The International Journal of Information, Diversity, & Inclusion

Contingent Colonialities: Mapping *La Relación de Álvar Núñez Cabeza de Vaca*

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Abstract

This work-in-progress report presents the bilingual mapping project "Decolonizing *The Narrative of Cabeza de Vaca*/Descolonizar *La Relación de Cabeza de Vaca*," an interdisciplinary undergraduate, graduate, and faculty digital humanities collaboration that aims to educate users about the impacts of Spanish colonization and its ramifications on the creation and evolution of latinidades in the Americas by recovering the history of that colonization within Latin America as well as what became the United States; analyzing how and by whom that history has been narrated, and considering what impact those narratives have on society today. Written in Spanish, *La Relación* precedes English-language accounts that describe what is now the United States, thus providing necessary historical context for the centuries-long development of transborder latinidades throughout the hemisphere. At the same time, the fact that *La Relación* was not written in English does not mean the text is not Eurocentric. On the contrary, fully apprehending *La Relación* and its impact requires a decolonial approach that decenters Cabeza de Vaca and his limited perspective. By visualizing this Spanish colonial narrative, this project provides not just a window into what became the pre-Anglophone Southern and Southwestern United States, but also brings into sharp relief the complexities of the overlapping colonialities these lands have experienced, as well as the way the interplay among those colonialities has shaped U.S. Latinx communities and their relationship to hemispheric latinidades.

Keywords: Álvar Núñez Cabeza de Vaca; coloniality; decolonizing methodology; digital humanities; mapping

Publication Type: special section publication (work-in-progress report)

Introduction

This work-in-progress report presents the bilingual mapping project "Decolonizing *The Narrative of Cabeza de Vaca*/Descolonizar *La Relación de Cabeza de Vaca*," an interdisciplinary undergraduate, graduate, and faculty digital humanities collaboration that aims to educate users about the impacts of Spanish colonization and its ramifications on the creation and evolution of latinidades in the Americas by recovering the history of that colonization within what became Latin America and the United States, analyzing how and by whom that history has been narrated, and considering what impact those narratives have on society today.[1]

ISSN 2574-3430, https://jps.library.utoronto.ca/index.php/ijidi
DOI: 10.33137/ijidi.v6i4.38774

In 1542, Álvar Núñez Cabeza de Vaca published a detailed account of his eight-year journey, focusing primarily on his travels between present-day Florida to the borderlands of the U.S. Southwest and northern Mexico. Cabeza de Vaca was part of the failed Pánfilo de Narváez expedition, which began in Spain in 1527 with over 600 people and ended in northern Mexico in 1536 with only four survivors: Cabeza de Vaca, two other Spaniards, and an enslaved Moroccan man they called Estevanico. In the nearly 500 years since the first publication of Cabeza de Vaca's portrayal of their harrowing struggle for survival, his vivid descriptions of the people and places that he and the other survivors encountered have become canonical reading for students and scholars of European colonization of the Americas.

Written in Spanish, *La Relación* precedes English-language accounts that describe what is now the United States, providing necessary historical context for the centuries-long development of transborder latinidades throughout the hemisphere. Though *La Relación* challenges Anglocentric accounts that have invisibilized transborder latinidades, it is still a Eurocentric text told from a Spanish colonial perspective. Fully apprehending *La Relación* and its impact, therefore, requires a decolonial approach that decenters Cabeza de Vaca's perspective. By visualizing this Spanish colonial narrative, this project provides not just a window into what became the pre-Anglophone Southern and Southwestern United States, but also brings into sharp relief the complexities of the overlapping colonialities these lands have experienced, as well as the way the interplay among those colonialities has shaped U.S. Latinx communities and their relationship to hemispheric latinidades.

Once completed, the interactive map of Cabeza de Vaca's narrative will allow users to follow his approximate route and explore thematic filters that contrast his descriptions of peoples and places with historical and contemporary primary and secondary sources that demonstrate the limitations of his colonial perspective. For example, users will be able to compare Cabeza de Vaca's descriptions of the flora and fauna he encounters alongside Indigenous perspectives on the landscape's medicinal, cultural, and culinary value, as well as contemporary data from the U.S. Environmental Protection Agency about environmental degradation in the region. By bringing together multiple perspectives and temporalities, the project foregrounds the short and long-term effects of colonial power relations across the centuries in the Americas.

