

Remembering Water: Immigrant Water Narratives in Waterloo Region

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

What water priorities are embedded in the personal water narratives of immigrants in Waterloo Region? How can immigrant water meanings transform local waters? The purpose of this qualitative research was to understand immigrants' diverse experiences of water and consider what immigrants might contribute to the Canadian water agenda. Fifteen adult immigrants in Waterloo Region were recruited through opportunistic and snowball sampling methods, drawing from the researcher's personal connections with immigrant settlement organizations and the broader community. Participants offered their water narratives through oral history interviews and follow-up group discussions. Following a collaborative oral history approach, participants were invited to share authority in the thematic analysis of the water narratives. Research into water meanings, translocality, and placemaking offered a theoretical context for the interpretation process. During interviews and follow-up group discussions participants emphasized water's sacredness and cultural importance, and voiced concerns about who controls water and how we—individually and collectively—can take more responsibility for water. As water practitioners and advocates strive for changes in local water culture, immigrants should not be overlooked as potential agents of change. This research indicates that immigrants may have strong motivations to protect Canada's waters and contribute to placemaking efforts through which local waters can be restored and revered.

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Chapter 1: Introduction

Water is a shifting mirror.

Illich (1985, p. 25)

Speaking about watery place enacts a claim—an insistence that I know these waters in some way even if my family has only been living in this watershed since 1968.

Chen (2013, p. 292)

A stronger jolt to changing how we have used resources would come in imagining ourselves to be like immigrants thrust by chance or fate onto a territory not our own, foreigners in a place we cannot command as our own... [T]he foreigner... holds up a mirror to the society into which he or she enters, since the foreigner cannot take for granted ways of life that seem to natives just natural. So great are the changes required to alter humankind's dealings with the physical world that only this sense of self-displacement and estrangement can drive the actual practices of change and reducing our consuming desires; the dream of dwelling in equilibrium and at peace with the world risks, in my view, leading us to seek escape in an idealized Nature, rather than confronting the self-destructive territory we have actually made. (Sennett 2008, p.13)

It's raining.

Let me show you the 90-year-old cement cistern at the back of my house. Its deep, quiet waters hold the memory of the German and Polish immigrants who built, lived and worked in this neighbourhood back when the area was a mix of factories and

homes on the edge of newly named Kitchener, Ontario. Each dry summer morning my husband and I open the cistern to draw buckets of rainwater for our vegetable garden. Otherwise we keep the lid, under which is an opening large enough for an adult to climb inside, locked. I am wary of this old technology. But I am grateful for the chance to hold this buried treasure of rainwater for later use. The cistern waters will be transformed into rows of swiss chard, tall tomatoes, and fragrant fennel and geraniums.

Inside the house, sheltered from the rain, my young daughters turn on the kitchen tap to wash their hands. We pay the municipality to pump these waters from nearby aquifers and the Grand River, through the blue plastic pipes that run below our city streets. It seems a massive project to coordinate the energy, infrastructure, policies, planning, and labour necessary to get these waters into my house. Not to mention getting that water back out again, mixed with the parts of ourselves we are all too happy to let someone else deal with.

Out front, the rain running down our driveway drains into the storm sewer. A steady underground flow of captured waters carries traces of my home and neighbourhood to the Grand River a kilometer and a half away. During 15 years of living in Waterloo Region, I have gone often to the river to walk, picnic and camp with friends. Besides my personal memories, the river also holds the memory of upstream activities and economic developments, and reminders of Canada's colonial history. My home, as with most of the rest of Waterloo Region, sits on a parcel of land "six miles deep from each side of the river" that the British gave to the Six Nations in 1784, ignoring the historic ties that the Six Nations and other First Nations people already had to these lands (Six Nations Lands and Resources 2008; Grand River Conservation Authority (GRCA) 2011). The settlement of the Grand River watershed area, as with much of Canada, is a history that unsettles me.

These waters—the cisterns of a post-World War I immigrant neighbourhood, the modern waters that flow through pipes and taps, and the contested Grand River watershed—are the waters from which I write. But in the midst of a fast-moving,

mobile, modern life, all of these waters and the memories and meanings they hold are easy to forget. If the capacity of water decision-makers and practitioners to understand and address the cultural and place-specific nature of water meanings is to improve, then specific waters, carrying specific memories and meanings, through specific places, must be remembered.

1.1 Remembering local waters

Remembering local waters is an important action we must take both individually and collectively. As Canadian geographer Jamie Linton (2010) argued, modern thinking produces an abstracted notion of water, as if it is a discrete resource, disconnected from place, and stripped of its cultural and economic context. Remembering specific waters clarifies the integral role that human systems and structures play in shaping waters' flows (Linton 2010). Though it is easy to think of H₂O as an abstract, static material, thinking of the Grand River reminds us that waters are real and dynamic. They are not separate from but instead fundamentally shaped by local and global human—and non-human—contexts. In turn, human systems and structures are also constituted by waters' flows (Linton 2010). From this perspective, water does not exist separately from society, nor vice-versa. Both are created through each other, as an inseparable “hydro-social” hybrid (Swyngedouw 2004; Linton 2010). Remembering water, then, means paying attention to how water flows through the systems and structures of our daily lives, what these waters mean to us, and what we mean to them.

These days—more than ever—many human systems, exchanges, and interactions occur on a global scale. Because water is dynamic, flowing, and transformative, it offers a useful way to consider the impact of movement and change in today's world. Flows between and through local places and waters are increasingly rapid and global. These include the movement of people, ideas, information, technologies, money, systems, and environmental impacts. Because of their hydro-social hybridity, local waters are subject to the changing influence of climate change, global economic systems, corporate interests, rapid and global communications, and the

unprecedented mobility of people at the intra- and international levels. To remember water, it is necessary to consider these global flows. To what other local waters, nearby or in other parts of the world, do these flows connect us?

1.2 Towards a complex water narrative

Telling stories is one way to remember local waters. Leaders from Canada's water advocacy community recently set a goal to have all Canadian waterways in good health by 2025 (Our Living Waters Working Group (OLWWG) 2014a). To achieve this goal, they identified the need to distill a shared water narrative behind which a water movement could gather and grow (OLWWG 2014b). But what is Canada's water story? Even now, the myth of water abundance tends to dominate Canadians' sense of water, with images of endless supplies of cheap, clean water available at the turn of a tap (Sprague 2007; Telfer 2015). Contrasting with this water myth is a lesser known water reality, that across Canada, First Nations communities are frequently under boiled water advisories (Health Canada 2015). Much less prevalent in Canada's water narrative is what Ardith Walkem (2007) and Dorothy Christian (Christian and Wong 2013) call a kin-centric relationship to water, in which humans are called upon to honour their relationships with all living things. From this perspective, actions and decisions are "grounded in the knowledge that water is sacred and connects all living things, [and] that all beings have an equal right to the water necessary to sustain their own life" (Walkem 2007, p. 314). Such a way of relating to water has not been part of the dominant Canadian water story so far.

Literary critics such as Northrop Frye (1965) and Margaret Atwood (1972) offered another element to Canada's water mythology. They argued that the view English Canadians hold of water was formed by the garrison mentality of early settlers, caused by fear of the unknown (Frye 1965; Atwood 1972; Potocco 2011). The feelings of terror began for newcomers during the journey along the St. Lawrence River, where "to enter Canada [was] a matter of being silently swallowed by an alien continent" with the flowing river waters providing a way in, but no way out (Frye 1965, p. 824). For

subsequent generations of settlers, “the otherness of nature, water, the indigenous population, and, by extrapolation, one’s own unconscious self” continued to evoke discomfort (Potocco 2011, p. 21). Though this fearfulness of nature shaped part of the Canadian subconscious, the average contemporary Canadian, when asked about water, is less likely to feel afraid than to recall happy memories of lakes and rivers (Royal Bank of Canada Blue Water Project 2012). New immigrants are no different. They too are drawn to water, identifying swimming in Canada’s waterways as part of the “real Canadian” experience (Lifesaving Society 2012). Sadly, new immigrants are four times more likely to be unable to swim, and are at higher risk of drowning than other Canadians (Lifesaving Society 2012). Water’s life-giving and destructive capacities are part of the Canadian water story.

There is power in the stories told about water. People tell stories about their lives in order to understand themselves, and these stories, in turn, affect who they are and who they become (Gee 1985). As Thomas King (2003, pp. 9-10) writes, “you have to be careful with the stories you tell. And you have to watch out for the stories you are told.... Stories are wondrous things. And they are dangerous.” The work to build a shared Canadian water narrative should not mean ignoring Canada’s diverse water stories for the sake of a unifying story. Instead, the complexity and multiplicity of Canadians’ relationships to water should be central to the story we tell. Thankfully, along the Grand River watershed, researchers from within and without First Nations communities have collaborated to investigate indigenous water perspectives held by local First Nations communities (Cave *et al.* 2011; Baird *et al.* 2013). In order to understand and tell Canadians’ regional, cultural and personal water stories, we need room for complex water narratives that are steeped in both traditional and contemporary indigenous relations to water, while carrying the diverse water perspectives of generations of settlers.

