Digital Humanities" in *Debates in the Digital Humanities* (Minneapolis: University of Minnesota Press, 2012). An interactive open access version of Debates in the Digital Humanities can be found at <u>http://dhdebates.gc.cuny.edu/</u>.

<sup>&</sup>lt;sup>8</sup> Spiro is the Executive Director of Digital Scholarship Services at Rice University's Fondren Library, the former director of the National Institute for Technology in Liberal Education (NITLE), and founding editor of the Digital Research Tools wiki the <u>DiRT Directory</u>. Spiro's definition is from January 1, 2011 in Jason Heppler's dataset of definitions from the Day of DH <u>https://github.com/hepplerj/whatisdigitalhumanities</u>.

<sup>&</sup>lt;sup>9</sup> Patrik Svensson, "Humanities Computing as Digital Humanities," *Digital Humanities Quarterly* 3.3 (Summer 2009). <u>http://www.digitalhumanities.org/dhq/vol/3/3/000065/000065.html</u>

<sup>&</sup>lt;sup>10</sup>Patrik Svensson, "The Landscape of Digital Humanities," *Digital Humanities Quarterly* 4.1 (Summer 2010). <u>http://www.digitalhumanities.org/dhq/vol/4/1/000080/000080.html</u>

<sup>&</sup>lt;sup>11</sup> Patrik Svensson, "From Optical Fiber to Conceptual Cyberinfrastructure," *Digital Humanities Quarterly* 5.1 (Winter 2011). <u>http://www.digitalhumanities.org/dhq/vol/5/1/000090/000090.html</u>

<sup>&</sup>lt;sup>12</sup> Patrik Svensson, "Envisioning the Digital Humanities," *Digital Humanities Quarterly* 6.1 (2012). <u>http://www.digitalhumanities.org/dhq/vol/6/1/000112.html</u>

Digital Humanities Genre	Examples in Theology, Biblical Studies, or Religious Studies
Digital Archives and Texts	<ul> <li><u>Virtual Manuscript Room</u></li> <li><u>Nines - Nineteenth Century Scholarship Online</u></li> <li><u>Dead Sea Scrolls Digital Library</u></li> <li><u>Perseus Digital Library</u></li> <li><u>Antiquities of the Institute for Antiquity and Christianity</u></li> </ul>
Text Encoding	<ul> <li><u>Christian Classics Ethereal Library</u></li> <li>EAD Finding Aids - <u>Guide to Baptist Missionary Society Archives</u></li> </ul>
Digital Storytelling/Exhibits	<ul> <li><u>History of Missiology</u></li> <li><u>Religion in Kansas Project</u> (Omeka-based)</li> </ul>
Information/Data Visualization	<ul> <li>John Donne's Gunpowder Day sermon in 1622</li> <li>Qumran Visualization Project</li> <li>Rome Reborn</li> </ul>
Scholarly/Critical Editions Publishing	<ul> <li><u>SBL Greek New Testament</u></li> <li><u>Syriaca</u></li> </ul>
Crowdsourcing Transcription	<u>Ancient Lives in Zooniverse</u>
GIS/Mapping	<ul> <li><u>ORBIS</u></li> <li><u>Association of Religion Data Archives</u></li> </ul>
Data Mining	<ul> <li><u>Hathi Trust Bookworm</u></li> <li><u>Paulist Missions Map</u> - also a visualization</li> <li><u>Google N-gram</u></li> </ul>
Makerspaces/3D Printing	• Reconstructing Artifacts from the Ancient World with 3D printing
Critical Technology/Code Studies/Research Centers	<ul> <li><u>Center for the Study of Information and Religion</u></li> <li><u>Network for New Media, Religion, and Digital Culture Studies</u></li> <li><u>Center for Media, Religion and Culture</u></li> <li><u>CODEC Research Center for Digital Theology</u></li> </ul>

Table 1: Examples of digital humanities projects in theological or religious studies by genre

Most theological and religious studies librarians are aware of some of these digital texts and archives, and new ones are being created all the time.<sup>13</sup> However, it is also important to be aware of projects from other genres of digital humanities scholarship. Mapping projects like ORBIS and visualization projects like the Virtual Paul's Cross Project use "new media" to recreate the environments and experiences of Ancient and Biblical times or 17th century London. One can engage theology and religious studies in new ways by calculating the travel costs and methods of Paul's missionary journeys,<sup>14</sup> or experience John Donne's 1622 Gunpowder Day sermon<sup>15</sup> complete with ambient noises of early modern London.

