The Expanding Digital Media Landscape of Qualitative and Decolonizing Research: Examining Collaborative Podcasting as a Research Method

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> *"We have three ears to listen with. Two on the sides of our head and one in our heart."*
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> —Cited by Jo-Ann Archibald (2008, p. 76)

Introduction

Continually emerging and evolving technologies have transformed our ability to create, modify, store, and share digital media and, in so doing, have presented new possibilities for how social science research can be conducted and mobilized. The growing use and accessibility of digital media technologies—such as digital cameras, online sharing platforms, and mobile devices (e.g., smartphones and tablets)—offers new tools and opportunities for augmenting, enriching, and introducing new collaborative dimensions to established and emergent methods of inquiry (Nagy Hesse-Biber 2011). Indeed, methods such as digital storytelling (Cunsolo Willox, Harper, & Edge 2012; Gubrium 2009; Gubrium & Turner 2011; Lambert 2013), PhotoVoice (Castleden, Garvin, & Huu-ay-aht First Nation 2008; Catalani & Minkler 2010; Wang 1999; Wang & Burris 1997), participatory video (Kindon 2003; Milne, Mitchell, & de Lange 2012; Petrasek Macdonald et al. 2015), and other community-based and collaborative approaches to audiovisual media production (Chalfen 2011; Chávez et al. 2004; Mitchell & de Lange 2011; Parr 2007; Pink 2013; Schleser 2012; Tacchi, Watkins, & Keerthirathne 2009) illustrate the synergies that researchers are finding between (increasingly digital) media modalities, creative practice, and participant-centred approaches in research.

Encompassing a range of processes and techniques, these collaborative and participatory media methods together illustrate an evolving, dynamic, and diverse field of practice that takes media creation processes and products as sites of co-learning and collaborative knowledge building. Grounded in participatory action research (PAR), community-based participatory research (CBPR), and related frameworks dedicated to social justice and equity, these methods fit within the decolonizing methodologies continuum by attempting to deconstruct unequal power dynamics in research relationships through the meaningful and equitable inclusion of participants throughout the research and decision-making processes (Castleden et al. 2008; Cunsolo Willox et al. 2012; Kindon 2003; Wang & Burris 1997). Participant-directed media creation, facilitated by the increasing uptake of related digital technologies in qualitative inquiry, therefore has the potential to prioritize community concerns, honour local knowledge and participant expertise, and develop meaningful research outcomes (Gubrium & Harper 2013).

Thus, our goal for this paper is to outline and describe the process and use of collaborative podcasting, using a case study example from a multi-year, cross-Canada research initiative aimed at integrating Indigenous[1] and Western sciences to support the development of improved water management and policies, and to learn how to better care for and live with water (Castleden, Hart, et al. in press; Castleden, Martin, et al. in press). We begin with an overview of the literature concerning digital media in the context of decolonizing research. We then explore podcasting as a research methodology before laying out our case study. Our discussion of the case concentrates on four key "projects" of a decolonizing research agenda: storytelling, representing, reframing, and sharing. We conclude with critical reflections on our praxis, and discuss how collaborative podcasting may contribute to and support research within a decolonizing agenda.

Digital Media and Decolonizing Research

Since the landmark publication of Linda Tuhiwai Smith's *Decolonizing Methodologies*: *Research and Indigenous Peoples* (1999), research has increasingly examined how Indigenous ways of knowing have been subjugated, subordinated, silenced, marginalized, and ignored through Western-based research methods and approaches. As Smith argued, "from the vantage point of

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[1] We use the term Indigenous to refer to the original inhabitants of the lands now known by the names of today's nation-states, and their decedents. In Canada, there are three constitutionally recognized Indigenous groups: First Nations, Inuit, and Métis peoples.