1.3 Immigrants and Canada's environment

Immigrants have always been agents of water transformations in Canada. While dramatically altering the physical and chemical make-up of Canada's waterways, Canada's European settlers shaped water culture according to a worldview in which people and culture were perceived to be separate from nature. When I spoke to someone from the Six Nations about this research, he suggested that the water legacy of generations of immigrants to Canada had been one of neglect and destruction. Why would the water habits, beliefs and values of new immigrants have a different impact? What this research highlights is that some contemporary immigrants come to Canada having experienced a respectful and reverent relationship to their local waters, through their community life, their cultural practices, their spiritual beliefs, and their day-to-day activities. Some immigrants come to Canada having also experienced a relationship to local waters that required significant responsibility at the individual or community level. How might the water experiences and perspectives of such immigrants contribute to a more sustainable water future?

In remembering local waters, I became curious about the steady stream of people coming from all over the world to live within the Grand River watershed, and particularly in Waterloo Region where I live. For several years I worked in intercultural settings with new immigrants, where moving forward required reaching across cultures to form new culture together. Alliances and friendships grew through listening, negotiating, and mentoring, with each of us changing in the process. It became clear to me how Canada depended on immigrants, who are the main driver of population growth in Canada (Statistics Canada 2006a). Through their business and entrepreneurial activities they not only make important contributions to Canada's economy, they also facilitate the development of reciprocal economic, social, and cultural exchanges between their Canadian and overseas communities (Froschauer and Wong 2006). As the baby boom generation retires and Canada begins to experience a serious labour shortage, immigrants fill the gap. They are predicted to account for 100% of labour force growth (Statistics Canada 2006b). Research shows that immigrants are and will

continue to be agents of social and political change in Canada (Teixeira and Li 2009). There is much to be learned by listening to immigrants, who begin life in Canada as strangers to local ways and traditions. Radical changes are needed in order to ensure that access to healthy eco-systems can be equitably extended to humans and non-humans, within and beyond Canada's borders. As Sennett (2008) suggested, it may only be through the shock and discomfort of having habits and assumptions reflected back by people who are not yet fully settled in Canada that we will identify what these changes may be.

Yet, in North America immigrants' potential contributions to the environmental agenda are generally overlooked (Future Watch 2010a; Lange *et al.* 2011). It was not uncommon in the course of this research to hear comments from participants, settlement workers, and water advocates, about such a disconnect. Such anecdotal observations were supported in my literature survey in which it was rare to find linkages between immigrants and environment. I found a small body of literature, mostly in environmental psychology, that tracked the pro-environmental values and behaviours of various cultural groups, sometimes including those of immigrants (Hunter 2000b; Schultz *et al.* 2000; Johnson *et al.* 2004a; Johnson *et al.* 2004b; Sierra Club & National Council of La Raza 2012). Several researchers have investigated immigrants' long history with the environmental justice movement—both as victims of injustices in their neighbourhoods, and as a major force in building the environmental justice movement (Hunter 2000a; Hunter 2000b; Pellow and Park 2002). Though visible minorities and people of low income tend to be most adversely affected by environmental issues, they are poorly represented within the environmental movement (Marouli 2002). In another small body of literature, researchers explore the meaning of multicultural environmental education (Agyeman 1995; Marouli 2002; Lange *et al.* 2011). These researchers have found that when it comes to ecological knowledge and environmental concern, “newcomer groups are constructed by dominant groups as lacking”, the assumption being that they have little to contribute, and much to learn (Agyeman 1995 in Lange *et al.* 2011, p. 395). One of the most frequent links between immigrants and environment in the literature and media is a somewhat hostile toned

debate about controlling immigrant numbers to protect the North American environment (Chapman 2000; Political Research Associates 2002; Neumayer 2006; Cafaro and Staples III 2009; Hernandez 2013). The environmental argument against immigration leaves a particularly bad taste at this time, when the response of Canada and other countries to the plight of refugees seeking asylum via Mediterranean waters seems woefully insufficient. While Canada's privileged place on Hardin's (1974) metaphorical "lifeboat" is secure, migrants from North Africa and Western Asia face crowded journeys by boats that are all too real, and tragic (Reguly 2015; Smith 2015). Overall the dearth of literature connecting immigrants to environmental concerns was striking (Marouli 2002; Sillito *et al.* 2012). In key texts on Canadian and North American immigration, I was surprised to find no references to environment, ecology or natural resources (Scheffer 2011; Teixeira *et al.* 2012). It is time to recognize the potential that immigrants hold to influence *and* contribute to Canada's environmental decisions, whether through their work, their votes, their daily life activities, their consumption patterns, or their activism. Any remembering of local waters should include the remembering of a myriad of local waters that immigrants bring with them to Canada, through their memories, but also their habits, their values, and often their sense of identity.

Despite the need for more attention to immigrants' potential contributions to the environmental agenda, discussions about immigrants' relationship to nature—including water—are also almost non-existent (Future Watch 2010b). Some exceptions are Hung (2003), Lovelock *et al.* (2011), Lange *et al.* (2011), and Lovelock *et al.* (2013). We know that when people feel connected to nature they are more likely to engage in pro-environmental behaviours, are better equipped to deal with life problems and moral dilemmas, and experience a greater sense of belonging (Mayer and Frantz 2004; Mayer *et al.* 2009). By understanding how the diverse environmental experiences of immigrants affect their relationship to nature, it becomes more possible to gauge immigrants' capacity to adopt stewardship values that have been identified as necessary if we are to maintain and, increasingly, to establish the integrity and resilience of Canada's socio-ecological systems. Such understanding would also facilitate the

promotion of immigrants' engagement with Canadian nature, and thereby contribute to the overall wellness of this important and growing demographic in Canada (Parks Canada 2014). Facilitating new relationships between immigrants and waters in Waterloo Region is a way to invite newcomers to experience local waters and through that experience, to begin to reimagine a complex, Canadian, water narrative.

1.4 Changing Water Culture in Waterloo Region

This remembering of water, in all its forms, is especially important now, as many communities, regions and countries identify the need to transform water culture. There is a growing literature that explores what water culture is and what cultural shifts are needed to move towards sustainable water use (Shove 2003; Strang 2004; Allon and Sofoulis 2006; Head and Muir 2007). Much of this research is Australian, in which the call for creative thinking about water culture is loud and clear, because of the country's long and continuing history with long-term drought. Australian cultural researchers, Fiona Allon and Zoe Sofoulis (2006), described water culture as something that is created and practiced first and foremost through people's everyday life activities. But each load of laundry and glass of water exists only in the context of water systems and technologies that, when examined, tell stories about urban social relations and expectations, identity, and power (Swyngedouw 2004; Sofoulis 2005). Sofoulis (2005) followed Shove (2003) to define water systems as the co-evolving collection of infrastructure, technology, conventions, practices, ideas, and social relations through which people's use of household waters—both incoming and outgoing—are managed. When people have little responsibility for the systems through which water is supplied and sewage is taken away, the scope for engaging in water culture transformations at the individual and community level is limited.

One way of remembering water is to find ways for people to reclaim some responsibility for water. Smaller, more flexible, water systems would allow individuals and neighbourhoods to do more with local waters than pipe them in and out. In the Canadian context, water engineer Andrew Hellebust (2009) argued that hybrid—

centralized and decentralized—water and wastewater treatment plants should replace the current, out-dated setup. The new systems would match different qualities of potable and non-potable water for appropriate uses, and minimize the use of water for diluting sewage, perceiving it instead as a valuable resource. Examples of more flexible systems include household, community-based, and for-profit models of greywater reclamation and recycling, rainwater harvesting, and the use of treated sewage for landscaping (Sofoulis 2005; Hellebust 2009).

The potential for significant water changes is evident in Waterloo Region, a large and diverse community located within an hour's drive of Toronto, in South-Western Ontario. The region is made up of three cities, Cambridge, Kitchener and Waterloo, and four rural townships, with a total population of over 565,000 (Region of Waterloo 2015a). In 2005 the provincial government designated this region as a future growth area as part of the Places to Grow Act (Ontario 2006), setting the local population on a trajectory to almost double by 2031. The region was already one of the fastest growing areas in Ontario, with a population growth rate of twice the national average (Region of Waterloo 2011). Because such growth has an impact on local waters these plans have been met with a variety of local concerns (GRCA 2005; Grand River Environment Network (GREN) 2010; GREN 2013). Tap water use accounts for 70% of water demands within the region (AECOM 2009). Eighty percent of that water is drawn from groundwater sources and the remaining 20% is pumped from the Grand River (Region of Waterloo 2015b). In order to safeguard water supplies in the face of government mandated development and population growth, careful and creative planning is required.