In addition to these specific projects, it is also important to understand how digital technologies have changed the practice of religion and scholarship. Tim Hutchings used a visit by Pope Benedict XVI to the United Kingdom to illustrate four ways that digital technologies have changed the study of religion:

<sup>&</sup>lt;sup>13</sup> Christopher D. Land, "Digitizing Ancient Inscriptions and Manuscripts: Some Thoughts About the Production of Digital Editions," *Journal of Greco-Roman Christianity and Judaism* 9 (2013): 9-41; Claire Clivaz, Andrew Gregory, and David Hamidovic, *Digital Humanities in Biblical, Early Jewish and Early Christian Studies* (Leiden: Brill, 2014).

<sup>&</sup>lt;sup>14</sup> OpenBible.info. "Calculating the Time and Cost of Paul's Missionary Journeys" (July 5, 2012). <u>http://www.openbible.info/blog/2012/07/calculating-the-time-and-cost-of-pauls-missionary-journeys/</u>.

<sup>&</sup>lt;sup>15</sup> John N. Wall, "Transforming the Object of our Study: The Early Modern Sermon and the Virtual Paul's Cross Project," *Journal of Digital Humanities* 3 No. 1 (Spring 2014). <u>http://journalofdigitalhumanities.org/3-1/transforming-the-object-of-our-study-by-john-n-wall/</u>.

[A scholar] might follow the first approach by using digital tools to create a database of photographs; the second, by conducting discourse analysis of blog posts and comments to map national debates; the third by observing online prayer groups during the visit; and the fourth, by considering how possession of a mobile phone with access to such discourses might change the experience of being present at the event.<sup>16</sup>

A personal database, blog post analysis, online prayer groups, and mobile phones are all new factors in studying religion and theology that didn't exist in Father Busa's time, or even as recently as the 1990s. It is important for us as stewards of research practice and literature to be aware of these changes in order to direct our faculty and students to the sources of knowledge in all of its forms, and, in some cases, to help them create it.

Institutional Memory and Cultural Heritage. One opportunity that clearly meets a theological or religious studies library's mission is stewardship of unique cultural heritage objects on behalf of its community. Curating and providing access to these objects contributes to the larger story of religious and theological expression within those communities. The process of digitizing unique library and archive materials, enriching them with metadata and encoding, and providing easy and meaningful access are core library responsibilities spanning cataloging, systems, and reference.



Figure 2: Paul's Churchyard, the Cross Yard. From the <u>Visual Model</u>, constructed by Joshua Stephens, rendered by Jordan Gray. Used by permission of Principal Investigator John N. Wall

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Figure 3: Bethel's Early History Timeline

Building on the foundation of existing digital collections in the Bethel University Digital Library, I used new digital tools to exhibit these collections. For example, I employed an interactive timeline tool, called TimelineJS, that helped visually contextualize Bethel's early history.<sup>17</sup>

Learning and discussing this tool with a faculty member who co-coordinates the Christianity and Western Culture course led to collaboration on a digital exhibit where I contributed library expertise, including project management, collection organization, secure preservation of digital artifacts, and a platform for dissemination. I also used the Wordpress-based Library blog to feature selected items from a collection of recorded faculty presentations that discuss the formative influence of Pietism in Bethel's history and in Christian higher education generally.<sup>18</sup> These library and

<sup>&</sup>lt;sup>16</sup> Tim Hutchings, "Religion and the Digital Humanities: New Tools, Methods, and Perspectives" in *Annual Review of the Sociology of Religion: New Methods in the Sociology of Religion.* Luigi Berzano and Ole Preben Riis, eds. (Leiden:Brill, 2012), 159. Hutchings is a research fellow at the CODEC Centre for Digital Theology at the University of Durham, UK.

<sup>&</sup>lt;sup>17</sup> Bethel's digital collections are hosted in a consortial subscription using CONTENTdm <u>http://www.oclc.org/en-US/contentdm.</u> <u>html</u>; TimelineJS <u>http://timeline.knightlab.com/</u>; Bethel's Early History Timeline <u>http://cdm16120.contentdm.oclc.org/cdm/</u> <u>timeline/collection/beunhisco</u>.

<sup>&</sup>lt;sup>18</sup> <u>https://blogs.bethel.edu/bethel-library/tag/pietism/</u>. This presentation series was a preview of chapters that appear in Christopher Gehrz, ed., *The Pietist Vision of Christian Higher Education: Forming Whole and Holy Persons* (Downers Grove, IL: IVP Academic, 2015).

digital humanities collaborations communicate the value of this history to the attention of students, administration, and researchers beyond the institution, and put it in the larger context of higher education and religion in North America.

# How can theological libraries/librarians get involved with, contribute to, or otherwise support digital humanities developments?

There are many resources available for librarians wanting to get started in the digital humanities, including publications, organizations, and digital tools.<sup>19</sup> Starting with an awareness of the digital humanities landscape, librarians can help connect their communities with resources and projects, become creators or collaborators, or assist in the management and preservation of projects. Many of the digital humanities collaborations and conversations at Bethel University started with me simply asking faculty and IT staff: "What do you think of digital humanities? Are there any tools or projects that you find helpful or essential?"