This work-in-progress report focuses on the first step in the map's creation, which was the process of representing a colonial narrative as spatial data. As Tuck and Yang (2012) emphasize, land is at the center of decolonization, and it is land that Cabeza de Vaca attempts to control through his narration. Of key concern for this project is how to make visible the ways that Cabeza de Vaca's text and the larger colonial project of which it was a part made claims to land and foreground other possibilities beyond the colonial structure. For the project team, this means making clear that the narrative is unreliable both in terms of accuracy (the narrator was lost for most of the text) and motivation (the narrator was incentivized to portray himself and his actions in a positive light). To discuss our process up to this point, in this report we: frame how the project was conceived and how our team came together; define the key terms and theoretical underpinnings that drove our work together; describe the project team's work to collect, clean, and input data into a digital map; and discuss preliminary conclusions and next steps. This digital humanities project builds on the substantial work of scholars in the Spatial Humanities and Historical Geographic Information Systems (GIS) who have explored how GIS technology can deepen our understanding of the spatiality of place. "Decolonizing *The Narrative*/Descolonizar *La Relación*" asks how GIS can be used to destabilize colonial land claims through emphasizing

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
DOI: 10.33137/ijidi.v6i4.38774

the biases inherent within colonial narratives that have nonetheless shaped the way countless centuries of readers continue to see the world.

Why Map Cabeza de Vaca's *Relación*?

The impetus for this project came from the classroom experiences of Anita Huízar-Hernández, who regularly includes Cabeza de Vaca's *Relación* in her courses on the literatures and cultures of the U.S.-Mexico borderlands. As a Chicana from the U.S. Southwest teaching courses in Spanish, Anita Huízar-Hernández includes the text in her courses to demonstrate the ways that Spanish colonial texts have played a central role in otherizing non-European communities and naturalizing European settler colonial land claims on both sides of the contemporary U.S.-Mexico border. Nevertheless, this decolonial analysis was often forestalled because students faced difficulties following the geographic and temporal trajectories of the 16th century narrative. Regarding geography, students struggled to locate Cabeza de Vaca's often vague descriptions within their own mental maps of the contemporary Americas. The edition of the narrative that Huízar- Hernández uses in the classroom, Rolena Adorno and Patrick Charles Pautz's (1999) side-by-side Spanish transcription and English translation, includes rigorously researched footnotes to help orient the reader to Cabeza de Vaca's approximate location. Yet, students had difficulty toggling between the narration, which is itself dense, and the footnotes, leading Huízar-Hernández to wonder how to help students better grasp the text's geography. Regarding the text's temporality, students also struggled to follow the order of events since Cabeza de Vaca does not tell his story chronologically. As an instructor, Huízar-Hernández knew that if she could help students more easily comprehend what the text said, they could shift their attention to the more important work of analyzing both how and why the text said what it did.

What if a digital platform could be built that would not only help support basic comprehension of Cabeza de Vaca's *Relación* but also foreground the colonial context from which the narrative emerged? Huízar-Hernández began to imagine a multi-layered interactive map that would juxtapose Cabeza de Vaca's descriptions of the people and places he encountered alongside the perspectives of those people, as well as how those places have changed in the 500 years since Cabeza de Vaca wrote his *Relación*. The first step would be to gather a team to help comb through the narrative and code the various data points it contained according to type (location, date, and theme). With a faculty seed grant from the Office for Research, Innovation, and Impact at the University of Arizona, Huízar-Hernández gathered a team of undergraduate and graduate student researchers to begin the work.