When I began this research in 2010 I did not realize that the Region of Waterloo was on the cusp of a significant water management shift. I was aware that compared to some Canadian municipalities, the Regional Municipality of Waterloo had demonstrated some capacity for proactive water planning. In a country where only 35% of municipalities had official water efficiency plans (Canadian Water and Wastewater Association 2009), the Regional Municipality of Waterloo had been recognized as a

leader in water efficiency, having created an official plan in 1998 and reduced water usage since that time (Region of Waterloo 2010). In 2010, what concerned many local water advocates was the Regional Municipality of Waterloo's planned response to the Places to Grow Act (GREN 2010). By the late 2020s the municipality planned to begin pumping water through a pipe from Lake Erie (AECOM 2009). This pipe would be an uphill, energy intensive and expensive proposition. Though the Regional Municipality of Waterloo left the door open for the Great Lake pipe to be superseded by more ambitious water conservation and efficiency gains, local water advocates were uneasy (GREN 2010).

Fast-forward to 2015 and plans have changed, allowing for some optimism. After the first Regional Municipality of Waterloo water supply strategy was created in 2007, per capita water demand and peak demand decreased (Environment Canada 2011; Stantec 2015). In response, regional water planners released a new local Water Supply Master Plan in which there is no longer a projected need for a supplementary Great Lake water supply until and possibly beyond 2050 (Stantec 2015). This trend towards declining demand, evident in many municipalities across Canada, was due largely to increased water conservation and efficiency measures, the positive effect of summer watering bylaws, and urban densification (Environment Canada 2011; Stantec 2015). The 2010 Ontario Water Opportunities and Water Conservation Act also played a role, by promoting water efficiency innovations as economically valuable (Ontario 2010; Stantec 2015). This Act encouraged municipalities to extend the life of their water infrastructure through innovative technology. Within the Canadian context of water management, the Regional Municipality of Waterloo continues to be lauded as a leader. However, they are by no means radical in their approach, and there is not yet any indication that in this new context the Region of Waterloo is contemplating moving towards significant innovation or change in its water management approaches. The status quo system imposes a specific water culture on its users, squandering the environmental and spiritual water values that many people share (Sofoulis 2005). A more flexible and decentralized water and sewage management system could create the opportunity for people, including immigrants, to take more responsibility for local water

culture. One way of remembering water may be for the Region of Waterloo to manage water with systems that support the expression of diverse water meanings, so that these meanings are not lost.

1.5 Research questions

In order to transform water culture, it is important to first remember water, which means to acknowledge what water means to people, and what people mean to water. In a spirit of intercultural learning, I have used this research to consider how the perspectives through which immigrants relate to the local waters of Waterloo Region are affected by their personal, cultural and place-specific relationships with local waters in other places in the world. My intentions in documenting the personal water narratives of immigrants in Waterloo Region were to:

- Understand diverse immigrant experiences of water through analysis of their personal water narratives;
- Consider what immigrants might contribute to the Canadian water agenda;
- Examine the relationship between translocal flows and changing local water culture; and
- Collaborate with research participants to share aspects of their water narratives publicly.

I used the following questions to guide this investigation:

- How do immigrants in Waterloo Region describe their memories of water?
- What water priorities are embedded in the personal water narratives of immigrants in Waterloo Region?
- How could immigrant water meanings transform local waters?

To answer these questions I designed a small-scale study using qualitative methods to listen to the water stories of 15 immigrants living in Kitchener and

Waterloo, Ontario. I sought participant collaboration in the interpretation of the results, and to a small degree in the design of the study. My approach was tentative and exploratory. I acknowledged my position as an outsider researcher without a personal experience of immigration. I chose to use “immigrants” as a category through which to focus my research, acknowledging that there is nothing homogeneous about the experience of immigration and nothing static about culture.

Human geography became a key research perspective in this inquiry, with particular focus on translocal connections between places. The research design limited the extent to which the relationship between water narratives and translocality could be explored. As people, ideas, information, designs, styles, and technologies move more frequently and rapidly between places, translocality research, which will be discussed in Chapter Two, offers a description or analysis of the changes and transformations that occur as a result. Translocality research often focuses on a specific migrant community in a specific new place—for example, Polish migrant workers in London, England (Datta 2013). Because the research for this thesis involved 15 individual immigrants from almost as many cultural backgrounds and geographical locations, it was not possible—nor was it my intention—to formulate a description or an analysis of a specific pattern of translocal flows in relation to local waters. What this research offers, instead, is a glimpse into the water meanings and memories that individual immigrants bring with them as they develop new attachments to the waters of Waterloo Region.

1.6 Thesis Overview

This thesis developed in an iterative and non-linear fashion, a process explained in detail in the methodology and methods sections. By design, much of the theoretical framework developed after the first stages of documenting and interpreting the immigrant water narratives were complete. In Chapter Two, I will introduce this literature of water meanings, translocality, and transcultural placemaking. What began as a disjointed review of water meanings and immigration studies developed into an investigation of people’s place-based water meanings. The restlessness of our global

world amplifies the changing nature of these water relationships, creating opportunity for transformation of water culture. In Chapter Three, I discuss some of the ethical and methodological concerns that arose in seeking meaning from personal water narratives in an intercultural context, and describe how collaborative oral history methodology influenced my research design. In Chapter Four and Chapter Five, I provide some of my findings, beginning by discussing the water narratives in relation to the themes that the participants identified as priorities, and finally widening the lens to connect the water narratives to my own research concerns and questions.

Chapter 2: Water Meanings In A Restless, Mobile World

There is a poem, “Pied Beauty” that has stayed in my mind since I first read it.

Glory be to God for dappled things—
For skies of couple-colour as a brinded cow;
For rose-moles all in stipple upon trout that swim;
Fresh fire-coal chestnut-falls; finches’ wings;
Landscape plotted and pieced—fold, fallow, and plough;
And all trades, their gear and tackle and trim.
All things counter, original, spare, strange;
Whatever is fickle, freckled (who knows how?)
With swift, slow; sweet, sour; adazzle, dim;
He fathers-forth whose beauty is past change: Praise Him.
(Hopkins 2005 [1877], p. 532)

At Canisbay Lake, in Algonquin Park, I think of Hopkins’ words once more. As the sun sets, I stand at the sandy shoreline with my husband and two daughters, our canoe nearby. Within arm’s reach, past the shrubs and plants that grow from a wall of mud and logs, a large beaver pond sits beside the lake. Its surface waters are at shoulder level. We are first confused, then enchanted. Finding a spot through which to enter the pond, we explore, finding frogs, lily pads, and a sense of moose nearby. Our own voices, loud, even when trying our best to whisper, are another layer in the absurdity and beauty of this dappled place. Leaving my home waters of the Grand River helps me to find other waters from which to learn. The purpose of this chapter is to depart from the water narratives of the participants, as well as my own, to learn what the literatures of water meanings, translocality, and placemaking have to offer to the process of remembering waters.

2.1 Variable Waters

The joy and wonder that Hopkins felt in contemplating creation expanded in his appreciation for its complexity. Likewise, with understanding people's changing and connected ways of relating to waters in specific places, a sense of awe awakens. The concept of variability will appear throughout this chapter through the multiplicities of waters and ever-changing hybridity of place. Variability can be used as the foundation of a non-Eurocentric perspective on nature that brings concepts of diversity, change, complexity and interconnection to the fore (Gibbs 2010). This point of view is used to question the conventional urge to separate, compartmentalize and dominate nature. In developing her framework, Australian geographer Leah Gibbs began with specific waters in a specific place, drawing inspiration from the variability of the semiarid Central Australian landscape to study the social, cultural and non-human geographies of water (Gibbs 2009; Gibbs 2010). Gibbs (2010) observed that Eurocentric thinking originated from a landscape shaped by a northern, temperate climate. Yet, even in temperate zones such as in Canada, climate change makes the concept of variability more urgent. Research shows that climate change will bring more variability to freshwater flows in communities across the country with implications for drinking water supplies and collaborative governance (de Loë *et al.* 2000; Maas 2010; Hania 2011; Disch *et al.* 2012; King *et al.* 2012).

Water itself is highly variable, in form, scale, and sensual qualities (Strang 2004; Strang 2005; Linton 2010; Chen *et al.* 2013). Water is the persistent drip of a leaking tap, the flowing waters of the Grand River watershed, or vast ocean water transforming into vapour and then rain. In northern climates such as Canada's, we observe water's transmutations as we move through the seasons, from ice to water to vapour to snow crystals. In its various forms water acts as an important agent of transformation itself, changing landscapes over the space of minutes and millennia (Gibbs 2014). Aesthetically, water soothes, inspires and alarms us with its constant movement and change. Visually it ripples, shimmers, flattens, churns and reflects. Audibly it drips, streams, dampens, and roars. In taste, it can be chemical, mineral, bitter, or sweet.

Having converted to indoor plumbing the Palestinian village women that ethnographer Nafissa Naguib (2009) interviewed remembered—and missed—local spring waters for their range of sensual characteristics: tangy winter water, rain water, red or yellow water, bitter water, frothy water. As a “promiscuous solvent”, water “materially communicates where it has been, what has occurred elsewhere, and even what is possible” (Chen 2013, p.277; also see MacLeod 2013). Water’s “great age and fathomless receptivity” tells stories of what has passed before (MacLeod 2013, p.49): in its materiality, water records human acts of questionable ethics that result in such impacts as changing climate, shifting currents, polluted oceans and lost wetlands (France 2003; Wardi 2011; Chen *et al.* 2013).