*Get acquainted with the digital humanities publications and organizations.* In addition to the examples and citations above, the following resources are worth reviewing in more depth:

#### **General Digital Humanities**

• <u>Debates in the Digital Humanities</u> is an interactive open access book platform providing an accessible collection of essays by leaders in the field and serves as a good contemporary overview.

#### Peer-reviewed Journals

- Journal of Digital Humanities
- Digital Humanities Quarterly

#### Library-Specific

- <u>dh+lib</u> is the website of the Digital Humanities Interest Group of the Association of College and Research Libraries full of news and helpful resources including links to sample LibGuides.
- <u>Advances in the Study of Information and Religion</u> is an open access journal published by the Center for the Study of Information and Religion at the Kent State University School of Communication and Information.

*Get acquainted with the digital humanities tools, skills and standards.* <u>The DiRT Directory</u> (Digital Research Tools) is a great place to investigate various genres of digital tools. The tools highlighted below are ones we've implemented at Bethel University. All three have freely available versions for entry level, paid hosted versions (which provide more features), and advanced DIY open source versions that require more software knowledge and possibly local hardware support.

- <u>TimelineJS</u> requires basic knowledge of Google spreadsheets and following a few steps on the website.
- Wordpress is used for blogging and simple web publishing. <u>Wordpress.com</u> is free and <u>Wordpress.org</u> is the open source software version.
- Omeka is an online collection and exhibit platform. <u>Omeka.net</u> has a free version and a paid hosted version, and <u>Omeka.org</u> is the open source version.

Coding and encoding standards are also foundational for understanding the structure of or working with online texts and projects like the <u>Christian Classics Ethereal Library</u> or <u>International Greek New Testament Project's</u> XML transcription project. XML, or eXtensible Mark-up Language, forms the basis for standards like the Text Encoding Initiative (TEI) and Encoded Archival Description (EAD) which allow librarians, archivists, and humanists to do their work on the Web.

<sup>&</sup>lt;sup>19</sup> Miriam Posner, Digital Humanities and the Library: A Bibliography. Miriam Posner's Blog (April 2013), <u>http://miriamposner.com/blog/digital-humanities-and-the-library</u>; Jennifer L. Adams and Kevin B. Gunn, "Digital Humanities: Where to Start," College & Research Libraries News 73, no. 9 (October 01, 2012), 536-569; Lisa Spiro, "Getting Started in Digital Humanities," Journal of Digital Humanities 1.1 (Winter 2011) <u>http://journalofdigitalhumanities.org/1-1/getting-started-in-digital-humanities-by-lisa-spiro/</u>.

Understanding XML requires some familiarity with HTML and CSS. Fortunately, there are free and helpful resources online for learning these concepts. My digital library student's orientation involves a mini-course incorporating these resources:

#### Free

- <u>W3 Schools</u>
- <u>Codeacademy</u>

#### Subscription

• Lynda.com is a great learning resource for HTML, CSS, and XML.

*Have conversations with your local community and the digital humanities community.* At Bethel, recognizing the characteristics of digital humanities and initiating conversations with colleagues, faculty, and other community members has led to many productive engagements. Conversations spanned topics such as how to innovate teaching and research interests, and resulted in classroom invitations around digital tools and information literacy, consultations about reference and copyright, and a collaboration collecting and curating student work from a study-abroad term using Omeka.

Online, Twitter is the social media platform that digital humanities practitioners and librarians commonly use to communicate, share resources, announce projects, and follow conferences. Search for conversations connected with hashtags such as #digitalhumanities or #digitaltheology, or find librarians or digital humanists to subscribe to or follow. The list of digital humanities practitioners curated by Dan Cohen, Executive Director of the Digital Public Library of America, is a good starting place to listen in and learn.<sup>20</sup>

Physical gatherings called THATCamps (The Humanities and Technology) attract individuals who are seeking to learn new tools, methodologies, and research practices in a non-threatening and informal environment. THATCamps are typically organized by region, institution, or discipline, including ones based on theological and religious studies.<sup>21</sup>

However you engage, I've found that both librarians and digital humanists are curious and generous learners and keen to offer mutual support for healthy growth professionally and institutionally.

<sup>&</sup>lt;sup>20</sup><u>https://twitter.com/dancohen/lists/digitalhumanities</u>

<sup>&</sup>lt;sup>21</sup> For example, recent THATCamps were organized at the meetings of the American Academy of Religion and Society for Biblical Literature <u>http://usreligion.blogspot.com/2014/07/thatcamp-returns-to-american-academy-of.html</u> and <u>http://www.thatcampaarsbl.org/</u>.