

***Voyce Sabrina
Durling-Jones***

***Words Not
Spoken: Digital
humanities and
the Future of
Endangered
Language***

ADAMarts

Volume 2, 2020•21
Audiovisual Media Arts

Received: 01.03.2021
Accepted: 01.05.2021

Abstract

This article explores how digital humanities can enhance the process of documenting and revitalizing endangered Indigenous languages. To better understand why so many Indigenous languages are in decline, a brief overview of colonial assimilation practices is presented. Moving from the past into the present, this text briefly surveys how immersion methods on Indigenous-developed IT platforms use interactive media to promote language learning. Reflecting on personal experience and professional practice teaching documentary film methods in Indigenous communities, this text focuses on the importance of creating maker spaces and promoting a culture of experimentation and collaboration when communities begin using technology to document and revive their languages. The assertion is also made that ongoing efforts to expand digital humanities practices at the local level and in the local language are central to language revitalization and decolonization.

Keywords

digital humanities, endangered language, decolonization, language revitalization, language documentation, interactive media, new language immersion, Makerspace, experimentation

...

“You who read me, are You sure of understanding my language?”

Jorge Luis Borges

Introduction

This article discusses how digital humanities tools can be utilized to enhance user experience and the efficacy of training exercises when teaching language and culture documentary methods. The first part of the text presents a brief explanation of why languages become endangered and the distinct types of language loss. The section that follows discusses the changing definition of digital humanities, as well as historical implications of Indigenous language archives and future possibilities for Indigenous archival ownership and management. The third section of the text focuses on makerspaces and the need for collaboration and experimentation when learning filmmaking for language and culture documentation purposes. Finally, the article contemplates ongoing efforts to expand digital humanities practices at the local level, as well as the need to advance ethnoprogramming efforts so members of Indigenous communities can access the same technology as everyone else, without having to sacrifice their cultural autonomy.

My contribution to this discussion of endangered language revitalization is from the perspective of a filmmaker. Insights gathered for this article are the result of leading a series of filmmaking workshops on the Saddle Lake Cree First Nation in northern Alberta (Canada) in 2010. The idea behind the workshops was to help Saddle Lake members tell their own stories through film and to encourage collaboration as a community building tool. Because filmmaking is inherently collaborative, the idea made sense. During the period I spent in Saddle Lake, I was able to guide workshop participants through basic narrative and documentary filmmaking processes and

through the creation of two short films, authored completely by the workshop participants.

A decade after my work in Saddle Lake, I was again invited to a remote community in British Columbia to teach students and staff at the Skatin Community School (SCS), to use film to document and preserve their endangered language, Ucwalmícwts. The administrator and principal of the school, Roberta Whiskeyjack, is an educator and innovator who has understood for some time that First Nations communities need to have the resources and the ability to control their own narratives, instead of relying on someone else doing it for them. She hoped that teaching members of her community to use video to record fluent speakers of Ucwalmícwts would empower the Skatin First Nation to begin the difficult work of language revitalization.

I travelled to Skatin in the spring of 2018, and again in the late fall of 2019, to train SCS staff and students. I originally taught ten SCS students and five staff members filmmaking fundamentals, techniques for clear voice and video recording and how to operate the cameras and audio recorders owned by the community. We also designed a workflow SCS staff found intuitive so they could efficiently download media from recording devices to hard drives, catalogue recently filmed video and audio files and begin editing what had been recorded.

The Skatin First Nation is comprised of 450 band members, of whom roughly 150 live on-site, on traditional lands. The remaining 300 members live elsewhere across Canada. There are only three remaining members of Skatin First Nation who are fluent speakers of Ucwalmícwts, all of whom are elders. Since October of 2019, when I last left SCS, a large part of the community, both on and off the Skatin reserve, has become engaged with the language revitalization process. One of the remaining fluent speakers, who is easily accessible



Figure 1. Saddle Lake First Nation film training (Riga: Voyce Sabrina Durling-Jones, 2010)

Figure 2. Skatin First Nation language and culture class, SCS (Riga: Voyce Sabrina Durling-Jones, 2018)



to the school, works regularly with the SCS language team and students. The group gathers to film language lessons and document vocabulary, usage, and pronunciation tutorials, as well as record traditional stories and instructions for cultural practices.