Similarly to Gibbs (2010), I am as interested in the variability found in people’s values about nature—in this case water—as in the variability of water flows themselves. Canada’s increasing reliance on immigration for population growth offers the potential for shifts, transformations or, at the very least, increased diversity in Canadians’ interactions with water. The implications—and potentials—of such socio-cultural variability merits more attention, both with respect to human interventions in natural environments generally (Greiner and Sakdapolrak 2013) and within water management and governance discourse in particular (Strang 2004; Allon and Sofoulis 2006; Head and Muir 2007; Gibbs 2010).

Just as fluidity, movement and transformation characterize water’s material forms, water meanings are also highly variable and difficult to contain in tidy categories (Tvedt and Oestigaard 2006; Gibbs 2010; Chen 2013). Indeed, as cultural studies researcher Cecilia Chen (2013) wrote, water ‘overflows’ such static and discrete categories. Researchers in a growing multidisciplinary water literature assert that change, diversity and complexity are significant shapers of meanings, values, world-views and place (Strang 2004; Strang 2005; Sofoulis 2005; Allon and Sofoulis 2006; Head and Muir 2007; Naguib 2009; Gibbs 2010; Linton 2010; Chen 2013). As anthropologist Veronica Strang (2005, p. 98) wrote, “[w]ater’s diversity is, in some respects, a key to its meanings.” Naguib (2009) found that the old Palestinian women

she interviewed longed for the pre-piped spring waters not only because of their sensual qualities, but also because of the complex personal, social, spiritual and place-based meanings that the ritual—and hard work—of fetching water had offered.

Studies by several Australian researchers demonstrated the complexity of water meanings, with the ethnographical work of Veronica Strang (2004) leading the way. In her ethnography of water meanings in the Stour Valley, UK, she proposed that such complexity is linked to the layers of sometimes drastically different belief systems that inform individual people's worldviews. "Like individuals, societies do not discard earlier models [of understanding] so much as build on them epigenetically, so that the future is always a discussion with the past" (Strang 2004, p. 83). Strang found that many people in the contemporary Stour Valley continue to be influenced by the pre-Roman pagan belief systems that shaped the early local relationship to water. Participants moved fluidly between "sometimes conflicting ... sets of knowledge and explanation" such as scientific ideas, Christian beliefs and alternative worldviews (Strang 2004, p. 83). "The consistency of the meanings encoded in water enables an unproblematic flow of ideas from one [model of understanding] to another. In each transition, water retains its core meanings as the source of 'life' and of the spiritual and social 'essence' of human being" (Strang 2004, p. 96).

Other Australian researchers added geographical and cultural studies counterparts to Strang's anthropological approach, using their research to investigate the intersection between complex water meanings, behaviours, management and technology (Allon and Sofoulis 2006; Head and Muir 2007; Gibbs 2010; Gibbs 2014). Researchers Fiona Allon and Zoe Sofoulis (2006) chose a cultural approach to investigate Western Sydney household water practices for their Everyday Water Project. They found that water managers and policy makers, including proponents of demand management, too often underestimate the influence of sensory, experiential, habitual and affective relations on water consumption (Allon and Sofoulis 2006). Effective management of consumer demands requires an understanding of the influence of socio-cultural factors on water meanings, expectations and practices, even when those factors

are contradictory (Allon and Sofoulis 2006). While water managers focus on changing people's environmental values by exposing them to information, people's daily water practices do not always jibe with their personal water values (Sofoulis 2005; Head and Muir 2007). Sofoulis (2005) argued that what water conservation proponents overlook is the role that large-scale water infrastructures and technologies—such as household plumbing, municipal drinking water, and sewage treatment—play in shaping people's water expectations and habits. In fact, the discrepancy between people's water values and their practice “may arise because the available technologies and systems are inimicable to alternate values” (Sofoulis 2005, p. 451). Sofoulis (2005) suggested that one key to transforming people's daily water interactions is to decentralize drinking water and sewage treatment systems. Redistributing responsibility for water will create more room for creative shifts in daily water practice (Sofoulis 2005).

While Allon and Sofoulis situated their research in an urban here and now, Gibbs (2010) highlighted the interconnected flow of water meanings through place and time. She studied aboriginal, settler and water practitioner water values in central Australia and found that meanings shifted according to both seasonal variations in water flows and complex historical processes that continued to unfold in the present (Gibbs 2010). Relevant also to Canada, Gibbs found colonization to be a key agent of change in Central Australia, where legacies of “displacement, dispossession, invasion, migration, and settlement” continue to impact meanings of and ways of knowing place—and water—for both colonizers and colonized (Gibbs 2010, p. 372). In this context she found, like Chen (2013), that participants' water values consistently transgressed conventional categories such as economic, social, ecological and indigenous (Gibbs 2010). The actual water values that emerged defied separation.

Linton (2010) offered a Canadian example of what can happen when resource managers and developers do not give enough consideration to the complexity of water meanings. These “indigenous waters,” he wrote, “[become] visible to the dominant society only when the people who give them life and meaning [manage] to place

them(selves) directly in our line of vision” (Linton 2010, p.12). In 1990, Cree and Inuit communities of northern Quebec came together to demonstrate their opposition to a series of dams along the Great Whale River. By planning the dams, Hydro Quebec treated water solely as an economic resource effectively causing “alternative, potential meanings and relations with water ... [to] be ignored or shunted aside, along with the people for whom such meanings and relations are constitutive of life and livelihood” (Linton 2010, p. 13). Together these two indigenous communities of Whapmagoostui and Kuujjuaraapik built and paddled an odayak—an oversize hybrid canoe-kayak—to New York City along the Hudson River, to make their opposition known to the would-be consumers of the electrical power (Linton 2010). They were successful: the hydro dam project was shelved when the prospective consumers backed out, unhappy with the destructive social and ecological potential of the dams (Linton 2010). Despite this success, hydroelectric projects have been built and continue to be planned in Quebec. Yet, by opposing the project, the people of Whapmagoostui and Kuujjuaraapik showed an unwillingness to have their connection to local waters ignored by those in power.

Many researchers argue against a reductionist, abstracted, singular, modern concept of water. Because of water’s spatial and socio-cultural specificity, water is not one thing, but many (Illich 1985; Hamlin 2000; Linton 2010; Feitelson 2012). Social critic Ivan Illich (1985) was the first to argue against conceptualizing waters as a singular, abstracted, ahistorical water.

Following dream waters upstream, the historian will learn to distinguish the vast register of their voices. As his ear is attuned to the music of deep waters, he will hear a discordant sound that is foreign to waters, that reverberates through the plumbing of modern cities. He will recognize that the H₂O which gurgles through Dallas plumbing is not water, but a stuff which industrial society creates. He will realize that the 20th century has transmogrified water into a fluid which archetypal waters cannot be mixed. Illich (1985, p. 7)

According to historian Christopher Hamlin (2000), it was the shift to modernity that obscured these dream waters. In their plural form, pre-modern waters were “aspects of the histories of places” expressing an almost infinite range of qualities (Hamlin 2000, p.315). In its singular form, modern water narrows to H₂O, a “monolithic substance containing a greater or lesser concentration of ...impurities” (Hamlin 2000, p.315).

In response to the flattening of modern water, Illich (1985) urged that we attend to the social production of water, by examining the historicity of water’s treatment through time and space. Similarly, Linton (2010) proposed that we reinstate water’s ecological, cultural and political dimensions. He drew heavily from Swyngedouw (2004) who argued that we should think about water in the context of the hybrid hydro-social relations through which water and society are constituted. Geographer Eran Feitelson (2012) responded to the critiques of modern conceptions of water by exploring the policy implications of a normative change from water to waters. He suggested that waters should be differentiated based on *needs*, including basic rights of humans and nature for water, *wants* in terms of the economic demands on water as a factor of production, and finally, the *sources* of water (Feitelson 2012).

2.2 Consistencies in water meanings

As we have already seen, water meanings and definitions are diverse and shaped by specific places, waters and socio-cultural contexts. Though expressions of water meanings are ever changing, several themes in water meanings consistently recur. In Strang’s (2005) review of anthropological research, she found that certain water meanings appear through every aspect of human life. Across generations and cultures “the broad themes of meanings encoded in water are similar in substance, providing important undercurrents of commonality” (Strang 2005, p. 115). In this section I will first discuss why these commonalities occur. Then I will describe and illustrate the major themes of water meanings that carry so consistently through cultures, places and time. None of these themes are discrete; instead they flow into each other. The theme of water as a matter of life and death often encompasses the other themes, including water

as a generative and regenerative force, water as a symbol of agency and power, and water as the basis of social and spiritual identity (Strang 2005).

2.2.1 Our dialectic relationship with water

Given the sheer quantity of watery images and metaphors through which we perceive and understand the world and ourselves, our very imaginations are steeped in water (MacLeod 2013). We think *with* water, as well as *about* water. Treating water as a resource to be managed is an example of thinking about water that pervades the broader water discourse (Chen *et al.* 2013). Thinking with water, on the other hand, pervades our daily lives because of the sheer omnipresence of water in people's thought processes. Water has an almost limitless capacity to carry metaphors (Illich 1985) that Strang (2004) argued is in part because of the variability of waters:

Its characteristics of transmutability and fluidity make it the perfect analogue for describing complex ideas about change, transformation, mood and movement. Because it can transform from one extreme to another, it can readily convey all of the binary opposition through which people construct meanings and values. Of all the elements in the environment, it is the most suited to convey meaning in every aspect of human life.