The authors of this article, which include Alejandra Encinas García as well as the undergraduate and graduate researchers that were part of the project for its entire duration (March–December 2021), were each drawn to the decolonial possibilities of a digital platform that explicitly questioned the authority of Cabeza de Vaca's text and other Spanish colonial documents like it to control the narrative of who belonged in the Americas in general, and the U.S.-Mexico borderlands in particular. After sending out a broad call for applicants and conducting a series of interviews, Huízar-Hernández assembled a team of interdisciplinary researchers, all of whom had cultural or academic ties to the borderlands and were fluent in both English and Spanish. For senior Alejandra Encinas García, who was majoring in Spanish and law and minoring in anthropology, this project was an opportunity to demystify colonial literature and reclaim an alternate history of the Americas in a public-facing, accessible format. Sophomore Carmen Rivero, who was majoring in English literature and political science, echoed the emphasis on accessibility, noting that she was excited to draw upon her own bilingual and cultural heritage

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
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in an academic research project that would be geared toward students and community members like herself. Sophomore Ashley Ávila, who was majoring in Sustainable Built Environment and minoring in Spanish, likewise emphasized her interest in the project's connection to decolonization, land-back movements, and Indigenous sovereignty, as well as the related focus on climate change within the areas described. PhD candidate Angela, who is a historian of Latin America, was drawn to the project not only for its subject but also its collaborative approach. As someone who came to the borderlands from the Midwest, this project offered her a new way to engage with the land she was inhabiting, as well as an opportunity to work alongside and learn from people who had very different relationships to the land and its history.

Toward a Decolonial Digital Humanities

This mapping project fits into existing scholarship which seeks to use digital tools to decolonize physical space, challenging the biases and priorities that are embedded in colonial descriptions and depictions of the Americas. As a project within the field of digital humanities, this effort to decolonize *The Narrative of Cabeza de Vaca*/*La Relación de Cabeza de Vaca* is uniquely poised to confront the biases that shaped the author's descriptions of people, places, plants, and animals in the Americas by using GIS and digital mapping to engage with these colonial processes. In doing so, this project represents an exercise in deep mapping and renders these biases visible, thus decentering the limited Eurocentric perspective in favor of bringing forth the complex systems of life that have existed in these spaces since the 16th century.

Colonization is deeply relevant to the way in which we perceive the U.S.-Mexico borderlands. As noted by historian Raymond B. Craib (2017), it has impacted both the physical space as well as the minds in the way that it inscribed itself onto the land and the people who lived on it. As such, it is also embedded in colonial and post-colonial maps which exhibit continuities drawing on the knowledge and conventions associated with cartographic practices (Craib, 2017; Schulten, 2001). Additionally, Elizabeth Losh and Jacqueline Wernimont (2019), both scholars of the digital humanities, have addressed the ways that spatial arrangements can communicate value and establish barriers, arguing for the necessary incorporation of intersectional feminism—which acknowledges the interactions of various power structures—into practices associated with the digital humanities to facilitate one and combat the other. Through digital humanities and the creation of digital maps, scholars have created a new means to challenge perspectives of the U.S.-Mexico border that neglect these complex realities by creating a means to think about these territories as dynamic, fluid spaces (Álvarez & Fernández Quintanilla, 2022).

In this Cabeza de Vaca mapping project, the authors similarly seek to address these complex systems of power through a decolonial approach. Broadly, decolonial theory seeks to undo the hegemony of European settler colonialism, both recognizing the impacts of colonialism and directly challenging its naturalized ubiquity and concrete consequences. This work necessarily engages with the past, as Martiniquan theorist Frantz Fanon asserts in his seminal text *The Wretched of the Earth* when he writes, "Decolonization, as we know, is a historical process: that is to say it cannot be understood, it cannot become intelligible nor clear to itself except in the exact measure that we can discern the movements which give it historical form and content" (1963, p. 36). As the authors began to work out the process of mapping Cabeza de Vaca's text they kept at the forefront the goal of making discernable the movements Fanon describes.