the colonized … the term 'research' is inextricably linked to European imperialism and colonialism. The word itself, 'research', is probably one of the dirtiest words in the Indigenous vocabulary" (1999, p. 1). The push for decolonizing methodologies has been taken up by scholars such as Margaret Kovach (2009), Shawn Wilson (2008), Bagele Chilisa (2012), and Eve Tuck and Wayne Yang (2014), as well as in edited volumes such as *The Handbook of Critical and Indigenous Methodologies* (Denzin, Lincoln, & Smith 2008). Together with many other voices, within and beyond the academy, these scholars argue for the transformation of research structures and institutions, and challenge the underlying assumptions about what counts as knowledge and research, and how research should be conducted and disseminated (e.g., Smith 1999). Part of a larger movement towards reclaiming Indigenous lands, languages, sovereignty, and ways of knowing, doing, and being, a decolonizing agenda supports the centering of Indigenous epistemologies within research such that Indigenous values, knowledge, and protocols become an integral part of methodology, rather than a peripheral consideration (e.g., Kovach 2009; Smith 1999; Wilson 2008).

Decolonizing research and methodologies have, therefore, demanded new methods and approaches that more adequately, richly, and meaningfully engage Indigenous ways of knowing, as well as cultural values and processes such as oral storytelling and sharing knowledge and wisdom through collective dialogue. In this way, research is "gradually coming to be seen as a potential means to reclaim language, histories, and knowledge, to find solutions to negative impacts of colonialism, and to give voice to an alternative way of knowing and being" (Smith 2005, p. 91). Participatory media creation processes, such as PhotoVoice (Castleden et al. 2008; Healey et al. 2011; Maclean & Woodward 2013; Moffitt & Vollman 2004), participatory photography (Fresque-Baxter 2013), digital storytelling (Cueva et al. 2013; Cunsolo Willox et al. 2012; Iseke & Moore 2011; Wexler, Eglinton, & Gubrium 2014), audio-documentary (Restoule, Gruner, & Metatawabin 2013), and participatory video (Petrasek Macdonald et al. 2015; Stewart et al. 2008) are being increasingly employed in Indigenous-led and Indigenous-engaged research methods, with promising results for deconstructing power dynamics between "researchers" and "researched," "Indigenous" and "non-Indigenous" (Cunsolo Willox et al. 2012), while remaining adaptable to local needs and contexts. Another digital platform that has not yet been widely explored within the realm of research, but may hold potential as both a participatory and decolonizing method, is collaborative podcasting.

Podcasting as a Research Method

Podcasts are digital audio files made available on the Internet for downloading or streaming to a computer or mobile device, and are often offered as a series listeners can subscribe to in order to receive automatic notification as new installments become available.[2] In contrast to traditional radio broadcast, podcast content can be accessed "on-demand," providing listeners with control over when, where, and how they listen. In addition, technological advances contributing to lower-cost digital recording equipment and audio-editing software, together with the growth of online sharing platforms and Internet access, have opened the possibilities for podcast creation (i.e., podcasting) to a greater range of potential producers (Berry 2006; Bottomley 2015), though we recognize that access to technology to produce and receive podcasts is still "a privilege"—not yet a universal. As a form of alternative media, podcasts are credited with bringing a greater diversity of voices and perspectives to public audiences (Atton 2008; Florini 2015), and providing a "sonic space" for traditionally-oppressed voices (Tiffe & Hoffmann 2017).

As a communication medium, podcasts offer a great deal of flexibility in terms of how audio material is presented and may, for example, consist of anything from a recorded lecture, speech, or interview, to a highly produced and richly textured narrative documentary with multiple voices, sounds, and music. In contrast to radio, podcasts need not run to specified time lengths to fit within programming schedules, and, when produced independently, gives control over content, style, and editing to the creator(s). As an aural medium, podcasts also share with other audio formats the unique affective qualities associated with communicating through (recorded) sound (McHugh 2012), and generally require less expertise and equipment to produce than video and film. In addition, audio-recording may be less intrusive and/or disruptive than the use of video cameras (McHugh 2014). With the ubiquity of smartphones and other mobile electronic devices, podcasts have the added advantage of portability for the listener, insofar as they can be heard on the go, or while engaged in other activities.