(Strang 2004, p. 61)

Linton (2010) suggested that in reality the two ways of thinking, about and with water, are impossible to disentangle. However, thinking *with* water is often overlooked in water decision-making processes, resulting in a loss of opportunity to consider the complexity of water meanings that surface through thinking *with* water (Chen *et al.* 2013).

Strang (2004; 2005) used relational dialectics to describe how people understand water through themselves and also understand themselves and the world around them through water. The first step in this dialectic begins across cultures and spheres of experience with a baby's first sensory experience, that of inhabiting its own physical self (Strang 2004). People continue to refer back to the human body as a basis

for first and subsequent models of ordering and understanding, including for sensing and understanding water (Strang 2004). The dialectic process continues as meanings, values, and images are transferred from people to water and back. As Strang (2004) described, “people project themselves psychologically onto the world, objectify that projection and ‘reel it in’ to be reintegrated into their own knowledge and experience” (Strang 2004, p. 60). In turn it is the consistency of water’s observable characteristics over space and time—its essentiality, fluidity and aesthetics—that make water an important cross-cultural model for understanding (Strang 2004; Strang 2005; Tvedt and Oestigaard 2006). Tvedt and Oestigaard (2006) argued that it is water’s ability to transcend the profane *and* sacred that make it so important to our ability to understand the natural and cultural world.

There are many expressions of our dialectical relationship with water. Human body homologues offer one example of how we project our experience of our own bodies onto water. In Strang’s words: “brooks ‘babble’, ‘chatter’ and ‘chuckle’; rivers have ‘arms’ and ‘mouths’; people swim in ‘bodies’ of water, and are sometimes unlucky enough to be ‘swallowed’ by them” (2004, p.60). The “reeling in” part of the dialectic is evidenced in the countless metaphors drawn from water to describe peoples’ mental, physical and emotional processes. Seemingly endless examples come to mind during a quick brainstorm: a person can ‘bubble over’ with joy, “well up” with emotion, or become ‘icy’ in personality, and the list goes on and on. As a model for understanding the world, we use watery notions such as circulation and flow to conceptualize both concrete and abstract phenomena (Illich 1985; Strang 2004).

The combination of shared human cognitive and physiological processes and water’s key characteristics create what Strang (2005, p. 115) called “undercurrents of commonality.” However, the meanings, values and linguistic and visual associations that result from this water dialectic are as varied as are the socio-cultural and historical-geographical spaces through which water is experienced (Strang 2004; Strang 2005; Linton 2010). As Strang (2004, p.50) wrote, “sensory experience [for example, of water] is formed in developmental engagement with a particular socio-cultural and physical

context, mediated by cultural practices and interpreted in the light of cultural beliefs and values. This creates considerable diversity in sensory experience.” The shared but different experiences of water, provide a rich opportunity for cross-cultural analysis (Strang 2005; Tvedt and Oestigaard 2006). Following is a description of Strang’s themes with attention to some of their myriad interpretations and expressions.

2.2.2 Strang’s shared water meanings: in place

Strang (2005) found that the themes of *life and death, social and spiritual identity, agency and power, and water’s generative and regenerative qualities* recurred consistently—though in diverse forms—across vastly different cultures and places. She did not intend for this list to be exhaustive. These major themes are particularly useful for this study because they derive from cross-cultural analysis. They recur across social, economic, political, environmental and spiritual aspects of human life, reflecting metaphorical and literal interactions with water at a variety of scales (Strang 2005). These meanings flow into each other: as Gibbs (2010) argued, they are not discrete or static, but complex, interconnected and dynamic.

Though Strang does not say so explicitly, place plays a central role in constructing these water meanings¹. Social and cultural geographer Tim Cresswell (1996; 2004) has written extensively about place. He paralleled the conceptual development of ‘place’ with broader shifts in human geography, from the analysis of a “regional distribution of ‘things’” to an analysis of the constitutive role of space and place in social and cultural processes (Cresswell 1996, p. 11). Cresswell (1996) noted the contribution of humanistic geographers such as Yi-Fu Tuan in loosening the grip of spatial analysis on the imaginations of geographers by exploring the experiential and subjective characteristics of place. Tuan conceived of place as a specific location that shapes and is shaped by the everyday activities, imaginings and meanings of humans (Tuan 2011 [1977]; Chen *et al.* 2012). He described place and space as intricately

¹However, Strang (2004) ‘places’ water meanings through the concept of cultural landscape, defined as the combined demographics, economic and political profiles, social activities, belief systems, history, ecology and geography of a specific place.

linked: humans perceive each through the experience of the other. For Tuan, space allows for movement, and place is a pause. It is in the pause that meanings and attachments form over time and abstract space is transformed into intimate place.

Yet, while Tuan and other humanist geographers oriented their understanding of place to the experience of an intentional human subject, since the late 1980s much research has focused on how that human subject is simultaneously constituted and de-centred through power in social relations (Henderson 2009). It is through inquiry into the complex and constitutive flow of power through meanings, identity, social relations and processes that 'place' as a concept is now more typically understood (Agnew 1987; Massey 1994; Staeheli 2003; Cresswell 2004; Henderson 2009). For community developer and researcher Michael Rios (2013) place reflects and is an outcome of a multitude of negotiations: about belonging in community, authorship in decision-making, and power to control placemaking processes. In the following examination of water meanings I will return to the idea of these complex and constitutive flows. The expression of water meanings occurs most often in relation to specific places with specific waters. As we shall see, recurring places of interest include the human body, the home, the watershed, the inner landscape, and mythical waterscapes.

2.2.3 Life and Death

Many of the meanings we attach to water relate to its dual nature, with life and death as a foremost example (Illich 1985; Strang 2005). This meaning is found flowing through most, if not all, of water's other meanings at both the individual and socio-cultural level (Illich 1985; Strang 2005). This capacity of water for both benevolence and malevolence, as Levi-Strauss (2012 [1955]) wrote, captures our imagination. Historian Terje Tvedt and anthropologist Terje Oestigaard (2006) however, argued that water has the capacity to transcend dualities, and in so doing, offers new understandings of the world around us.

One example of this transcendence is found in death rituals performed across many cultures. Illich (1985) suggested that water's role in death rituals is threefold: to cleanse the dead body, purify the soul, and remove the corrupting presence of death from the dead person's dwelling place, so that the living may continue living. *Tahara* is the traditional Jewish ritual of purification and preparing the dead for burial (Halpern 2006). It is performed by family or the consecrated Jewish burial society, or *chevra kadisha* (Halpern 2006). In a news article about the resurgence of death ritual observance amongst non-orthodox Jews, one member of the Chicago *chevra kadisha* said that performing *tahara* was "the most profoundly spiritual experience of my life" (Brotman 2011). Another member spoke of the transformation that the body undergoes as it is lovingly bathed and dressed. "[T]here is something holy that happens. It is transformed. It's not just a cadaver" (Brotman 2011). The ritual washing of the dead is also important in Islamic tradition. Many immigrant Muslim communities find ways to continue this ritual (Gardner 1998; Yaqub 2010). Reshma Memon Yaqub offered a first-person account of washing the body of a recently deceased family member, along with volunteers from the local mosque in Columbia, U.S. (Yaqub 2010). She felt "grateful for the opportunity. In Islam, it is a tremendous honor to give a body its final cleansing." Interestingly people's interest in bathing a loved one's body after death is growing in secular Canada, part of an alternative movement to de-commercialize and deinstitutionalize death (O'Connell 2014). Oestigaard (2006) offered an account of Hindu and Buddhist death rituals in Nepal that do not revolve around water's cleansing ability. When a person dies in the fertile rain shadow area of the Himalayan Mountains in Nepal, water is used in death rituals to represent life. However, in such rituals, water takes the form of food offerings. In the agricultural communities of the Nepali mountains, food acts as a memory of the rains that supported the growing season.

Another example of this transcendence is in the memory waters of Indo-European mythscapes, such as the rivers of Hades, including Lethe, the river of forgetfulness (Bachelard 1983 [1942]; Illich 1985). As the dead journeyed on these waters, in boats or by swimming, the waters washed away their memories and deeds. It is in this way that the dead were thought to let go of their attachment to life. As a

solvent, the waters carried the traces of these former lives to the Well of Remembrance. Here mortal poets and artists could gain the gods' blessings to listen to the Muses sing of the deeds and memories that the waters held, or tell of the visions that came when they drank the well waters (Lincoln (1982) in Illich (1985)). "In this way the world of the living is constantly nourished by the flow from [the well of remembrance] through which dream water ferries to the living those deeds that the shadows no longer need" (Illich 1985, p. 31).