Monolithic expressions of identity and history built by empire and conveyed through materials like maps especially belie both the complex histories and contemporary realities of lands

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
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characterized by complex social systems shaped by people, plants, and animals that inhabit these spaces.[2] We challenge this by addressing these realities through both clarifying and confronting the Western systems and ideologies present in the lands traversed by Álvar Núñez Cabeza de Vaca. As noted by Margaret Kovach (2021) and Linda Tuhiwai Smith (2021), both scholars of Indigenous education and research methodologies, one way in which we might approach decolonization is through the engagement with Indigenous methodologies that, in part, highlight the importance of recognizing Indigenous epistemologies that emphasize a holistic approach, which includes the recognition of the relationality between self and place (and time and the rest of the non-human-centric world). In the case of this project, we are careful to center Indigenous actors as central protagonists in the "story" of our map and incorporate relevant secondary source materials that engage with Indigenous epistemologies in the study of the borderlands. The digital map's structure foregrounds the significance of Indigenous knowledge of seasonal resource availability and the layout of the land itself, challenging the narrative's biases by highlighting how the expedition appropriated this knowledge to enable their survival. As a result, this shaped the path that Cabeza de Vaca and others would take.

Digital humanities projects such as this also offer a particular opportunity for engaging in decolonial scholarship. Roopika Risam (2018), a scholar of both digital and postcolonial humanities, has emphasized the importance of decolonization within the digital humanities specifically, asserting that therein lies significant potential for the democratization of knowledge. This project, in addition to its engagement in decolonial methodologies and digital cartographies, joins other projects in democratizing access to Cabeza de Vaca's narrative by placing historical and cultural resources online and outside of any paywall, and offering interpretive framing that makes the content more approachable to various audiences. This includes the Wittliff Collections at Texas State University's Cabeza de Vaca digitization project which both made the 1555 edition of his narrative available online, as well as offered additional resources through learning and teaching tools. It also joins Andrés Reséndez's *A Land So Strange* (2007), which offers to readers a vivid retelling of the narrative paired with endnotes informed both by *La Relación* and the *Joint Report*. However, even as we expand access to materials that might otherwise be out of reach for those outside of the academy through making content such as *La Relación de Cabeza de Vaca* more available and approachable, we do so in a way that resists replicating colonial structures of power. To this end, this project also aims to do as Risam describes and engage with the use of new tools and methods to "dismantle the master's house,"[3] even as we reflect on the way in which the field has already contributed to colonial and neo-colonial epistemic violence (Risam, 2018, p. 81).

Finally, "Decolonizing *The Narrative*/Descolonizar *La Relación*" employs the digital humanities method of deep mapping by challenging traditional cartographic approaches which create illusions of authority and objectivity. Deep mapping seeks to do what intersectionality did to decolonize space within the context of the digital humanities by simultaneously engaging with different methods to better understand the complex systems of affect between people and space and to resist reductionism (Harris, 2021). Trevor M. Harris (2021) highlights the way in which deep maps function mostly as a vision of "what could be," rather than a concrete framework (p. 112–113). This belief in the possibilities created by this approach is something echoed by David J. Bodenhamer (2021), who sees the construction of deep maps through GIS as having "the potential…to revolutionize the role of place in the humanities by moving beyond the two-dimensional map to explore dynamic representations and interactive systems that will prompt an experimental, as well as rational, knowledge base," as well as John Corrigan (2021) who addresses the nature of a deep map as an "assemblage" that, when valuable, engages with

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
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different types of knowledge, highlights the fluidity and multilayered nature of territory, and facilities the navigation of that territory (p. 4; pp. 162–163). In order to disrupt the narrative's authority, this project engages different types of media to change the way users interact with the borderlands narrative.

The interactive map invites users to explore multiple perspectives and temporalities through thematic filters focusing on chronology, flora, fauna, the location of Spanish members of the expedition, the Indigenous communities they encounter, and the travel of Estevan (an enslaved Moroccan man who was among the final four survivors). Each of these filters includes quotations from Cabeza de Vaca's narrative and information from additional primary and secondary sources in the form of both text and images that refer to different ways of knowing and relating to the land he describes. Lastly, the process through which this digital map was created involved collaboration between people from diverse academic backgrounds, as well as with varying ties to the borderlands through their own cultural heritage.

