

# Impact Report:

## Discover How the Gale-ASECS Fellowships Helped Steer Fulfilling Research Journeys

Read How One Fellow Used Digital Humanities Tools to Trace the Influence of Eighteenth-Century Missionary Accounts



**Daniel Watkins**

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Gale-ASECS Non-Residential Fellowship

### MEET THE SCHOLAR

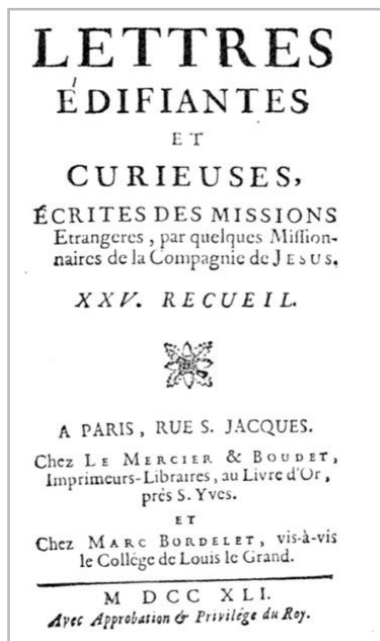
As one of five researchers awarded a fellowship from Gale and the American Society for Eighteenth-Century Studies (ASECS) in 2022, Daniel Watkins used digital humanities tools to enhance his research on the *Lettres Édifiantes et Curieuses* in eighteenth-century Britain. In his research, Watkins hoped 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.

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## 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."

Taxonomy #1: Title	Taxonomy #2: Senders	Taxonomy #3: Recipients	Taxonomy #4: Place Names (Original)	Taxonomy #5: Place Names (English)
Curious	Amiot	Arendts	Agadna	Agadna
Edifying	Arieta	Armendáriz	Alep	Aleppo
Letters	Armendáriz	Aubers	Amerique méridionale	Bengal
	Attiret	Baltus	Anse	Buenos Aires
	Baborrier	Birnet	Arloura	China
	Barbier	Brisson	Aour	Cap Haitien
	Benoist	Broisla	Ariancoupan	Carnataka
	Bouquet	Bruno Morales	Atipakam	Cochin China
	Bourgeois	Cibot	Balassor	Cochinchina
	Bourzes	Cochet de Saint-Vallier	Ballabaram	Conception in Chili
	Bouvet	Coltlogon	Ballapouram	Ethiopia
	Burgés	Colonia	Bassora	Isfahan
	Calmette	Soudé	Bengale	Loango
	Cantova	Orécy	Buenos ayres	Guyana
	Cazier	Croiset	Cai-tum fou	Peru
	Chalier	Daubenton	Camien-naiken-patty	Manilla
	Charseaume	Davaogour	Canlon	Madural
	Chavagnac	Delmas	Cap	Mascarinnes
	Cholenec	Dez	Capinagati	New France
	Chomé	Du Chamberge	Careical	New Orleans
	Cibot	Du Halde	Carnate	New Philippines
	Clain	Du Trévou	Carouvepondi	Quebec
	Coourdoux	Dugad	Cascaskias	Tibet
	Contancin	Fleurau d'Armenonville	Cayenne	Congo
	Crosnard	Fortlancy	Chandienagor	
	Dermecolles	Gernon	Chine	
	Desideri	González	Chinnaballabaram	
	Dlusse	Goville	Cho tcheou	
	Dollières	Grassi	Chruchnabouram	
	Dolu	Hébert	Cochinchine	

Taxonomy of words to identify use of the *LEC*.

## OVERCOMING CHALLENGES WITH DIGITAL SOLUTIONS

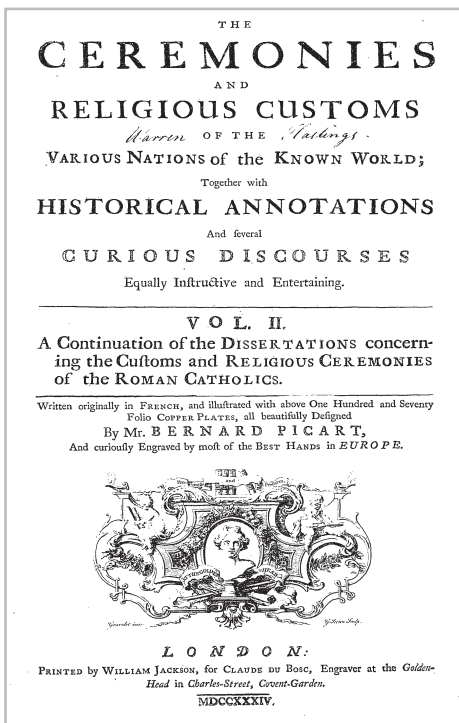
Watkins faced an immediate challenge during the first phase of his research, as the *LEC* was originally published in French. Watkins noted, "Basic keywords from the text would be insufficient for searching an English-language database. So, I devised a method of creating a taxonomy of words that would 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*."