Water's life and death meaning can also often be devastatingly concrete. As Strang (2005, p. 105) wrote, water is "literally [the] 'essential' matter of life and death." Researchers who attend to water's materiality find that water is an important place of cultural and social memory, physically holding traces of what has happened before, offering evidence of life and death in its waters (Naguib 2009; Wardi 2011; MacLeod 2013; Griffiths 2014). Ecocritic Anissa Wardi (2011) used an African American historical perspective to explore water's molecular memory of the slave trade. During the middle passage over the Atlantic Ocean, it is estimated that five percent of the human cargo died on short trips, while a quarter died on three-month trips (Johnson 1999 in Wardi 2011). Overall, millions died, many because of dehydration or drowning. "Humans, who lost their lives in the currents...by their very materiality [and sheer numbers], shaped the composition of the waters" (Wardi 2011, p. 7). Because of this nexus of death, mourning and water, bodies of water, and particularly the Atlantic Ocean, have become important sites of cultural memory for African Americans, figuring in the works of Toni Morrison and Langston Hughes, among others (Wardi 2011). The confluence of migration, seawaters, life and death, and desperation continues today. More than 40,000 people are estimated to have died while attempting to cross the turbulent waters of the Mediterranean Ocean as migrants since the year 2000 (Brian and Laczó 2014). As a solvent, seawater receives and remembers these tragic deaths, but it cannot absolve us, collectively, of responsibility.

Geographer Hywel Griffiths's (2014) discussion of a major Welsh hydro-political conflict is another example of life being subsumed by water, in this case not people, but

an entire place. In the 1960s Liverpool Corporation flooded the culturally rich Welsh village of Tryweryn for the purpose of expanding Liverpool's residential and industrial water supply. Decades later, references to the event permeate Welsh contemporary poetry and song, and graffiti far from the flood site reminds the Welsh to "Remember Tryweryn" (Griffiths 2014, p.455). The reservoir waters hide the remaining material traces of the decaying village below the water's surface. For many of the Welsh, bodies of water continue to hold negative colonial associations—having become a visceral reminder of the "symbolic flooding of [the Welsh] nation" (Griffiths 2014, p. 466). At the same time, one could argue that the 'death' of the village caused by the flood also offered life to culture, as a lynchpin for the strengthening and expression of a nationalist identity (Griffiths 2014).

In each of the above examples, water, which offers life to every living thing, also has a key role to play in death. In most cases, death is not the end of the story. From death comes renewal, whether through new life, art and poetry, or the strengthened identity of a culture. Water's powerful force for generation and regeneration is the focus of the next section.

2.2.4 Generative and Regenerative

Water's generative and regenerative powers can be found in everyday lives and livelihoods, in socio-cultural practices, beliefs and myths, in watery places, and also in the inner world of the creative imagination and the unconscious. Our own bodily fluids are natural expressions of this theme, whether it is the life-starting potential of semen, the nurturing first-water experience that amniotic fluids offers, the cathartic effect of tears, or the healing and regenerative potential of blood. To immerse in waters, bask in their steam, and shock one's self with alternating hot and cold streams all create therapeutic effects or physiological change. Water places, from springs and estuaries, to puddles and primeval oceans, signify fecundity, transformation, and eternity.

Gestation, birth and rebirth, in literal or metaphorical forms, are strongly associated with waters. Often these waters are gendered, such as the waters of the womb, which, though full of movement, exchanges, and the white noise of bodily functions, are more often linked to a notion of quiet and stillness. French philosopher Gaston Bachelard (1983 [1942] p.14) described waters as profoundly maternal: “Water swells seeds and causes springs to gush forth. Water is a substance that we see everywhere springing up and increasing. The spring is an irresistible birth, a continuous birth.” It is not only the waters themselves that are associated with the maternal. Strang (2004, p.23) discussed the iconic image of women as water carriers, an image with historical and contemporary relevance. As water carriers, Strang argued, women are the “literal and metaphorical ‘bearers of life.’” Interestingly, in a qualitative study of participants’ use of water in their urban Australian backyards during a period of city-imposed water restrictions, geographers Lesley Head and Pat Muir (2007) found a contemporary incarnation of the archetypal water-carrying woman. “In an echo of earlier times in history, busy women are prepared to become water carriers,” lugging shower-water daily, the only possible way to keep their gardens alive during drought conditions (Head and Muir 2007, p. 901). Of course, this contemporary Western version of women water carriers is not solely a new incarnation across time. In different cultural and class contexts there remain many places—for example, in rural Nepal (Rousselot 2015) and Thoreau, New Mexico (Tory 2015)— where women, and more often girls, are depended upon to fetch water from local streams, ponds, and public taps for household use and survival (Aureli and Brelet 2004).

Waters carry generative and regenerative meanings in part because of their cleansing qualities. In everyday rituals across many cultures and religions holy waters are used for blessing, including several times a day in the case of Islamic ablutions (Faruqui *et al.* 2001). Holy waters are also used to signify significant passages, such as in Christian baptism, Jewish mikvah rituals, or the Hindu death rituals documented by Oestigaard (2006). Because water denotes purity, transparency and freshness, its use in religious rites is thought to bring inner transformation and rebirth (Illich 1985). These meanings are not restricted to formal religious ritual, however. Generative and

regenerative waters flow through secular and spiritual rituals of renewal, as well as through art and literature. For example, Hamlin (2000) traced the history of the contemporary Western mineral springs and spa industry, whose waters were heavily promoted from the 16th century to 19th century for their overall health properties, as well as their capacity to cure disease, ease arthritis and other ailments, and aid in fertility and childbirth. In another example Wardi (2011) showed how rivers in African American art and literature are a place of rebirth, because of the movement they offered to escaping slaves. “The passage across river water is portrayed...as baptismal in nature, as characters travel these arteries of the nation to escape stultifying climates” (Wardi 2011, p. 64). With water, sins, ill health, or aspects of identity may be washed away, so that the person can move forward in life, transformed.

Freud and Jung, whose work Strang (2004, p.67) referred to as providing a “European ‘mythology of the mind,’” drew heavily on generative water imagery in their work. Though their analyses are not so fashionable in contemporary psychological thought, Strang (2004) found evidence of their influence on the ways in which participants in her ethnography of water in the UK Stour Valley used water imagery to describe their emotional and mental processes. It was Jung who proposed water as an archetypal symbol of the unconscious (Strang 2004). This symbol has layered meanings that suggest the dual natures of both water and the human mind. On the one hand is the contrast between the irrational “deep and wild ‘well’ of the unconscious and the surface of the rational ‘cultured’ self” (Strang 2004, p. 68). But on the other is the dual nature of the unconscious itself that can be both an alien depth wherein individuals might lose themselves, and a source of creativity and regeneration, in which people might access their deeper selves (Strang 2004). While these symbolic meanings of water permeated the ethnographic accounts in the Stour Valley, water creation myths provide possible evidence that some of these symbolic meanings appear across cultures other than in the Western world.

Creation myths, as King (2003, p. 10) argued, contain “relationships that help to define the nature of the universe and how cultures understand the world in which they

exist.” Many creation myths involve waters, whether they are conjured, divided, or plunged (Illich 1985). These waters are often associated with chaos or what Chen (2013, p. 278) called a “transformational and generative anarchy.” Cultures from central and northern Asia, North America, India and Russia each feature versions of the Earth Diver myth, a story of a god or animal who dove down to the bottom of the sea to bring up grains of earth (Ball 2001). In the Judeo-Christian creation myth, God separated the watery world into sky and sea, the latter from which the earth rises. The scientific “creation myth” also led to the sea. After the Big Bang created a universe of protons and electrons, these formed water in space, and that water was delivered to Earth by comets and collisions. There it evaporated and condensed as the earth cooled, raining the oceans down (Ball 2001). Eventually algae and then bacteria formed in this sea and life on Earth began (Ball 2001). As with the unconscious, the primordial ocean was “water as undifferentiated source – a ‘sea’ of potential” (Strang 2004). The memory of these original waters is retained in everyday waters today. Whether in amniotic fluids, a vernal pond, or the barely explored depths of the ocean, the association is of a place where life teems. People’s reliance on these core water meanings of life, death and renewal mean that when generative waters are threatened, deep anxiety can result (Strang 2004).

Through simple everyday rituals and extraordinary pilgrimages, people seek waters’ generative and regenerative qualities, both symbolic and concrete. However, it is not difficult to find matters of power and agency mingling within these rejuvenating waters. In my daily walk through downtown Kitchener, I find balm in the large reflecting pool in front of the city hall, as artificial as it may be. But the joyful one-story tall fountains of water that shoot out of the pool are not just there to celebrate life. They also exist as a none-too-subtle assertion of the city’s might.