Using video documentation, in conjunction with digital humanities tools, is helping the community create language learning applications that are accessible to most of its members, both on and off-site. With the help of video conferencing platforms like *Zoom*, the community has also begun virtual language classes online twice a week, reuniting families and friends, virtually and in-person, around the common goal of reclaiming their identities by either re-learning their language, or learning to speak it for the first time. These practices are restoring a shared sense of value for the Ucwalmícwts language among its users, despite generations-long assimilation practices by the Canadian government that were meant to do the opposite.

Assimilation

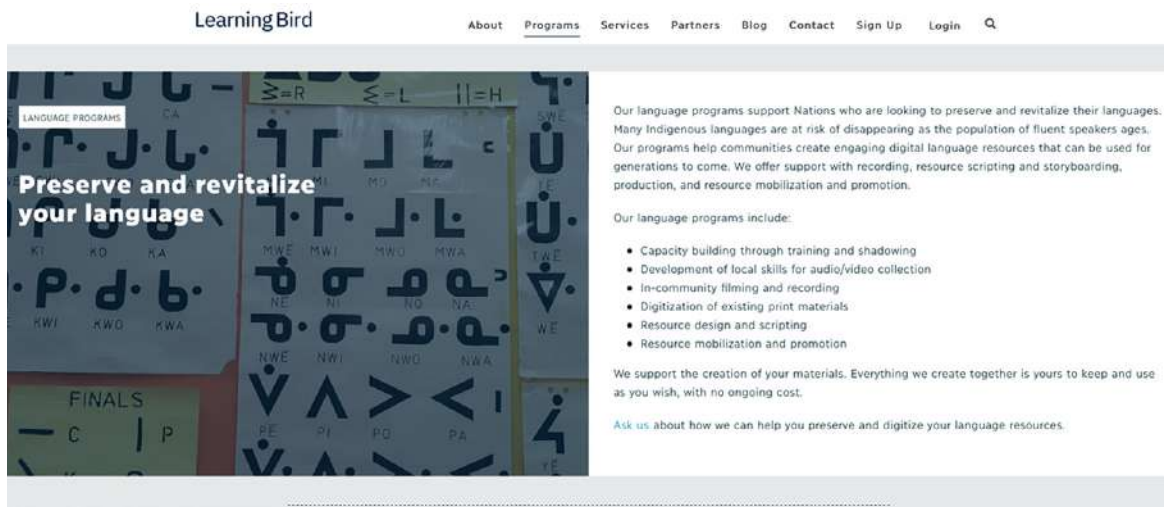
When anthropologist Franz Boas travelled to the Pacific Northwest (not far from Skatin, actually) to study Native American cultures at the end of the nineteenth century, one of the first difficulties he confronted was language. Boas understood that having some knowledge of Indigenous languages was important to the process of studying them. He believed “a command of the language is an indispensable means of obtaining accurate and thorough knowledge, because much information can be gained by listening to conversations of the natives and by taking part in their daily life, which to the observer who has no command of the language, will remain entirely inaccessible” (Boas 2013:60). While he never mastered the languages in the Native American communities he studied, he did compile volumes of orthographies, dictated to him by heritage speakers. His goal was to create

written records of dying languages so they would not disappear forever.

While Boas’ goal was valiant, it does beg the question of why? Why are there dying languages that may disappear forever? The reasons can be assembled from a list of humanity’s most tragic realities. Languages die because of genocide or mass human loss; they slowly fade away when they are abandoned to use dominant languages like English, French or Spanish, usually for economic reasons; languages disappear when one culture exerts its power over another for centuries; and they cease being spoken and taught to children by their elders when Indigenous people are systematically stripped of their identities to be assimilated into colonial cultures.

Most endangered languages in the Americas fall into the last category, achieving their endangered status through assimilation. Between 1860 and 1950, Indigenous children were forcibly removed from their homes and sent to state boarding schools, where they were not allowed to speak their languages or observe their traditions and were obligated to adopt the language, religion, and cultural practices of the colonizers. (Smith, 2009). These acculturation efforts resulted in the dissolution of traditional family bonds, lifelong trauma for children and lifelong guilt for their parents, as well as the gradual discontinuation of language use in their native communities (Starblanket, 2018).

Boarding schools taught Indigenous children that their languages and cultures were of no value and that they should feel shame because they were native and not White (Starblanket, 2018). They were taught to adapt to White cultural norms so they would be accepted by society and have what the colonizers considered productive futures. As a result, many children would return home with no memory of their heritage language, or refusing to speak it, and parents began learning the dominant



language to communicate with their children and to be able to operate within the larger society.