Given the utility and range of potential applications, podcasts have been used in a variety of contexts since their first appearance in 2004 (Berry 2006; Bottomley 2015), including by traditional media (such as newspapers, magazines, and radio programs), scholarly journals (Picardi & Regina 2008), advocacy groups and organizations (Waters et al. 2012), by academic

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[2] As an emergent medium, we note that podcasts have been defined in varying ways in the literature over time. We follow the current definition offered by the *Oxford English Dictionary*.

institutions as an educational platform (Hew 2009; Kay 2012), and as a public health education tool (Avery et al. 2010). While research related to podcasting is growing, the current discourse is primarily focused on examining the role and efficacy of podcasting as a communication tool: to enhance student learning in education (Fernandez, Simo, & Sallan 2009; McGarr 2009; Shim et al. 2007), in the media landscape (Berry 2016; Ginsburg 2006), and for health promotion (Turner-McGrievy, Campbell, & Crosby 2009; Turner-McGrievy, Kalyanaraman, & Campbell 2013). Podcasting, however, can be more than a communication tool: podcasting can be a method of qualitative data collection and analysis, critical inquiry, and knowledge mobilization. When collaborative approaches to design, content, data-gathering and data analysis, and dissemination are used, podcasts can be mobilized as another participatory strategy.

Background and Context: The *Water Dialogues* Project

This collaborative podcast initiative arose out of an 18-month transdisciplinary research project, which sought to examine methods and models for bringing together Indigenous and Western knowledge in water research and management (Castleden et al. 2015; Castleden et al. 2017). Globally, Indigenous communities are disproportionately affected by water-related challenges such as freshwater contamination, flooding, lack of access to safe drinking water, and inappropriate and/or inadequate wastewater and drinking infrastructure (King, Smith, & Gracey 2009; Patrick 2011; Phare 2009; Simeone 2009; Toussaint, Sullivan, & Yu 2005). The inadequacy (and often outright failure) of prevailing approaches to address these issues—which are often embedded in colonial structures and policies, and a predominance of Western-based science—has underscored the urgent need for Indigenous leadership, as well as equitable and respectful non-Indigenous partnerships with Indigenous peoples, to develop strategies that facilitate the meaningful inclusion and implementation of Indigenous knowledge and ways of knowing in water research and management (Basdeo & Bharadwaj 2013; Boelens, Chiba, & Nakashima 2006; Mascarenhas 2007; McGregor 2012; Walkem 2007).

Funded by the Canadian Water Network, this larger research project was premised on the principles of collaborative and participatory research, including shared decision-making; co-learning and empowerment through cyclical and iterative processes; knowledge and action for the mutual benefit of all partners; recognition of the strengths and resources of all partners; and valuing, and sharing, with partners all knowledge generated (Castleden et al. 2015). To this end, a National Advisory Committee (NAC) of Indigenous

knowledge-holders and other Canadian water experts (policy-makers, engineers, natural scientists, social scientists, and health researchers) was established to guide the research team in the design and implementation of the research. The project began with the first of two National Water Gatherings (June 2014) to engage the NAC and additional Indigenous and non-Indigenous water experts, researchers, and knowledge-holders from across Canada in a dialogue around water and how best to proceed with the project—which ultimately included a systematic literature review (Castleden, Hart, et al. in press) and in-depth interviews with academic researchers, community-based partners, and knowledge-holders (Castleden, Martin, et al. in press). A second Water Gathering was held one year later (June 2015), allowing us to return together and discuss, as a group, preliminary research findings and next steps.

The research was grounded in a Two-Eyed Seeing approach (Bartlett, Marshall, & Marshall 2012; Martin 2012), a Mi'kmaw framework for integrating the strengths of Indigenous knowledge and methodologies alongside Western-based approaches. We were therefore mindful of finding ways within our work to honour the perspectives, experiences, stories, knowledge, and wisdom of project partners and participants. The NAC also emphasized the importance and value of sharing this research and our team's co-learning journey with a wide audience, including the sense of goodwill and meaningful relations that informed, and were generated through, the Water Gathering dialogues and collaborative research process.