2.2.5 Symbol of power and agency

Attending to water’s material and metaphorical flows offers various examples of the ways in which water is “the ultimate symbol of energy, potency and the ability to

extend human agency outwards into the world” (Strang 2005, p. 111). This energy and potency is an echo of the striking power and agency that water itself holds in its landscape-shaping flows and climate-shifting currents (Gibbs 2014). Taking inspiration from the materiality of water, a growing number of geographers use water’s agency as a starting point for analysing the social, historical and geographic processes through which water is produced (Swyngedouw 2004; Kaika 2005; Linton 2010; Bakker 2012; Gibbs 2014). Geographer Karen Bakker (2012) urged further consideration of the context of power and authority in which water and its assemblages are produced. To acknowledge “that the ‘things’ (pumps, dams, canals), which make a difference for the way social relations unfold, are not merely pre-given substrates that enable and constrain social action” offers new possibilities, as “many of the precepts and concepts with which we customarily order the world” are called into question (Bakker 2012, p. 621). Such analysis could reveal ways in which conventional water distribution and treatment systems predetermine certain aspects of people’s water relations, and thereby limit their capacity for agency (Sofoulis 2005).

Strang (2004) provided an example of how to analyze waters’ hydrosocial flows through power. She reviewed European history to investigate the relationship between the technical enclosure of water and homologous shifts in material culture—from wells and vessels to pumps and pipes. Such changes mirrored similar societal shifts in power dynamics. Since value is encoded in an object in which human agency is invested, the historical act of carrying water for daily use may have ensured value for both water and the women who carried it (Strang 2004). Strang argued that there is evidence that this was the case during the time of early settlement of the Stour Valley. During the time when women were primarily responsible for water collection and management, there was widespread worship of female deities, indicating they benefitted from relative political and religious equality. According to Strang (2004), women were among the first groups to be disenfranchised as water control shifted from collective responsibility to meet increasingly complex urban water needs. Naguib (2009) found that this was the experience amongst the old women of the Palestinian village of Musharafah, a place where women formed most of the population. “Listening to [the women] gives us the

possibility to understand that ‘power’ in ‘empowerment’ is problematic” (Naguib 2009, p. 155). For the old women, household water was their “essential contribution to the working structure of the community” (Naguib 2009, p. 156). During the Palestinian election campaign of 1995, Um Awad, one of the women of Musharafah, spoke up.

“The old women,” [she said] could tell [the male organizer] a thing or two about water. “Do you want to go back to carrying the water on your head?” the young man asked. Her answer was “It is better than having no water in the tap and paying money for each drop. Look around you, we have nothing to do.”

Naguib (2009, p. 155, original italics)

The women were initially positive about the piped water that would come to their village, as a result, in part, of economic liberalisation. Their experience of the new economic regime, as well as piped water, was not everything they expected. Naguib found that they were especially vulnerable to the new management systems that accompanied the water changes. As the situation for these women changed, the numbers of them living alone and in poverty in Musharafah increased (Naguib 2009).

The way we think *with* and *about* water also affects ideas about the order and disorder of socioeconomic and ecological systems, and these affect water’s capacity as an expression of social standing (Strang 2005). In their study of the water values and practices that participants expressed through their interactions with their backyards in urban Australia, Head and Muir (2007) found that the majority of their study shared a belief in the importance of water conservation. However, the researchers noted the tension and disconnect between such a widespread conservation ethic and many participants’ desire to include more ‘watery places’ around their homes, including swimming pools, ponds and streams. Researchers in environmental psychology have long investigated the reasons—both structural and psychological—for the gap between people’s environmental attitudes and their actual behaviour (Gifford 2014). Head and Muir (2007, p. 899) found that their participants, especially the young and affluent or middle-class, looked to household water features for tranquility, peace, beauty and the sensory experience of water, longings which were “both fed and gratified by the lifestyle

industry.” Strang (2004; 2005) found that in Dorset, UK such water luxuries in and around the home provided desirable symbols of social power and agency. So, too, did the ownership of riverside land (Strang 2004; 2005).

The theme of power and agency can also be detected in societal concerns about cleanliness and odour, with waters’ flows heavily implicated. By washing away soil, shit and mud, water absolves us of these sticky reminders—and any related encumbrance—of our recent activities (Illich 1985). Terror management theorists argued that humans wish to avoid confronting reminders of their own mortality via their bodily functions² (Goldenberg *et al.* 2001). To acknowledge our essential animal nature means accepting the fact that we will each eventually die and decompose. In order to psychologically distance us from this fate, we use a variety of methods to transform their bodies “from something creaturely and material into something symbolic and ethereal” (Goldenberg *et al.* 2001, p. 428). Geographer Maria Kaika (2005) placed people’s increasing distance from nature in a historical context, describing how contact with uncontrolled water in the forms of urban rivers, ponds, puddles and sewage became increasingly considered harmful in the first decades of the 1900s. Meanwhile, the modern, urban, middle class began to covet controlled water in their domestic sphere. While water features such as indoor plumbing, decorative fountains and private swimming pools³ were a mark of social status, comfort, and protective distance from Others (Kaika 2005), they also helped to shield modern home dwellers from mortality reminders by swiftly carrying them away via plumbing. In the context of the modern city, “good water”—that is to say “clean, processed, controlled, commodified” water—is associated with health-giving

²Goldenberg *et al.* (2000) acknowledged that cultures differ greatly in how they address the existential problem of human mortality. Because people in Western cultures often view humans as separate from animals and nature, they exaggerate this distinction. Because people in traditional or aboriginal cultures tend to view themselves as connected to and a part of nature, their response to the problem of mortality is to imbue all of nature with symbolic and spiritual power.

³Social historian Jeff Wiltse (2007, p. 2) wrote a fascinating social history that investigates shifts in power and agency as reflected in the waters of United States’ public pools. In the late 19th century pools began as “austere public baths” where immigrant, black, and native-born white labourers swam and washed together, with alternating days for women and men. Over the next 60 years, public pools had transformed into “leisure resorts, where practically everyone in the community except black Americans swam together.”

attributes (Kaika 2005, p. 54). In contrast, “dirty, grey, metabolized, nonprocessed, noncommodified” water is perceived to be bad, and even threatening (Kaika 2005, p. 54). Interestingly, Head and Muir’s (2007) findings indicated that people living in Australian cities were willing to touch ‘bad’ water, specifically domestic greywater, if it meant keeping their gardens alive in difficult drought conditions. Whereas Strang (2004) and Kaika (2005) concluded that this good/bad water association had led people away from understanding the inner workings of their household water systems, a significant proportion of the participants in Head and Muir’s (2007) study demonstrated more than a basic level of awareness of their pipes and drains. Furthermore, many of these participants showed agency by—often labouriously—reconfiguring, adapting, and sidestepping household water technology in order to conserve water for outdoor use (Head and Muir 2007).

Another more contradictory example of water as a symbol of power and agency can be found in how water’s flows shape economic thought. Strang (2004, pp. 124-125) offered several examples of how we think about money with water, including ‘cash flow,’ the ‘circulation,’ ‘pooling’ and ‘pouring into’ of funds, and the ‘trickle down’ approach to economics. The use of water imagery to describe the movement of capital is pervasive, in part because of the importance of the water concept of ‘circulation’ as a modern means for imagining the exchange, expression, absorption and transformation of ideas, beliefs, knowledge and values (Illich 1985; Strang 2004; MacLeod 2013). The link is not simply metaphorical, however. Since water itself *is* a form of wealth, access to water, to some degree, is determined by a person’s position in terms of wealth and power (Strang 2004; Strang 2005; MacLeod 2013). As Strang observed, the “unlimited use of water is equated with affluence, while restrictions denote the undesirable opposite, poverty and powerlessness” (Strang 2004, p. 125).

Under the guise of watery metaphors, capital can do real damage. Water researcher Janine MacLeod (2013) raised alarms about the negative consequences of this symbolic linkage. By borrowing from water’s characteristics of fluidity and movement to describe the movement of capital, she argued that we also transfer water’s

positive meanings of health, wellness, agency and livelihood to capital. When veiled in watery imagery and meanings, the “devastations wrought by floods or droughts of capital may be more readily interpreted as unfortunate inevitabilities” (MacLeod 2013, p. 42). Indeed, MacLeod argued that this appropriation of water’s meanings too often results in harm to water itself, when capital flows become the means of converting healthy waterways to profit, as in the Ontario Ministry of Environment’s controversial agreement with Nestlé, permitting the corporation to sell bottled water taken from an aquifer that may feed into the Grand River and Credit River watersheds, even during drought conditions (McDiarmid 2013)⁴. Arguably, this decision does not reflect the reality that healthy waterways are the foundation of well-being and wealth, and therefore should be safeguarded. MacLeod (2013, p. 43) argued that is only because “capital [has] to some degree usurped water’s place in the dominant cultural imaginary as an unquestionable and irrefutable source of life” that these outcomes could be considered to become politically palatable.

Through water we hold a mirror to ourselves, measuring the “state of society” (Linton 2010, p. xvii) and “the extent to which identity, power and resources are shared” (Strang 2004, p. 21). By investigating the kinds of power and agency implicated in waters’ flows, and vice versa, people’s social and cultural identities are also revealed.