After several generations of gradually shifting the language of daily life from heritage dialects to dominant, many Indigenous languages in the Americas and across the planet, have become endangered, or “moribund”, meaning no children in the new generations are learning the mother tongue as their first language. Others have become “sleeping languages” because they are written down but remain archived until someone from the current or a future generation decides to learn the language (Krauss 1992:6).

Digital Humanities and the New Archives

Digital humanities (DH) have had a close relationship with language and literature since its inception in 1946, when Roberto Busa attempted to encode all of Thomas Aquinas’ writings on IBM punch cards (Sula and Hill, 2019). Busa’s original definition of humanities computing, now referred to as digital humanities, is reiterated in the foreword he penned for Blackwell’s *A Companion to Digital Humanities*:

Figure 4. Learning Bird helps Indigenous communities incorporate language and culture learning in their classrooms (Riga: Joyce Sabrina Durling-Jones, 2021)

“Humanities computing is precisely the automation of every possible analysis of human expression (therefore, it is exquisitely a ‘humanistic’ activity), in the widest sense of the word, from music to the theater, from design and painting to phonetics, but whose nucleus remains the discourse of written texts”

Susan Schreibman,
Ray Siemens & John Unsworth (2004:i)

Like the technology used by Busa to encode Aquinas’ writings on punch cards, the definition of digital humanities has changed and is in a constant state of evolution, but the relationship between the two has become increasingly intertwined. Today, most scholars would agree that at the very least, digital humanities are an interdisciplinary, lively, and continuously advancing area of investigation that provides a platform for exploring humanities using digital technologies and approaches.

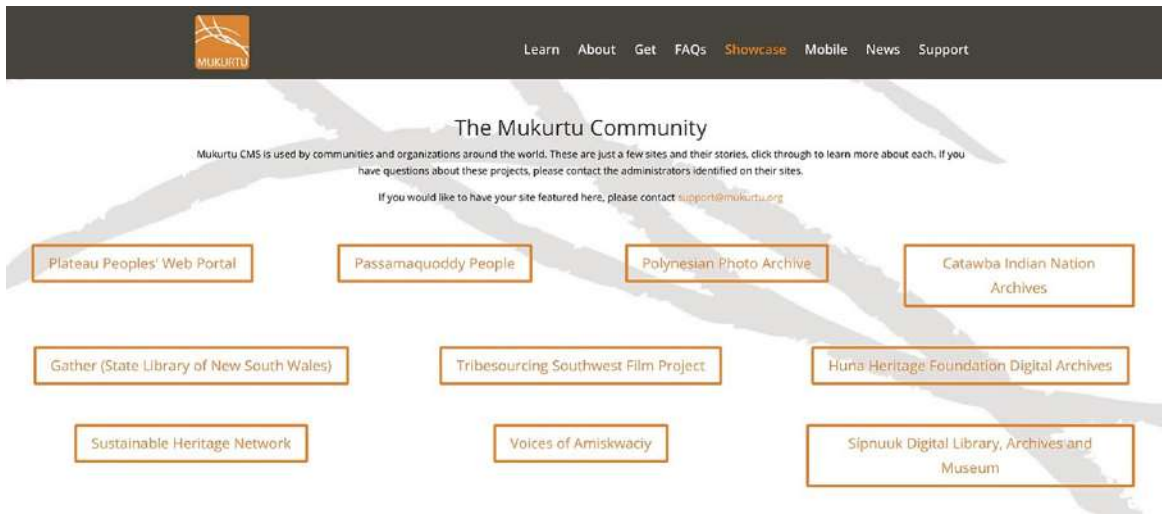


Figure 5. the Mukurtu open-source platform is built by Indigenous communities to preserve and share their cultural heritage (Riga: Voyce Sabrina Durling-Jones, 2021)

Twenty-five years ago, long before I began teaching filmmaking to help with language revitalization, accessing archives of documented endangered languages would have been a daunting task that took a lot of time and relied heavily on the ability to visit the various institutions where archives were held, or the patience to wait for copies of documents to arrive in the mail. Knowing these archives existed and what they contained, or how to access them, was even further removed from many isolated Indigenous communities. While anthropologists like Franz Boas had taken extensive orthographies of languages in case they ceased to be spoken, those records did not stay in the communities from which they were derived. Who was accessing them or using them? Were they used at all outside of academia or by their communities of origin? If a language has been “sleeping” and the community does not know there is a written record of it stored somewhere, then they have been deprived of the opportunity to

revive it.