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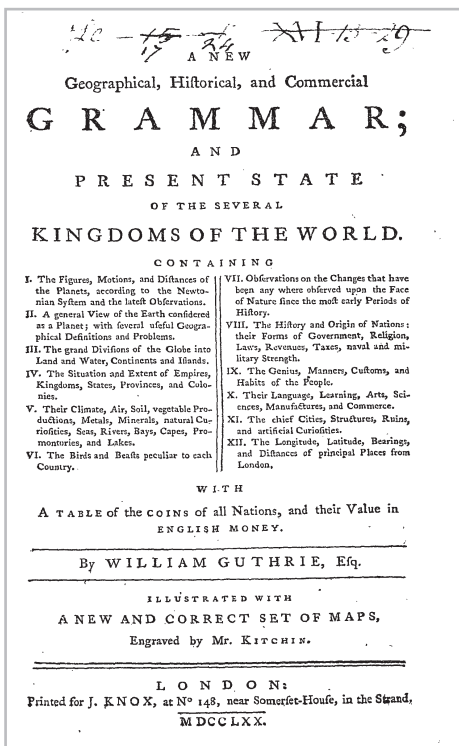


*The Ceremonies and Religious Customs of the Various Nations of the Known World*, vol 2, Bernard Picart, 1733, *ECCO*.

## 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*, William Guthrie, 1770, *ECCO*.

“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.”



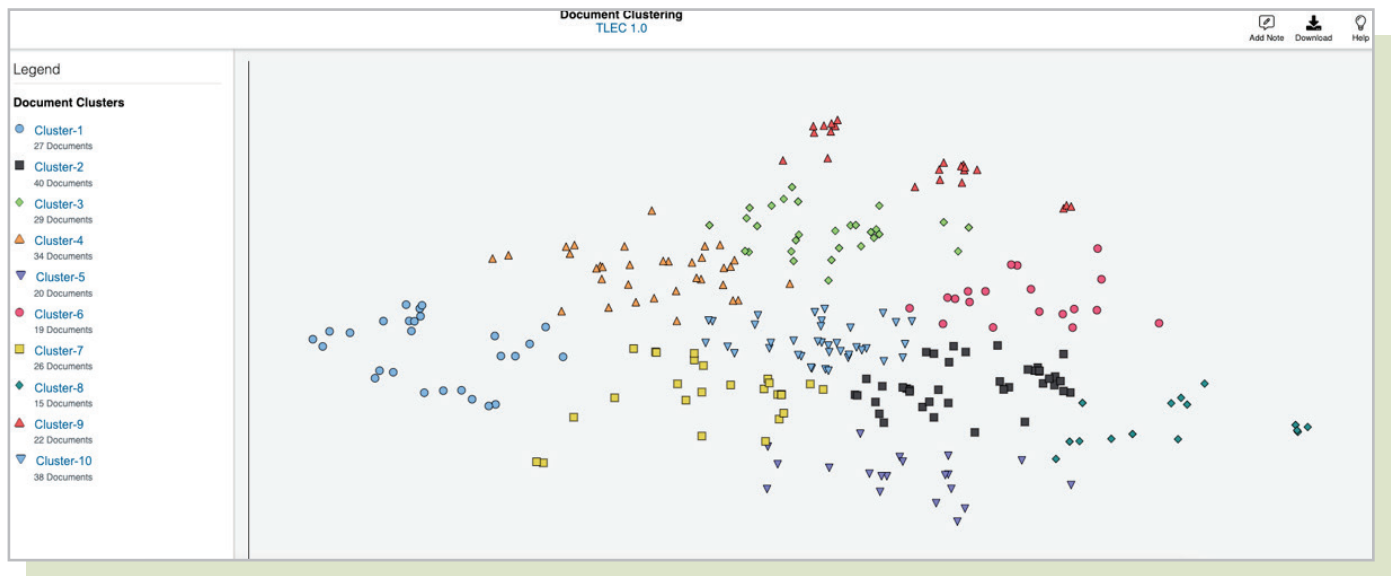
## ANALYZING & VISUALIZING DATA WITH DIGITAL HUMANITIES TOOLS

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.”



Document clustering tool in the *Lab* used by Watkins.