The expressed need to ensure that these dialogues transcended us and were heard by others motivated our desire to explore multi-media methods that could complement other data gathering strategies and facilitate broad dissemination beyond conventional academic peer-reviewed publications. We sought to do this in ways that would be resonant with Indigenous methodologies while simultaneously promoting, sharing, and celebrating Indigenous perspectives, knowledge, ways of knowing, and sciences around water. In addition, we also sought a method that would be amenable to a collaborative approach, while fitting within the context of a broad national-scale project designed around two in-person gatherings. Given the context in which we were working, and the desire for knowledge sharing, we considered that podcasting could provide a promising medium and method, given its potential to weave together multiple voices and perspectives in an accessible and engaging format. Thus, with the support of the NAC and Water Gathering participants, we embarked on a project to pilot the use of collaborative podcasting as a knowledge mobilization tool, both facilitating data gathering and also representing data in and of itself.

The Collaborative Podcasting Process

Given the noted lack of literature regarding the use of podcasting as a research method, we describe our process here, presented in six stages (Figure 1). Though described in a step-by-step manner, and led by the first author in collaboration with the research team, the creation of this podcast was very much an iterative and reflective process throughout its production.[3]

Figure 1. Summary of production stages in creating the *Water Dialogues* podcast. The research team was composed of the core research team and three Water Gathering participant volunteers.

Stage One: Audio collection

Podcasting requires the gathering of data in audio form, and, in our case, the second National Water Gathering event, held as part of the larger research project, provided the main venue for data collection. The 32 attendees included the NAC and core research team, as well as a cross-section of water researchers and knowledge-holders from First Nations, Inuit, and Métis communities and organizations across Canada, the majority of which had participated in the initial Water Gathering. Through ceremony, storytelling, and dialogue, the purpose of the second Gathering was to share and discuss preliminary research

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[3] This research protocol received Research Ethics Board approval from the University of Guelph, Queen's University, and Cape Breton University.

findings, co-develop recommendations, and to reconnect with one another as we continued to build relationships through the research process (Hart et al. 2015).

    With written and informed consent from all participants, the full proceedings of the one-day Gathering were audio-recorded.[4] Group dialogue was facilitated through a series of three sharing circles (Lavallée 2009; Tachine, Yellow Bird, & Cabrera 2016), a format that differs from focus groups as it provides an equal opportunity for everyone to participate because each person has a turn to speak going around the circle (Figure 2). This approach to group dialogue (also referred to as "talking circles") encourages respectful and attentive listening, and fosters collaborative learning through an emergent and reflective process of sharing and inquiry (Graveline 1998; Wilson 2008). In addition, short one-on-one interviews, ranging in length from seven to 25 minutes, were conducted with 18 of the participants. These interviews were conducted on an opportunistic basis during breaks (with two interviews conducted in the days immediately following the Water Gathering), with the aim of prioritizing Indigenous voices. Though a general interview guide was developed, the interviews were predominantly unstructured and conversational in nature (Kvale & Brinkmann 2009). The interviews provided an opportunity to delve deeper into topics and experiences shared during the circle, and allowed participants to focus on what they felt was most important with respect to the purpose of the podcast and larger research project. Together, the sharing circles and interviews provided a rich foundation for the podcast, both aurally and with respect to the content of what was shared. To provide additional sound elements with which to craft the podcast, ambient sounds from the Water Gathering were also recorded, as well as natural water sounds (e.g., rain, a river flowing) recorded elsewhere.

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[4] Two Zoom-H5 digital multi-track recorders hooked up to two Apex Pencil condenser microphones set up on stands at either end of the gathering space, and the venue's Public Address (PA) system were used to record the group discussion. An Olympus Linear PCM Recorder with an Audio-Technica ATR-3350 lavalier omnidirectional condenser microphone was used for one-on-one interviews, with an Olympus VN-7200 digital voice recorder running as back up. Audio was recorded in uncompressed .WAV format, with the exception of the PA system recording, which was MP3 format.