Turning a Colonial Narrative into Spatial Data

The "Decolonizing *The Narrative*/Descolonizar *La Relación*" project team gathered together on March 11, 2021 to begin mapping Cabeza de Vaca's text. The initial group consisted of five undergraduate students, one graduate student, and one faculty member. After meeting as a group and discussing our goals for the project, we divided into three pairs, each tasked with analyzing a different aspect of the narrative: thematic filters (mentions of Estevan[4] an enslaved man who traveled with the Spanish expedition, as well as descriptions of flora and fauna), location, and time. Together we read through Adorno and Pautz's (1999) transcription and translation of Cabeza de Vaca's 1542 *Relación* in English and Spanish and met to discuss overall impressions of the text. Many of the key themes that emerged during that initial discussion, from the geographic inexactitude of the descriptions of the landscape to the unreliability and Eurocentrism of the narrative voice, were topics that we returned to repeatedly throughout the process of data collection, which is outlined below. We discussed strategies to deal with these challenges and any areas of confusion during our weekly group meetings.

The forms and spreadsheets used for managing data from the narrative were all centralized within the Open Science Framework (OSF). Each team of two had its own Google form used for collecting data from the text that included fields such as page number, quotation, name of data creator, relevance to assigned aspect of the text (thematic filter, location, or time), and notes. Each Google form then auto populated a Google sheet. Once each pair had completed data collection for the entire text, we then began the process of data cleaning. Pairs compared their responses, deleting duplicates and combining any relevant notes that they made to contextualize the data. To collect and clean the data, each individual team member developed their own process but worked first with their partner and then with the whole team, which is detailed below.

Location

Tagging the narrative with specific locations was a fundamental yet paradoxical task for our team. On the one hand, creating a map necessitated some sort of geospatial specificity, which required us to look to Cabeza de Vaca's descriptions. On the other hand, the entire point of the project was to decenter Cabeza de Vaca's claim to the land, which required us to look past his descriptions to other kinds of information. As such, the team logging location data was constantly

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
DOI: 10.33137/ijidi.v6i4.38774

reflecting on the attitudes and assumptions that undergirded what information to include in their spreadsheets. As Corsa explains,

> Our team was forced to confront right away the extent to which Cabeza de Vaca's own goals for personal enrichment shaped what we knew about the land and those living there. Some of our decision making was practical; we wanted the map to be clear and we also had a finite amount of time and number of team members. So, we needed to establish criteria for what to log and a consistent method of logging that information. This meant that we learned to take careful notes of our thought processes and engaged with each other regularly to share our questions, concerns, and reflections.

As Encinas García affirms, "The mapping of coordinates required building heavily upon each other teammate's work."

An important part of digitizing the narrative map was taking the approximations of a nearly 500-year-old text and concretizing them to the point of selecting GPS coordinates. For Rivero, the best process was to work in sections in which she could track movement across specific regions and then cross-check with other project team members. She writes,

> I would choose to highlight text that demonstrated movement across valleys, rivers, camps, and outright mentions of change in location. This data ranged from movement of one point to another, such as 'We departed from there and arrived at Santiago,' as well as quotations that were not as specific but mentioned a range of movement in the group.

Encinas García also incorporated historical contextual information into her estimations, including:

> the equivalent to a Spanish league, how long can a people walk in a day, as well as the footnotes in the book. Moreover, I made sure to compare my estimations with sources describing the ancestral territories of the Indigenous groups mentioned in the narrative.

Corsa notes,

> I found myself heavily relying on footnote information and the maps included in the book, as well as going back and forth between the text and Google Maps as I considered both the transformation of the landscape and what rough approximations we might make based on the passage of time during a given segment of Cabeza de Vaca's journey. Those of us working on this task discussed how uncomfortable we were with the data demands of the maps; for example, there were plenty of moments where coordinates/points seemed to only be useful to demonstrate westward (or some other directional) movement, with no other claim to accuracy. Confronting this discomfort proved useful in thinking about how we might use technology to work in our favor (such as through the creation of a 'pop-up' disclaimer or the incorporation of shaded regions to indicate general estimations of locations). It also helped us think about future companion teaching materials that we might create to help those engaging with our map to confront both the biases of Cabeza de Vaca, as well as to understand the kinds of 'hidden' decisions that shape the creation of all maps that viewers might otherwise see as representing some kind of 'objective truth.'

