MEET THE SCHOLAR

As one of five researchers awarded a fellowship from Gale and the American Society for Eighteenth-Century Studies (ASECS) in 2022, Daniel Watkins used digital humanities tools to enhance his research on the Lettres Édifiantes et Curieuses in eighteenth-century Britain. In his research, Watkins hoped to discover how missionary accounts influenced European descriptions of societies and cultures in Africa, Asia, the Americas, and beyond.

All Gale-ASECS Non-Residential Fellowship recipients were granted access to Gale’s Eighteenth Century Collections Online (ECCO) and Gale Digital Scholar Lab (the Lab) for a six-month period of research. ECCO is the most comprehensive online historical archive supporting eighteenth-century studies, connecting researchers to every significant English-language and foreign-language title printed in the United Kingdom between the years 1701 and 1800. The expanse of content housed in ECCO meets substantial research potential in the Lab, an industry-leading text and data mining research environment that removes barriers to digital scholarship.

Fellows received training to use the text and data mining tools available in the Lab to explore ECCO and advance their work using digital humanities methods. Read on to see how Watkins used this cloud-based analysis platform to build a robust body of data, run meaningful analyses using digital humanities tools, and create impactful visual stories.
BUILDING A STRONG FOUNDATION FOR FRUITFUL RESEARCH

Watkin’s research for the Gale-ASECS Fellowship represents a starting point for a larger project exploring the influence of a set of eighteenth-century missionary letters named the *Lettres Édifiantes et Curieuses* (LEC). “The LEC was perhaps the most widely known collection of missionary letters in eighteenth-century Europe,” said Watkins. “Numerous contemporaries mention the letters in one form or another, and historians have long believed that the LEC had a wide readership.”

The first project in Watkin’s research, titled “Tracking the *Lettres Édifiantes et Curieuses* in Eighteenth-Century Britain,” sought to determine exactly how far-reaching the influence of these missionary accounts was. Watkins noted, “The purpose of this inquiry is to help solve a larger historical question about the role that missionary letters played in shaping the ways that Europeans saw the rest of the world. In this step, I focused on eighteenth-century Britain to uncover evidence of text reuse and citations of the LEC in English-language texts.”

“Asking a question as big as ‘how did missionary letters influence European conceptions of the rest of the world’ demands a methodology that is expansive. This kind of question is perfectly suited for research using digital tools,” Watkins acknowledged. “The Lab in combination with ECCO allowed me to do a ‘distant reading’ of the LEC’s influence on English published literature. In particular, I was interested in this fellowship because of the comprehensiveness of ECCO.”

“ECCO itself is an invaluable resource because of its sheer breadth. There is perhaps no better digital resource with which to assess the whole of British print culture in the eighteenth century.”

OVERCOMING CHALLENGES WITH DIGITAL SOLUTIONS

Watkins faced an immediate challenge during the first phase of his research, as the LEC was originally published in French. Watkins noted, “Basic keywords from the text would be insufficient for searching an English-language database. So, I devised a method of creating a taxonomy of words that would appear the same in both French and English documents. The taxonomy included names of letter writers, places names, and other keywords translated from French into English.”

“To build the taxonomies that I used to find English-language texts citing the LEC, I first focused on the thirty-four volumes of the LEC in French … accessed via *Sabin Americana*,” said Watkins. “I was able to use the Lab to produce five taxonomies with anywhere from three to 128 tokens with which to identify use of the LEC.”
Impact Report: Discover How the Gale-ASECS Fellowships Helped Steer Fulfilling Research Journeys

SOURCING A ROBUST BODY OF DATA

After he developed his taxonomy, Watkins outlined, “The second phase of the project entailed using the taxonomy to identify English-language documents that cited, used, or replicated the LEC. Using the Lab and searching through ECCO, I managed to identify over 270 individual documents that make reference to the LEC. Only two of these were English-language editions of the LEC; every other document was an original publication that simply made use of the information from the LEC for its own purposes. This is a significant finding. It helps quantify just how much the LEC made an impression on the British literary public.”

Speaking more specifically about the documents he found in the Lab, Watkins noted, “Among the most important finds in ECCO were the English translations of certain volumes of the LEC, the English editions of The Ceremonies and Religious Customs of the Various Nations of the World—one of the most notable bestsellers of eighteenth-century Europe—many other French texts translated into English (including Voltaire’s works), and geographic texts such as A New Geographical, Commercial, and Historical Grammar.”

“A New Geographical, Historical, and Commercial Grammar; and Present State of the Several Kingdoms of the World containing I. The Figure, Motion, and Elements of || VIII. The Elements of the Planets that move about the Sun and the Orb Habitable. II. Astronomical and Orographical Descriptions of the Earth. III. The Great Divisions of the Globe into Land and Water, Countries and Harbours, with their Boundaries and Distances. IV. The Modern States, Kingdoms, Princes, and Colleges. V. Their Climate, Air, Soil, Magazine, Precedents, History, Names, Manners, &c. VI. The Maps and Charts peculiar to each Country. With A Table of the Coins of all Nations, and their Value in English Money. By William Guthrie, Esq. Illustrated with a New and Correct Set of Maps, Engraved by Mr. Kitchin. London: Printed for J. Knox, at No. 145, in St. Martin’s-Leake-street, MDCCCLXX.”