Figure 2. Water Gathering photos depicting sharing circle dialogue at the Wabano Aboriginal Health Centre, Ottawa, Ontario. Audio-recordings for the *Water Dialogues* podcast were collected during the second Water Gathering (June 2015) of the larger research project. Group dialogue was facilitated through a sharing circle format where each person has a turn to speak. Photos taken with permission and photo credits to Lori Hoddinott.

Stage Two: Review and analysis

In total, approximately 12 hours of recordings were collected, and a research team was assembled to assist with the task of determining how to meaningfully organize and present the material through the podcast. Three volunteers from among the Water Gathering participants, representing First Nations and Inuit perspectives, identified their willingness to be involved (an option offered to all participants), and worked together with the core research team through two conference calls, as well as email correspondence, to inform the podcast's creation throughout the production process. Analysis followed a multistage, iterative process that involved immersion in the material; identification of key themes; and selection of quotations for potential inclusion in the podcast. Audio-recordings were imported into an audio-editing software program (Hindenberg Journalist, Version 1.5, 2015) and were transcribed with time codes noted in the margin to create a complete audio log of the Water Gathering proceedings and interviews.[5] Through multiple readings and re-listening to the material, notes were added to highlight the nature of what was said, as well as how it was said (e.g., tone, pacing, emotive power). Thematic categories through which the content could be summarized were identified inductively, and were presented to, and discussed with, the research team to further develop and refine key themes and messages to be explored through the podcast. Three overarching themes were identified: relationships and responsibilities to water;

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[5] The data were not de-identified, with consent, due to the nature of the project.

confronting colonialism in the water sphere; and, working together across diverse knowledge systems to improve how we live with water (Day et al. in press). Quotations of sufficient sound quality[6] were then organized in a word document by theme, sub-theme, and other story elements (e.g., Water Gathering context).

Stage Three: Sequencing and structure

Through discussion with the research team, it was decided that narration within the podcast would be kept to a minimum in order to allow the stories, experiences, and insights shared by participants to speak for themselves. While all recorded content was considered in the analysis stage, it was necessary to significantly, and selectively, reduce the amount of material to be included in the podcast in order to create a coherent and engaging representation of the larger research findings and Water Gathering dialogue. This was a challenging process, with the research team again providing important guidance. During a second conference call, a number of audio-quotations were played so the team could provide feedback in terms of their fit and potential inclusion and/or placement. The first author selected these quotations, informed by the discussion with team members during the previous conference call meeting regarding thematic focus. We sought to prioritize material that would illustrate various dimensions of the key themes through diverse perspectives and experience, and that could be woven together in such a way as to create a cohesive narrative reflective of the Water Gathering dialogue.

Framing the podcast narrative around the structure of the Water Gathering itself, we chose to develop a long-form audio-documentary piece, ultimately told in three parts, rather than produce a series of shorter episodes with a specific focus to each. Indeed, much like the sharing circle dialogue during the Water Gathering, the podcast structure came to follow a more circuitous path, with concepts, ideas, or issues raised or foreshadowed, then revisited later in nuanced ways, thus eliciting a layered and contextualized understanding as the podcast unfolds.

Assembly of the component parts also followed an iterative process that took place both on paper with transcribed text and digitally with the audio-files.

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[6] Occasional and intermittent noise interruptions (e.g., doors slamming, cups dropping, issues with the PA system) rendered some segments of the recordings unusable for sharing via the podcast. In this way, and together with other elements of the collaborative editing process described here, it is important to note that speaking is another element ultimately mediated and editorialized through the podcasting process.

Key segments of text were printed, cut out, and arranged (and re-arranged) on Bristol board, then considered aurally by arranging the selected components of the audio-files in a parallel form in the editing software. This process involved a further refining of material to be included through an approach similar to a constant comparative method (Boeije 2002; Glasser 1965), whereby choices to include or exclude elements of the selected material were weighed against the ability of other quotations to convey a similar idea or insight, albeit through a different expression, voice, or experience. Ultimately, quotations were included based on consideration of a range of factors including their sound quality, resonance with key themes, affective quality, level of technical language (which we sought to minimize), their ability to be woven into the fabric of the larger piece in an interconnected way, and a desire prioritize Indigenous voices while also presenting the diverse geographic and cultural perspectives, and areas of expertise represented within the group. These selected quotations were reviewed and approved by the research team (and subsequently all Water Gathering participants—Stage five, below). In total, the voices of 17 participants were included,[7] with all 32 Water Gathering participants thanked and acknowledged in the closing credits.

