

Gapping the Map: Indigenous Presence in Native Land Digital

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Abstract

Native Land Digital, an Indigenous-led mapping project, exemplifies the growth and impact of mapping as a tool for data visualization. Its unique focus on absence, rather than presence, offers opportunities for interactive humanities scholarship. Native Land Digital (2014–) was founded by Victor Temprano and its Executive Director is Tanya Ruka (Māori): <https://native-land.ca>

Introduction

Native Land Digital (NLD) is a Canadian Indigenous-led non-profit organization. Their digital interactive project continuously reminds us of the question that lies at its heart: *Whose land are we on?* By mapping Indigenous territories, peoples, languages, and treaties, NLD actively challenges dominant colonial narratives of land ownership that have historically subjugated conventional understandings of geographic history. By critically analyzing NLD's approach, methodology, and audience, this review demonstrates how the project redefines digital mapping as a medium for Indigenous self-representation, while also highlighting the strengths and shortcomings that arise within both public and scholarly conversation on digital mapping projects.

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The NLD project situates itself at the intersection of Indigenous studies, postcolonial theory and spatial humanities. It thereby operates in a growing global movement of mapping Indigenous lands digitally. NLD exists alongside a plethora of similar projects that emerged in the context of digital mapping such as the Indigenous Mapping Collective, First Nations Location, and Native Land Information System, just to name a few. The non-profit collective *Rest of World* coined the mapping of Indigenous land a “race to put themselves on the map” [Mk 2023]. Since the emergence of Digital Humanities as “a discipline in its own right” in the early 2000s, mapping has grown to be one of its most impactful tools for data visualization. Maps orient the viewer, situate the project's aim in a large, cultural context, and visually organize large data sets [Luhmann and Burghardt 2021, 149] [Allen and Queen 2015, 86–87]. The act of mapping serves as a “representation of a world” [Presner et al. 2014, 15]. Additionally, recent scholarly conversations on critical digital mapping emphasize its importance for community power and representation as Moore and Garzón argue: “Map-making can be a useful tool in scaling up from the individual lived experience to building a shared analysis about collective challenges” [Moore and Garzón 2010, 67]. Mapping is not a new phenomenon, it has held a central role in the production of geographical data for centuries [Presner et al. 2014, 16] [Moore and Garzón 2010, 66]. Consequently, mapping in an age of digital humanities represents an evolution of traditional cartography, offering new and critical opportunities of methods, media, data curation, and community representation [Presner et al. 2014, 20]. The “boom” that mapping projects in digital humanities have experienced therefore does not come as a surprise. What, then, distinguishes NLD from other Indigenous digital mapping projects? Within the bounds of this review, I answer: What makes NLD unique lies in what is absent, not present.

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Versatility

As stated in the introduction, NLD falls under the category of Indigenous studies, postcolonial theory and spatial humanities. Its interactive map serves as an extension of quantitative history and derives its methodology from history and archaeology in the humanities, visualized by digital tools such as mapping, hypermedia links, and data visualization. Additionally, printable lists of territories, languages, and treaties serve as a textual database. The project is fairly intuitive to navigate. A search bar enables users to explore specific regions and the selecting as well as un-selecting of languages, territories and/or treaties allows for a more tailored investigation of these categories. Once selected, hyperlinks navigate the user to external pages about the nations and histories of an area. Additionally, the project offers the possibility to export the page's data to printable image files. The landing page of NLD, however, can at times appear dense and visually complex. The color coding of different Indigenous nations overlaps on the map, which creates a blur of names, colors, and borders. From an analytical point of view, one could argue that this feature highlights the multifaceted and rich history of countries we deem as monocultural. In terms of accessibility, however, the pastel-colors can be difficult to navigate and differentiate, especially for colorblind users. It is possible to turn off the color section altogether, which, however, defies the purpose of the overlappings of the map. As NLD has been an ongoing project for a decade now, these visual tools have expanded over time. NLD was founded by Victor Temprano in 2014 [Temprano 2022b]. What started out as a hobby project quickly grew into a large-scale non-profit organization. Today, the digital interactive map alone is not what constitutes NLD as a digital humanities project. In recent years, mobile apps containing the interactive map (for both iOS and Android) were launched with the option to drop pins and save certain regions. Additionally, a community blog was created on Medium.com, which invites collaborators to dive into and contribute to the history of selected nations and Indigenous people [Native Land 2024a].