“Upon identifying those English-language works that use the LEC, I then explored the corpus to determine how and why the LEC was appropriated. To do so, I used various tools in the Lab. The results provided a glimpse at how the LEC was utilized in eighteenth-century British literary culture.”
ANALYZING & VISUALIZING DATA WITH DIGITAL HUMANITIES TOOLS

Although Watkins had used the Lab previously, including teaching with the resource in his graduate seminars, the Gale-ASECS Fellowship training gave him more insights to expand his research using digital humanities methods. “The training sessions with the fellows were immensely useful in generating ideas on what I could do with the Lab and in providing hands-on tutorials to figure out how to effectively take advantage of the tools,” said Watkins.

When talking more specifically about how the Lab enhanced his research experience, Watkins said, “The Lab’s search functions … were the first and perhaps most utilized resources provided by Gale. But the Lab’s inclusion of content sets made organizing these materials easy and effective. I built numerous content sets and used the various features of the Lab to edit and quickly peruse them to understand which works were connected to the LEC. Additionally, I used four of the analysis tools in the Lab to understand the corpus better: the document clustering tool, the ngram analysis tool, the topic modeling tool, and the sentiment analysis tool.”

“My research would not have been possible without the Lab. There isn’t another tool that I’m aware of that could have allowed me to explore this question of the LEC’s impact on English-language literature as well as Gale’s. It was absolutely necessary that I use the Lab and ECCO to achieve my research goals.”

SEAMLESSLY REVEALING INSIGHTS WITH DOCUMENT CLUSTERING

In his initial analysis step, Watkins used the document clustering tool to gain a better understanding of the breadth of his content set. “I was curious to see if the LEC simply got numerous hits in only a few documents or documents of the same basic nature [e.g., multiple editions of the same text],” said Watkins. “In fact, the document clustering analysis revealed a very uniform distribution. In an analysis that identified 10 clusters, no single cluster had more than 40 documents in it. And the proximity of the documents in each cluster was not particularly tight.”
When considering his experience as a Gale-ASECS Non-Residential Fellow, Watkins said, “The fellowship was an immensely useful time to explore the tools in the Lab and think about how these digital tools can help historians understand the past better.”

For other historians interested in exploring the possibilities of the digital humanities tools available in the Lab, Watkins recommended, “The tools themselves don’t have to provide final conclusions—they can help historians process information. For example, the ngram analysis tool helped me determine additional stop words to add to cleaning protocols so that the topic modeling and document clustering analyses produced better results ... I hadn’t considered this method for using DH tools before.”

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“Providing insights into the potential of the Lab for historians

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“Using the topic modeling tool to analyze content

Watkins then used the topic modeling tool to visualize the content of his dataset. “First, the topic that included the most documents (262 to be precise) was defined by the words ‘man, god, people, father, church, manner, religion.’ This seems to indicate that these texts were mostly interested in religion, possibly evangelization,” noted Watkins. “This isn’t particularly surprising considering the LEC was, essentially, a text about the evangelization efforts of Jesuit missionaries. But, what this confirms is that British authors did not simply cut out the religious narratives; they kept them in their retelling or reuse of the LEC.”

“The second largest topic was defined by words like ‘trade, aid, goods,’” said Watkins. “While this also might not come as a surprise, it nevertheless helps confirm the fact that missionary letters were useful sources for merchants. Documents focused on discussing trade utilized information from the LEC, presumably to teach merchants about the peoples that they would be interacting with in long-distance trading ventures.”

Lastly, Watkins noted, “The third topic was even more fascinating; its main keywords included ‘king, army, prince, general, troops, war.’” Watkins explained while there are many possible explanations for the prevalence of these keywords, “For potential missionaries or religious leaders and/or merchants, the topic of war in places like China, India, Africa, and the Americas would be unquestionably relevant. That the topic’s ‘exclusivity’ score was only 0.318 (the fourth lowest of any of the topics) means that war was talked about in a wide range of documents—presumably many of those that were primarily interested in evangelization or trade.”

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Get an Inside Look at Powerful Research Tools

Want to learn more about the resources Watkins used to enhance his research and develop his digital humanities skill set?

Discover the possibilities of Gale Digital Scholar Lab at gale.com/digital-scholar-lab

Find more information about Eighteenth Century Collections Online (ECCO) at gale.com/ECCO

Interested in learning more about ASECS?

Find more details about the American Society for Eighteenth-Century Studies (ASECS), including the society’s initiatives and events, at asecs.org