Stage Four: Sound editing

With the contributor-based content in place, the limited narration (scripted and recorded in draft form), music, and natural and ambient sounds were added through the audio-editing software to assist with pacing, mood, and context. These elements were informed by discussion with the team, with the opportunity for review and feedback from all team members and participants during subsequent stages. Similar to the way in which "rich, thick description" may be used in written presentations of qualitative research to help "transport readers to the setting and give the discussion an element of shared experience" (Creswell 2009, p. 192), these additional sound elements helped create a more nuanced depiction of the Water Gathering event and dialogue through an aurally textured soundscape. In some segments, the layering of voices and sounds also allowed for a more poetic expression and exploration of meaning,

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[7] Of the 17 participants whose quotations were included in the finished piece, 15 had been interviewed, though quotations from these interviews were not included in all cases. Of the 3 participants that were interviewed and whose quotations did not appear in the podcast, 2 were non-Indigenous participants, while the other was not included for the reasons cited regarding selection of quotations, including, in particular, the (in)ability to be woven into the fabric of the larger piece, as well as use of technical language.

as is the case in arts-based (including digital media) approaches to research (Smith & Dean 2009).

Following approval of the final draft (stage five, below), and with the assistance of a small knowledge translation grant, an audio engineer was hired to optimize sound levels and provide professional sound editing. The final narration was also recorded at a professional studio for consistency of sound.

Stage Five: Participant review

A script of the draft podcast was created as a textual representation of the content and included transcribed quotations noting the context (i.e., sharing circle or interview) and contributor name, narration, and a description of sound effects, music, and transitions (e.g., "fade under"). This script was shared with the research team, together with the audio-file for listening, to allow for ease of feedback via "track-changes." Once the team's suggestions were incorporated, a revised audio draft was shared first with all participants whose voices were included, and then following their approval and support, for review by all other Water Gathering participants as a means of soliciting feedback and identifying and addressing any potential concerns.

Stage Six: Public release and dissemination

A website with a dedicated webpage was created to host the podcast in an Open Access format, where it can be streamed or downloaded at any time (www.WaterDialogues.ca). Upon its release in May 2016, the podcast was promoted via social and other news media, as well as through conference presentations. In addition, it has been included as a required listening assignment in a graduate level course offered jointly by the University of Guelph, University of Toronto, University of Northern British Columbia, and Université du Québec à Montréal (Ecosystems Approaches to Health, Summer 2016, 2017), and aired on local radio (CFRU 93.3FM, October 2016). At the time of writing, the podcast website has been accessed by over 12,000 unique visitors.

Contributions to Decolonizing Methods: A Critical Reflection

In reflecting on how collaborative podcasting may be applied within, and have the potential to contribute to, a decolonizing research agenda, we draw on Linda Tuhiwai Smith's (2012) description of an Indigenous research programme,

comprised of a number of interrelated "projects" that Indigenous communities around the world are currently undertaking. In *Decolonizing Methodologies* (2012), Smith outlines 25 projects through which "a new field of indigenous research is being formed … a field which privileges indigenous concerns, indigenous practices and indigenous participation" (p. 111). United by themes of cultural survival, self-determination, healing, restoration, and social justice, these overlapping projects "have multiple goals and involve different indigenous communities of interest" (Smith 2012, p. 143). We focus on four of these projects here: storytelling, representing, reframing, and sharing.