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
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Relatedly, we discussed at length how to represent the lacunae within Cabeza de Vaca's knowledge regarding Indigenous communities. Corsa continues,

> We wanted to emphasize the presence and knowledge of Indigenous communities that Cabeza de Vaca encountered during his wanderings. We carefully noted any mention of Indigenous peoples and discussed ways to ensure that they were protagonists in the map, even (and especially) when they weren't in Cabeza de Vaca's own narrative. For example, we noted any stop in the journey where Cabeza de Vaca described seeing constructed settlements, regardless of whether the place had a name that he was aware of, or the constructions seemed 'permanent' to him. While most of these places have no footnote information regarding location, indicating the difficulty of asserting exactly where they were, it was important to account for them. This allowed for another method for decentering the members of the Nárvaez expedition and their associated settlements (both 'temporary' and 'long-standing'), as well as emphasizing the significance of spaces that may not have been described with the same level of detail as others.

Time

Like location, the data related to time in Cabeza de Vaca's narrative is highly unreliable, as someone writing about an eight-year journey could not be expected to recall with any specificity where they were on any given day. As Ávila explains, though "the first few chapters had more outright depictions of the date, once the Spaniards became stranded, any mentions of dates stray from what they likely were and occur less frequently." In the face of such uncertainty, collaboration among team members was once again key, as Encinas García reiterates, "Collecting time data implied coming to a consensus of how we were interpreting time in the narrative." For now, we decided to only represent in the map broad periods such as years and seasons. In the future, however, we also plan to include contrasting ways of marking time that differentiate the Spaniards from the Indigenous communities they encounter. Cabeza de Vaca, for example, tends to mark time through Catholic holidays or days of observation, whereas Indigenous communities in the text often mark time in relation to changes in nature, such as blooming, planting, or harvesting seasons.

Thematic Filters (Flora and Fauna)

Finally, project team members also identified themes as they came up in the text. Rivero worked on flora and fauna, which she found:

> much easier to identify than location, because the content was more straightforward. With location, I wanted to ensure I collected all mentions of movement in case any quote might be relevant to pinpointing another location or providing context on how the individuals moved throughout the area.

Flora and fauna involved less cross referencing, at least at first. However, team members soon realized that it would be helpful to tag the mentions of flora and fauna according to broad categories to make the map more navigable. Encinas García found this to be one of "the most interesting challenges" as "we had many conversations amongst ourselves" regarding how to structure the tags, including how "to distinguish and understand how flora and fauna were involved in cross-cultural trade, in the creation of materials, and for nourishment."

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Mentions of flora and fauna in the text also often involved circumstances "in which Indigenous communities taught the Spaniards how to interact with their new environment." Flora and fauna, then, offered an especially productive entry point into decolonizing the narrative overall through laying bare the Spaniards' deep misunderstanding and misuse of the land, pointing to the hollowness of their claim.

Map

The Tech Core team at the University of Arizona constructed the digital map. Tech Core is a program that allows undergraduate students, working alongside administrative staff and faculty, to apply their learning to the exploration, development, and integration of technology into various projects, giving them paid job experience. The authors were able to work with various team members over the course of this project and two members, Victoria Ogino (project coordinator) and Raphaelle Guinanao (developer), were both consistently and closely involved with the core project team. Together, they worked to convert an existing GIS application that had previously been created to display ancient Greek narratives to an application that worked for our project.

Both Ogino and Guinanao from Tech Core offered their reflections on the experience of taking a preexisting Narrative GIS application and converting it to a more complex and generalized application. In terms of challenges, they both described the complexity of creating the digital infrastructure for a deep map. They noted the difficulty of creating a tagging system that could express a greater variety of relationships between data. Said Guinanao,

> Initially, tags had a single broad implementation where events would be connected through shared tags. Now there can be two different kinds of tags: filters and routes, which display events and tagged relationships very differently. Either one of these tags can also be nested, which adds another layer of complexity and degree of detail to the display.