Since it was founded in 2014, NLD has not only grown in size, but also in community. Temprano stepped down as the executive director in 2022 and was replaced by Māori designer Tanya Ruka. NLD now additionally consists of an Indigenous board of directors and an advisory council of both Indigenous and non-Indigenous members [Native Land 2024b]. At the heart of the project are the numerous volunteers who contribute to fill in the gaps of Indigenous nations on the map and whose contributions are monitored and fact-checked by NLD staff.

The vast data sets compiled by staff, volunteers, and research projects at several universities in Canada are analyzed and visualized by several digital tools. Until 2022, NLD pushed to and pulled from the Mapbox dataset into a custom-made WordPress plugin [Temprano 2022a]. As of 2022, all data is stored in a SQL (structured query language) database and then built to Mapbox with Temprano's own Mapster Technology as its backend. In essence, Mapbox is a tool that allows the sharing and uploading of maps from different sources, while the SQL database allows for a more efficient and easier visualization of the data. A centralized database ensures a clearer scope of data analysis and visualization, which in turn ensures a more coherent user experience of the interactive map.

Absences

Given the theoretical framework of the project, it is essential for this review to explore the interactive map in action. The map is organized in a globe-structure that can be moved to and from every angle, deconstructing the euro-centric view on traditional world maps. Before accessing the map, the audience is presented with a Native Land and Territorial Acknowledgement and the goal of the project to "[honor] Indigenous resilience past, present and future" [Native Land 2024a]. What catches the eye first is the presence of absence. While major parts of today's North, Middle, and South America as well as Australia and New-Zealand are completely filled out with the color-coded names of Indigenous nations that at times even overlap, the majority of Europe and Africa remains blank. It would be presumptuous to assume that a project concerned with Indigenous land actively neglects a continent so rich in Indigenous nations as Africa. A look at the NLD staff and contributors gives a possible explanation to why certain continents are filled out completely while others are left blank: The team consists of Māori (New Zealand), Kichwa Nation (Ecuador), Payómkawichum (California, United States), Métis (Winnipeg, Canada), Anishinaabekwe (Minneapolis, United States), Bikol/Tagalog (Philippines), Tsawout First Nation (Vancouver, Canada), and Gitxaala (British Columbia, Canada). That might serve as an explanation and tentative confirmation that the project aims to establish a well-grounded framework of knowledge before mapping out Indigenous territories, letting Indigenous peoples "map" themselves. Thus, what may initially be perceived as a shortfall in representation, is, in fact, a bold decision to let absence speak for itself – to not impose border and territory definitions on behalf of other Indigenous nations. Its gaps serve as a painful reminder that

history's reclamation is ongoing.

Additionally, ethical implications of digital humanities projects are concerned with data sovereignty. Scholars who review the notion of data sovereignty, such as [Baezner and Robin 2018] and [Hummel et al. 2021, 10], underline that data flows are linked to control and power of its storage and usage. For Indigenous data sovereignty, specifically, open data sources represent a “site of tension”. While open data provides opportunities to sustainably develop and visualize Indigenous representation, it also bears the danger of reproducing colonialist power dynamics, biases, and diminishing Indigenous agency over their own data [Rainie et al. 2019, 300]. A failure to respect data sovereignty can harm Indigenous nations more than benefitting them: “By failing to respect Indigenous data sovereignty and engaging in extractive data practices, companies risk perpetuating the same harms and injustices inflicted upon Indigenous communities” [Vishal 2024, 3]. In this light, NLD provides an important contribution to Indigenous sovereignty by “gapping” the globe instead of mapping it.