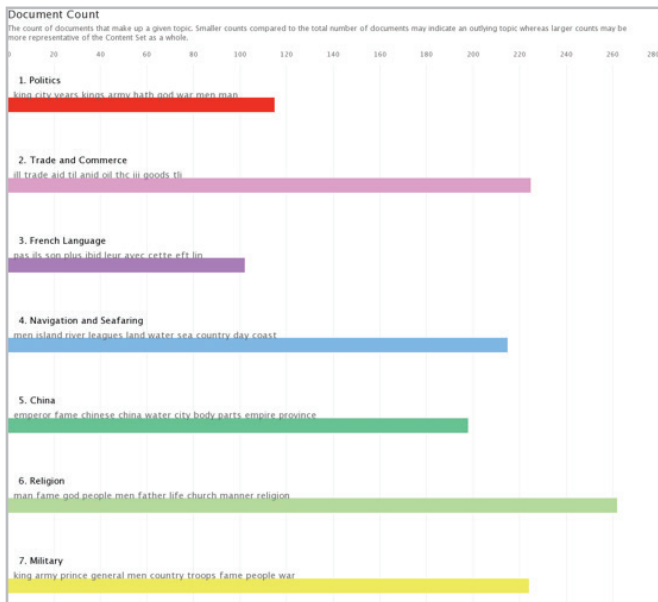
## SEAMLESSLY REVEALING INSIGHTS WITH DOCUMENT CLUSTERING

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.”



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Topic modeling tool in the *Lab* used by Watkins.

## 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.”

“This is just the beginning for me. I have so much more to do to answer my larger question about the impact of missionary letters on European views of the rest of the world. Digital tools will be integral to every stage of my research.”

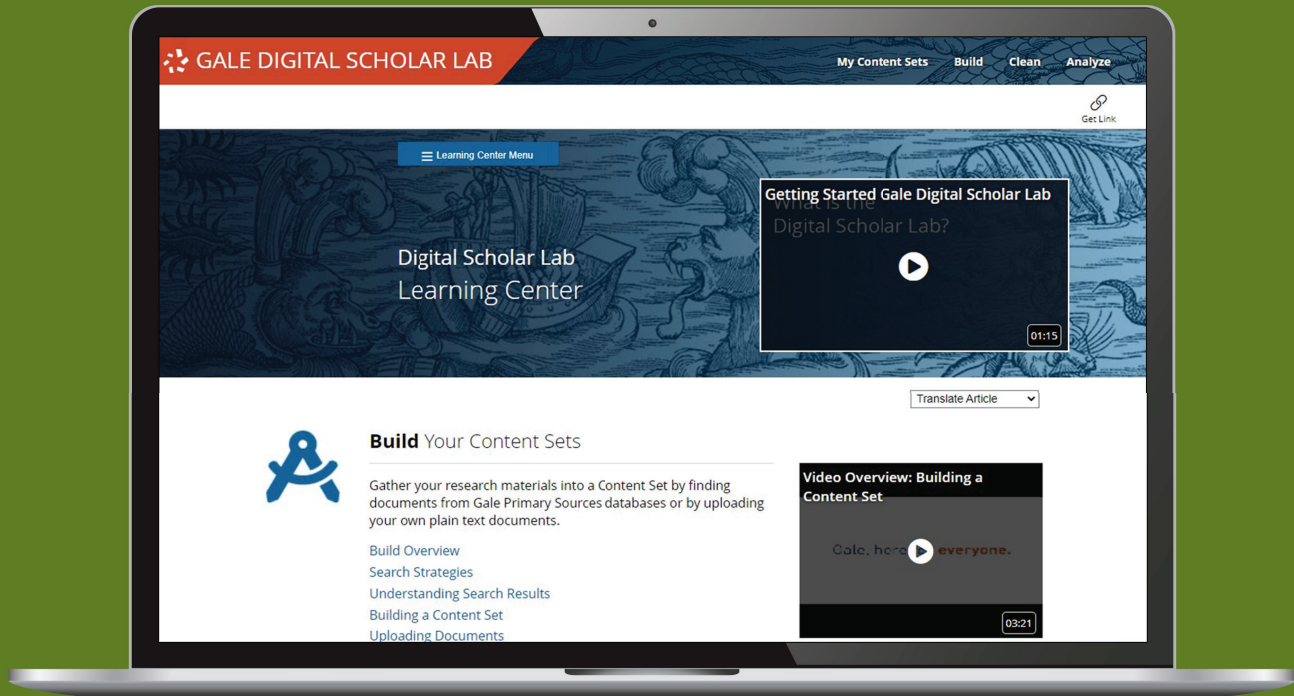
## PROVIDING INSIGHTS INTO THE POTENTIAL OF THE LAB FOR HISTORIANS

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.”

“This was a wonderful opportunity, and I am so very appreciative of Gale and ASECS for supporting my research. Know that I will be thanking everyone at Gale for the help that they gave when I end up publishing the results of my study.”





## 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](https://gale.com/digital-scholar-lab)

Find more information about *Eighteenth Century Collections Online (ECCO)* at [gale.com/ECCO](https://gale.com/ECCO)

## Interested in learning more about ASECS?

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