Storytelling

Storytelling was immediately resonant with the process of creating this collaborative podcast. Stories are a powerful medium for conveying meaning, knowledge, and understanding, and maintain a privileged place across diverse Indigenous cultures and oral traditions (Archibald 2008; King 2003). As Smith describes, qualitative research tools and approaches that foreground Indigenous knowledge, voices, and lived experience through storytelling are integral within a decolonizing research agenda; indeed, "embedded in these stories are the ways of knowing, deep metaphors, and motivational drivers that inspire the transformative praxis that many Indigenous researchers identify as a powerful agent for resistance and change" (2005, p. 89). Conceptualizing story as "both method and meaning," Margaret Kovach highlights the interrelationship between stories, knowing and Indigenous methodologies, suggesting that such approaches support research through which holistic and contextualized meaning can arise (2009, p. 94), while Russell Bishop points to the way in which stories "allow the diversity of truths to be heard" (1995, p. 78).

Storytelling was a central component of the *Water Dialogues* podcast, both through the dialogic process involved in its creation, facilitated by the sharing circles and supplemental interviews, as well as the multi-voiced narrative shared via the podcast itself. As applied within the context of our research, collaborative podcasting thus provided a platform to share and listen to individual and collective stories across diverse perspectives and experiences. Combining "the affective power of sound and voice … with the intimacy of the listening process" (McHugh 2012, p. 195), the aural and oral nature of audio-based storytelling can make it a particularly engaging medium. With respect to this unique aspect of aural communication, sound scholar Yvon Bonenfant has described, "when we [create] sound... [a] vibratory field leaves us, but is of us, and it voyages through space. Other people hear it. Other people feel it" (qtd. in Tiffe & Hoffmann 2017, p. 116). In addition, the flexibility afforded by

podcasting format and structure further contributed to the suitability of its use as a medium for storytelling within the context of this work. Given the unique place of story in Indigenous cultures and epistemologies, and the responsibility involved in sharing the stories of others in these contexts (Archibald 2008; Kovach 2009; Wilson 2008), the collaborative and deliberative production process outlined in the preceding section, including participant vetting of the podcast content before release, were essential to adapting the use of podcasting within a decolonizing methodological framework.

Representing

The project of representing "spans both the notion of representation as a political concept and representation as a form of voice and expression" (Smith 2012, p. 151). Within research, the project of representing seeks to challenge and address issues of objectification, appropriation, and colonization pertaining to the ways in which Indigenous knowledge, perspectives, and lived experience have been collected, documented, and perceived through Western-based approaches. Therefore, representation relates not only to the ideas, knowledges, and perspectives being shared, but who shares them and on what terms.

Aligning with this project, collaborative podcasting offers a pathway for the expression of Indigenous knowledges and worldviews, as well as participant stories, perspectives, and lived experience, shared through the voices of contributors themselves; and provides a discursive space to engage diverse knowledges. Indeed, audio-storytelling methods of inquiry and representation have the potential to move beyond the limitations and privileging of written text in academia, allowing listeners to encounter the subtle dynamics and texture of the speaker's voice through intonation, emphasis, narrative rhythm, and timing (Lindgren 2014; McHugh 2012). These nuances of speech can imbue meaning within dialogue that is not easily detected or conveyed through a reliance on written text alone. In addition, the sparing use of narration in the *Water Dialogues* podcast, which was limited to providing context rather than analysis, allowed participants' stories, insights, and experiences shared to "speak for themselves," without interpretation. However, as in any process of selecting and condensing empirical materials for presentation, the role of the researcher cannot be overlooked (Buckingham 2009; Kovach 2009). The composition of our research team, which included Indigenous and non-Indigenous researchers from multiple regions across the country, assisted in bringing a diversity of perspectives to the work. Moreover, our ultimate accountability to participants (Bishop 2005) and the collaborative approach taken were key elements of navigating the responsibilities of representation in a respectful and ethical way.