Her perspective working on the code behind the map seemed to echo the project team's own challenges as they sought to convert Cabeza de Vaca's imaginary cartography into a visual representation that could still convey information about both time and space.

Preliminary Conclusions and Next Steps

As this works-in-progress report has indicated, much work remains to be done to continue the project of representing Cabeza de Vaca's narrative from a decolonial perspective. In addition to further research, team members have considered the possibility of migrating to a different platform that would allow for greater flexibility to include other kinds of information. An application such as ArcGIS, for example, could afford the deep mapping the project team has envisioned, allowing for multiple layers of contrasting perspectives. Conversely, team members have also considered how to engage the principles of minimal computing, specifically non-proprietary applications, to ensure greater participation in the project beyond university students and professors.

Though it is beyond the purview of this report, another takeaway from the project up to this point has been the benefits of bringing together undergraduate, graduate, and faculty researchers across disciplines in a deeply collaborative Humanistic research setting. The PI and

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the graduate student researcher, who come from the disciplines of literary criticism and history respectively, both expressed excitement about the undergraduate researchers' enthusiasm towards closely analyzing a 16th century text. From the undergraduate researchers' remarks, much of that excitement stemmed from the opportunity to work collaboratively in an interdisciplinary setting. Ávila noted,

> While my main academic interests lie in urban planning, I wanted to work with Spanish language texts, not to mention there was a strong connection to place-making and maps in this project… Working with the rest of the team, we were all able to contribute our own perspectives, be they literary, historical, linguistic, or technologically focused.

Encinas García added,

> Having the opportunity to work with an interdisciplinary team allowed me to understand and adopt new ways of thinking. The task of taking a colonial text and adapting it to modern technology was laborious, yet I believe that the diversity of our team helped us adapt through creative thinking and solutions, and by the encouragement to be critical towards the data sources we had.

Rivero concluded,

> Although I had very limited experience with data cleaning or input, I felt I could greatly contribute to the literary and linguistic portion of the project. This was one of the best aspects of the project itself. Despite everyone's different academic backgrounds and interests, the project required everyone's prior knowledge to evolve and succeed the way it did.

All involved said this project was one of the most transformative experiences of their educational careers.

Endnotes

[1] This article is co-authored by the PI, graduate student, and undergraduate students who were part of the project for its entire duration. Additional undergraduate students who worked on this project at various points include: Zcheecid Aguirre, Nayleth Ramírez Duarte, Joelle Pantea, and Henry Harms. The platform used for the project was created by Tech Core, a collective of student developers housed in the University of Arizona College of Management. The two main contacts within Tech Core for this project were Victoria Ogino (project coordinator) and Raphaelle Guinanao (developer). The funding source for this project was the University of Arizona Office of Research, Innovation & Impact.

[2] One already existing example of projects centered around the U.S.-Mexico borderlands which addresses the decolonization of space through the digital humanities includes the *Borderlands Archives Cartography* (www.bacartography.org), an archival project which uses a digital map to display "a US-Mexico border newspaper cartography" (Álvarez & Fernández, 2022a) locating 19th

ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
DOI: 10.33137/ijidi.v6i4.38774

and 20th-century periodicals. Another example, *United Fronteras* (https://unitedfronteras.github.io/), is a larger digital project seeking to feature a variety of digital humanities projects to document the borderlands from diverse disciplinary and temporal perspectives, as well as works originating from universities, communities, and individual collaborations.

[3] See also: Lorde, A. (2018). *The master's tools will never dismantle the master's house*. Penguin Classics.

[4] Although the *relación* refers to Estevan as Estevanico, on our site, we use Estevan to reject the power dynamics implied by the use of the diminutive -ico.

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ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
DOI: 10.33137/ijidi.v6i4.38774

such an incredible group of women in academia and for the opportunity to have collaborated on the project as a whole. She would also like to thank Dr. Huízar-Hernández for her continuous leadership and guidance throughout the project.

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ISSN 2574-3430, jps.library.utoronto.ca/index.php/ijidi/index
DOI: 10.33137/ijidi.v6i4.38774