Viewing archival materials and researching the existence of documented endangered languages is much easier now that most records are digitized, or in the process of digitization, and available to access online. As a result, opportunities to repatriate records of documented languages to their cultures of origin are increasingly conceivable. For instance, searching *Google* for “images of Franz Boas’ field notes” yields scanned pages of his handwritten records (circa 1897) of the Kwakiutl language on the *Smithsonian Institution* website that can be easily downloaded by anyone with a computer and internet access. Referencing Smithsonian archives, or the archives of any institution holding Indigenous records, is a complicated subject involving provenance and data sovereignty. Ownership of historical cultural archives is a complicated issue that will not be discussed here, but it is important to acknowledge the possibilities current DH tools can offer Indigenous cultures regarding data sovereignty and the ability to maintain control of their own cultural intellectual property, as well as manage how it is used.

Online data storage is easily accessible wherever there is connectivity and has made it possible for communities to imagine what was once considered a daunting task: building and maintaining their own cultural historical archives, without having to worry about how and where they will safely store items. The advent of online database platforms like *Mukurtu*, *First Voices* and *Learning Bird* has allowed communities, including Skatin, to use web-based tools to archive digital files of important language material (including audio and video files) and provide community-wide access to those records and learning resources, while also affording them the option to decide whether they would like to place them in the public domain, or keep them password protected with access granted only to community members. The ability to protect cultural heritage production and intellectual property and to make decisions regarding how these items are accessed, and by whom, has become fundamental to Indigenous self-determination.

A Makerspace for Language Documentation

One of the more versatile DH tools used to work on language revitalization in Skatin is the concept of a makerspace. Makerspaces have been used widely for the past decade in libraries and classrooms to support hands-on learning and problem-solving skills. The term makerspace has a wide range of connotations, but the interpretation in this case has been to create a supportive and creative learning environment where moving images, shot sequences and structured stories are filmed and edited. Furthermore, Skatin Community School promotes a culture of experimentation where there are no failures – just chances to learn from what did not work while using film to document language.

When I taught narrative and documentary filmmaking in Saddle Lake in 2010, I treated the process as a truncated film school experience

for participants. Looking back, I understand that the approach was too rigid and did not allow for the level of experimentation that it should have. Learning to use film as a tool and edit what you film is a process that can at first be intimidating. If coupled with the pressure of trying to record as much of a language from elders as possible, while possible, it can get even more overwhelming. Documenting and revitalizing language is a marathon and not a sprint, so the process in Skatin was designed differently.

When planning the training sessions, we did our best to make learning interactive, engaging and not too serious. The staff at SCS all work very hard and wear many different hats throughout the school day, so it was especially important to create a space that was fun and where they would not feel burnt out from the added responsibility of learning filmmaking. Experimentation was continuously encouraged because there is no one way to document and revitalize a language. We would produce ideas and try them out. Sometimes they would work, and sometimes they would not, and that was okay. The important thing is that SCS has been able to keep everyone who was trained in filmmaking engaged in the process.

Decolonization, Ethnoprogramming and New Language Immersion

Addressing decolonization is a crucial step in revitalizing language because it focuses on undoing colonial power structures that promoted assimilation and cultural loss in the first place. Decolonization is unlearning the idea that Western thought and cultures are superior to those of the colonized. It requires that societies disassemble the established norms that promoted superiority of the colonial establishment over the colonized, while simultaneously placing value on and restoring importance to Indigenous knowledge. It is a process of dismantling prejudices and stereotypes and creating new frames of reference

by building relationships with Indigenous communities (Walia and Dilts, 2018).

Decolonization is a gradual process already underway, whether or not we are aware. However, there is one sector where considering the Indigenous perspective is imperative: computer programming. According to the *World Bank*, there are between 379 and 500 million Indigenous people worldwide. U.N. research indicates these communities comprise 5% of the global population and speak nearly 4,000 different languages, yet computer programming was never designed to accommodate the special characters and punctuation most Indigenous languages use. In fact, use of computer programming languages and keyboard formats are nearly exclusive to the world's dominant languages. In Skatin, a slowdown in progressing classroom Ucwalmícwts language learning and immersive language practices has been due, in part, to difficulties the community has had securing a keyboard blueprint for their language.