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Community

The collaborations of NLD are manifold. Besides the numerous volunteers, who are encouraged to submit evidence of Indigenous territories, languages, or treaties, NLD partners with organizations such as Digital Democracy and Historica Canada. Notably, the project closely collaborates with other digital humanities projects such as Whose Land and Tribal Nations Maps [Whose Land 2024] [Native Land 2024b]. Those databases of digital humanities mapping projects are shared among them, making Indigenous mapping a cross-global community project with different foci. Whose Land fosters an educational-based approach by providing teaching material and videos. Similarly, NLD established a teacher's guide in 2015, and an updated version in 2019 [Native Land 2024c]. In addition, the project seeks a broader audience. Through volunteer work, media representation, and the launch of their app version, NLD presumably wants to engage people on a daily basis and emphasizes the land acknowledgement in everyday life, not merely in educational settings. Furthermore, NLD cooperates with several higher education institutions in Canada and the United States, such as the College of the North, University of Alberta, University of Saskatchewan, Florida State University, and UC Riverside [Native Land 2024a]. In this scope, NLD conducts research with both undergraduate and graduate students to build their database. That suggests a more scholarly collaboration focus rather than an educational approach, even though NLD can without doubt be used as a teaching tool in a middle or high school classroom due to its intuitive usage.

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The NLD project engages a variety of users; Indigenous newscasts such as CBC News praise NLD for their work and careful research, and *HuffPost* brought the project to a broader audience's attention in 2019 [Meloney 2018] [Lewis 2019]. *The Guardian* and Boston's news station WBUR cite the project alongside coverage of a critical approach to Thanksgiving celebrations [Sinclair 2024] [Mosely and Hagan 2020]. In recent years, however, engagement from and with NLD has grown quieter. The last update of the project's “Roadmap” of their project was in April 2021 — the last community blogpost in April 2023 before a restart in April 2025. It is not too far-fetched to assume that an underlying reason for the project's halt is its funding. As NLD is dependent on funding from institutions such as the Kalliopeia Foundation and Vancity Credit Union [Native Land 2024a], it also raises the question of how sustainable such a complex mapping project (that is largely reliant on voluntary work) can be. Another shortcoming of the project is its reliability of data collection. How accurate can data be if it is crowd-sourced globally with relatively little staff to fact-check?

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Given the NLD's reliance on both institutional funding and volunteer contributions, concerns emerge not only about the source, but also about the storage of its data. Although the project has moved to one SQL database and away from scattered data sets in 2022, the aggregation of data from such a plethora of sources carries significant risks of inaccuracy. A strength of the map, however, is the fact that it is possible to look up when which alterations were made to the map. Its continuous changes assert that NLD continues to evolve through global volunteer work and activism despite an apparent outward halt.

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The ability to track such evolving changes on the map provides insight into global cultural, historical, and political processes. Its evolving representation invites humanities scholars to examine how we can use digital tools to assess

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narratives of land ownership and identity formation. For American Studies scholars, the NLD project offers a valuable perspective on the intersection of mapping, representation, and sovereignty. As Dunst examines in his essay on digital American Studies, our disciplinary field can only benefit from what digital humanities projects have to offer, mainly “establishing access and providing orientation, organizing communities online, and enlarging discussions in digital and analog spaces” [Dunst 2016, 386]. Digital humanities projects are not without flaws, and the NLD project is no exception. Yet, digital humanities projects in general, and NLD in particular, serve as a reminder of what American Studies can be capable of achieving with a large-scale organization and visualization of quantitative and qualitative data. As scholars, it is essential to continuously reflect on the audience we aim to engage and, consequently, the methodologies we must employ to reach them. In light of Indigenous data sovereignty, such reflection also entails the decision to “gap” the map and let absence speak for itself.

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