Reframing

Related to representing is the project of reframing, which involves achieving "greater control over the ways in which Indigenous issues and social problems are discussed and handled" (Smith 2012, p. 154). As Smith describes, "The framing of an issue is about making decisions about its parameters, about what is in the foreground, what is in the background, and what shadings or complexities exist within the frame" (ibid.). In this way, reframing is fundamental to knowledge production in decolonizing research that seeks to transcend the categories and concepts rooted in, and perpetuated through, dominant Western-based discourses. As Smith and others (see Battiste 2000; Kovach 2009; Simpson 2011) have noted, the persistence and seeming intractability of many of the issues faced by Indigenous communities can be linked with the ways in which these issues have been perceived and addressed through Western-based frameworks, and the related power-structures in which they are embedded; frameworks and practices that have tended to ignore, devalue, or otherwise obscure Indigenous knowledge and ways of knowing, including with respect to water (McGregor 2012; Walkem 2007). As a method and medium responsive to engaging the richness of Indigenous languages, knowledge, and oral traditions, collaborative podcasting thus offered a valuable discursive space for a dialogue around water grounded in and examined through Indigenous perspectives, experiences, values, and worldviews. From this convergence and privileging of diverse Indigenous voices emerged a more holistic, relational dialogue around water, divergent from dominant resource- and rights-based discourses, and unconstrained by the need to filter such understandings through the conventions and structure of traditional academic-based texts.

Sharing

The project of sharing relates to the idea of knowledge as a collective benefit, and the sharing of knowledge as both a form of resistance as well as a responsibility of research (Smith 2012). This project includes sharing within and beyond Indigenous communities, and recognizes that "Indigenous communities also have something to offer the non-Indigenous world" (Smith 2012, p. 160). Indeed, the dialogue that arose from the Water Gathering, and shared in the podcast, reflects the transformative potential of sharing stories and reflections about water together in ways that connect knowledge, lived experience, and relationships in a respectful space. In weaving together

individual stories, reflections, teachings, and research in a narrative form, collaborative podcasting offers an innovative method for telling nuanced and multifaceted stories while fostering dialogue among diverse peoples and groups. In so doing, collaborative podcasting can contribute to, and support the communication of, increasingly expansive understandings of complex issues within a decolonizing agenda.

As a method of knowledge mobilization and dissemination, podcasting provides an engaging and informative medium for bringing research to a wide audience, accessible across literacy levels (so long as technical/context-specific jargon is avoided), and available at any time through 'on-demand' streaming or download via the Internet. This online access requires less bandwidth than video (which may be a concern in areas with poor Internet connection). Radio broadcast, or distribution on a USB stick, provides other potential avenues for sharing. The public nature of podcasting and lack of participant anonymity, however, are important considerations with respect to the suitability of its use as a method of research dissemination, particularly in contexts dealing with sensitive or personal issues, or cultural teachings, stories, and knowledges that are not intended for sharing outside appropriate cultural contexts and protocols.

While we have centered our discussion around four projects, collaborative podcasting could also potentially relate to, and align with, several other decolonizing projects described by Smith (2012), including: testimonies; celebrating survival; indigenizing and indigenist processes; revitalizing and regenerating; connecting; envisioning; gendering; restoring; democratizing and indigenist governance; networking; naming; and, discovering the "beauty" of [Indigenous] knowledge. We chose to focus on storytelling, representing, reframing, and sharing, as they are most resonant with our experience in using collaborative podcasting in this particular research context.

Conclusion

Podcasts are continuing to gain traction, popularity, and widespread interest as a method for storytelling in mainstream and alternative media, and are increasingly employed in educational institutions and contexts. Their use in research, however, is relatively new territory; yet as we have experienced through the use of podcasting in this research context, exciting and rich opportunities exist, both as a research method and as a sharing and learning platform, particularly within a decolonizing context. Indeed, as Linda Tuhiwai Smith explained, "an important task of Indigenous research in 'becoming' a community of researchers is about … creating the space and support for new

approaches to research and new examinations of Indigenous research" (2005, p. 92). This resonates with our experience as a team of Indigenous and non-Indigenous researchers collaboratively creating and sharing the *Water Dialogues* podcast, and is indicative of the potential that the process of creating a podcast may have as a method of collaborative research, and a knowledge preservation and promotion strategy within a decolonizing framework.

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