Introducing ethnoprogramming, or programming that increases cultural awareness among developers, has growing importance as our reliance on technology increases. If Indigenous people decide to adopt Western culture because it has superior technology, then that will inevitably lead to further cultural assimilation:

“Every program that is made from an ethnical point of view is ethnoprogramming and a part of a cultural heritage. At the moment computer science is causing problems in all the languages and cultures that are not based on the western way of thinking and writing. We are leaving out a large amount of traditional knowledge from our information society; it is a loss for the Indigenous cultures and the world”

Outi Laiti (2016:9)

As more and more organizations focus on preserving Indigenous heritage and valuing what Indigenous communities offer global narratives, especially where environmental stewardship is concerned, decolonizing widely held negative perceptions of Indigenous cultures will need to become a priority.

Conclusion

It took me fifteen years for the right combination of circumstances, accessibility to technology and community buy-in to earn the privilege of teaching filmmaking as a tool for language and culture revitalization. An element of this achievement is tied closely to DH applications easily accessed today that were not widely available a decade ago. The futures of DH and endangered languages are connected – filming and documenting language by itself is not enough to revitalize a language. Languages are only living if people speak them, and digital humanities help make that possible. The digital humanities make it possible for language documents to be adapted and used as learning tools in countless ways, some of which have been discussed in this text. DH also encourage an environment of collaboration and creative spaces for experimentation, consistently expanding their reach in synch with new technological developments that support language communication for the revitalization process.

Moving forward, DH and endangered dialects will coexist in tandem, with DH providing a platform where Indigenous people can learn and teach their own languages and cultures in the same privileged environment everyone else is able to access (Gaertner, 2018). For the process to be successful and have a lasting impact, two realities are important to establish and maintain: institutional decolonization and the ongoing ability to control how cultural intellectual property is accessed and disseminated. Just as the digital humanities provide tools to help document and

promote language use, they also play a role in self-determination and cultural preservation by providing platforms where both can be deliberated and discussed. Likewise, the future of ethnoprogramming will be indelibly linked to relationships and collaborations across cultures that are facilitated using DH tools.

...

References

- Boas, F. (Ed.), 2013. *Linguistics and Ethnology, Handbook of American Indian Languages*. Cambridge: Cambridge University Press.
- Dilts, A., Walia, H., 2018. Dismantle and Transform: On Abolition, Decolonization, and Insurgent Politics. *Abolition: A Journal of Insurgent Politics*, No. 1, pp. 12–21. Available at: <https://journal.abolitionjournal.org/index.php/abolition/article/view/25/4> [Accessed 12 March 2021].
- Eisenlohr, P., 2004. Language Revitalization and New Technologies: Cultures of Electronic Mediation and the Refiguring of Communities. *Annual Review of Anthropology*, Vol. 33, pp. 21–45. Available at: <http://www.jstor.org/stable/25064844> [Accessed 12 March 2021].
- Gaertner, D., 2019, June 5. *Decolonial DH?: The Maker Movement Across Indigenous Studies and the Digital Humanities*. Available at: <https://novelliances.com/2019/06/05/decolonial-dh-the-maker-movement-across-indigenous-studies-and-the-digital-humanities/> [Accessed 10 March 2021].
- Laiti, O. K., 2016. *Ethnoprogramming: An Indigenous Approach to Computer Programming. A Case Study in Ohcejohka Area Comprehensive Schools*. Master's thesis, University of Lapland.
- Schreibman, S., Siemens, R., and Unsworth, J. (Eds.), 2004. *A Companion to Digital Humanities*. Malden, MA: Blackwell.
- Silva, W., Riestenberg, K. J. (Eds.), 2020. *Collaborative Approaches to the Challenges of Language Documentation and Conservation: Selected papers from the 2018 Symposium on American Indian Languages*. Language Documentation & Conservation Special Publication No. 20 [PP 1-5]. Honolulu: University of Hawai'i Press. Available at: <http://hdl.handle.net/10125/24928> [Accessed 1 April 2021].
- Smith, A., 2009. *Indigenous Peoples and Boarding Schools: A Comparative Study*. United Nations. Available at: https://www.un.org/esa/socdev/unpfii/documents/IPS_Boarding_Schools.pdf [Accessed 5 March 2021].
- Starblanket, T., 2018. *Suffer the Little Children: Genocide, Indigenous Nations and the Canadian State*. Atlanta: Clarity Press.

Sula, C. A., Hill, H. V., 2019. The early history of digital humanities: An analysis of *Computers and the Humanities* (1966–2004) and *Literary and Linguistic Computing* (1986–2004). *Digital Scholarship in the Humanities*, Vol. 34, Issue Supplement_1, December, pp. i190–i206. Available at: <https://doi.org/10.1093/llc/fqz072> [Accessed 1 March 2021].