2.2.6 Substance of social and spiritual identity

Strang (2004; 2005) argued that water is a material and symbolic substance of social and spiritual identity, and that such identities are almost always intertwined. For Tajfel and Turner (1979), social identity was the sense of self that a person gained

⁴In 2012 when Nestlé applied to renew its permit the Ontario Ministry of the Environment approved the renewal, with two new conditions that would force the company to reduce water removal during droughts (McDiarmid 2013). Nestlé appealed the conditions to the Ontario Environmental Review Tribunal. Subsequently, Nestlé and the Ontario Ministry of the Environment reached an agreement to remove the two drought conditions from the permit. Advocacy groups Wellington Water Watchers and the Council of Canadians succeeded in challenging this agreement by launching their own appeal. The tribunal sided with the water advocates. In British Columbia, drought conditions have created a growing opposition to the bottled water industry (On the Coast 2015). New regulations mean that companies like Nestlé will have to pay for water previously taken for free, but the amount is negligible: \$2.25 per million litres.

through his or her identification with groups. For many, spirituality plays a significant role in identity formation (MacDonald 2009). Spirituality connotes “an experientially grounded sense of connection with, or participatory consciousness of, the “sacred,” ‘transcendent,’ “numinous” or some form of higher power or intelligence (Elkins 1990 and Grof and Grof 1990 in MacDonald 2009, p. 87). It is partly because of water’s inescapable physical and metaphorical presence in our lives, that it has such a powerful influence on people’s identity in the context of spiritual and social relationships. As Strang (2004, p. 123) wrote, “People are socially connected by water because they share this ‘essential’ substance, because they are spatially linked by water courses and systems and—crucially—because the characteristics of water provide a metaphorical language for conceptualizing social being, knowledge and identity.” Such identities are not fixed and stable, however. As with waters, identities are subject to constant change and transformation, expressed through a multitude of identifications (Dubow 2009). Strang (2004) drew from anthropology to define identity as the individual or collective persona constructed through interactions with others. Meanwhile, human geographers have emphasized the place-based nature of identity, with new thinking about place emerging from changing understandings of identity. From this perspective, place and identity transform each other in their continuous process of *becoming* (Massey 1994). Attending to the ways waters flow through this process offers insights into changing ideas about who—and what—is “in place” or “out of place” (Cresswell 1996).

Sharing water across a watershed links people within and between social groups, for better or for worse (Strang 2004; Strang 2005; Naguib 2009; Wateau 2011). Such sharing may be expressed and negotiated through a variety of structures and rituals. Fabienne Wateau (2011) reviewed anthropological studies of water sharing and found that active water sharing based on traditional technology and systems generated greater social skills and connection for its users. The tradition depended on people working together in complex organizational systems steeped in histories of place and people. In Wateau’s own study, farmers in the region of northwest Portugal remained staunch defenders and practitioners of an ancient and intricate water sharing practice, though the process required twice-daily meetings of rights-holders. When traditional

water sharing was replaced by more technically efficient water distribution systems, conflicts declined. But so, also, did sociability (Strang 2004; Naguib 2009; Wateau 2011). As Wateau explained:

Technical performance [in water distribution systems] did not translate positively into sociability. Sharing water, a sensitive matter that necessitates discussion and assumes some degree of altercation, forced *de facto* a search for solutions, compromises and agreements between the different parties. Negotiations and tensions constituted the social environment of these communities; water supplied a possible framework for asserting differences and identities.

Wateau (2011, p. 260)

In contrast, when indoor plumbing is connected to centrally managed water systems, access to water is a matter of individual consumption, with water decisions left to water practitioners, planners and elected officials.

Spiritual and pragmatic water rituals also act to join people. Strang (2005, p. 109) argued that through baptism water becomes a “shared substance of a community,” in which group identity joins people together, despite differences. Just as rivers accept the waters of countless smaller tributaries during their journey to the sea, Strang (2005) found that the waters of baptism were a means for Aboriginals in Kowanyama, Australia and Christians in the Stour Valley, UK to absorb new community members, often babies, into local cultural, religious and social identities. “There is obvious coherence between the qualities of water and its ability to join separate flows, and the metaphors of inclusion and absorption that characterize constructions of religious and social identity and the ‘flowing together’ of individual life times” (Strang 2005, p. 108). Foot washing, practiced in ancient Jewish and Greco-Roman settings is another example. Used most commonly for hospitality, “[f]oot washing was a way of welcoming one’s guests to one’s home and one’s table; after a journey, a person’s feet would become dusty, and the host offered water so the guests could wash their feet” (O’Day 2014, p. 94). They would do this themselves, or in a wealthy household it would be done by a servant, but not by the host (O’Day 2014). For Christians, foot washing is a sacrament,

because Jesus washed the feet of his disciples before the Last Supper. O'Day (2014) argued that with this act Jesus blended the role of host and servant, and invited the disciples into a more equal friendship with him. Whether it is the actual sharing of water for domestic use, or symbolic sharing of water, water sharing interactions and negotiations provide an avenue for the affirmation and re-affirmation of community relationships, identities, and territorial claims (Wateau 2011).

Water places and waterways hold sacred, cultural or heritage significance for individuals, communities and nations (Strang 2004; Strang 2005; Neufeld 2008, Naguib 2009, Linton 2010; Wateau 2011). Strang (2005) described how Aboriginal clans in Australia identified strongly with the particular waters of their homes, many of which were sacred sites connected by ancestral tracks. The clans used these water identifications as a base for decision-making as to who—and what—belonged or did not. In Kowanyama, situated at the downstream end of the Mitchell River, clanspeople were concerned by pollutants from upstream mining and farming activities. Such inputs signified an ephemeral version of “invasions of ‘otherness’ that...followed—and continue to follow—the Mitchell River westwards” (Strang 2005, p. 110). Closer to home, historian David Neufeld (2008) reflected on the challenge of breaking away from the myth of Canada’s “Laurentian” narrative, especially for Parks Canada, an institution whose purpose was, in part, to unify the nation. Until the 1980s, the story Parks Canada had promoted was one in which Canada, as a nation, formed through economic and political activities along the St. Lawrence Basin. This creation myth represented a “Euro-Canadian vision of common traditions emphasiz[ing] the heritage of trans-Atlantic cultural ties to Western Europe, the geography of the country, and the political history that established its boundaries” (Neufeld 2008, p. 7). As a historian for Parks Canada, Neufeld supported a series of collaborative oral history projects in indigenous communities. The result was the realization, on behalf of Parks Canada staff, that perpetuating the idea of Canada as one nation, with one story, had meant the neglect of a parallel indigenous narrative in which Canada was formed through a multiplicity of nations and narratives from disparate cultural communities (Neufeld 2008). The

nation-building story, as projected onto the St. Lawrence waterway, reinforced how First Nations communities were and are too often out of place in their own lands.

Whether it is the waters of our own bodies or specific waters in place, water is integral to how identity is constructed (Strang 2005). Bodily waters, in the form of blood, tears, semen, milk and amniotic fluids, flow through social and sacred connections (Strang 2004; Strang 2005). The extent to which people are willing to be in contact with each other's bodily fluids is an indicator of interpersonal closeness, or lack thereof, from the intimacy of breastfeeding to the extreme social isolation caused by viruses such as Ebola or, in many parts of the world still, HIV/AIDS (Strang 2004). Strang (2005) argued that we experience the threat of water pollution in part as anxiety about the pollution of our own bodies and blood, fears steeped in ideas about blood, race, and purity. Western ideas about purity are rooted in Leviticus's laws of purity from the Judaic tradition (Berthold 2010), but contemporary manifestations are found in the frequent use of water imagery—'coming in waves,' 'flooding in,' 'swamping'—to express concerns about immigration and changing demographics (Strang 2004). People's sense of what it means to be "pure" or "clean" is often complex and contradictory. While, many millions of pilgrims have travelled to the holy town of Varanasi to bathe in the purifying and holy waters of the Ganges River, Tvedt and Oestigaard (2006) noted that researchers, from a physical geography perspective, would describe the waters of the Ganges River as highly polluted, contaminated by chemicals, sewage, and the ash of countless funeral pyres.

[Yet,] empirical descriptions of the Ganges and of other sacred Indian rivers leave out the more complex structure perceived and comprehended by devoted Hindus. For many Hindus the Varanasi that one sees is merely a shadow, a kind of symbol or expression of the genuine but invisible Varanasi situated on the banks of a river, which flows in heaven.

(Tvedt and Oestigaard 2006, p. xiii)

In North America, the focus on purity and cleanliness is informed partly by colonial ideas about race and culture in which "civility, high class, and whiteness" were valued and "'dirtiness" ha[d] not only physical but moral implications" (Berthold 2010, pp.

2,10). Ironically, this obsession has led to rampant consumption of bottled water and antibacterial soap, both of which products have polluting affects on the environment and therefore, ultimately, our own bodies (Berthold 2010).

Wardi (2011) urged us to also consider how the historical, cultural and socioeconomic processes through which social identities are constructed determine the experiences we have of water, and the meanings water holds. She argued that in African American literature, nature, including water, is often something to be feared, a “politically charged racialized topography, imprinted with a history of slavery, racism, and barbaric Jim Crow practices” (Wardi 2011, pp. 12-13). In her essay “Black Women and the Wilderness”, journalist Evelyn White (1995) wrote about her experiences as a black woman teaching creative writing for several summers in a nature retreat setting on the Mackenzie River in Oregon.

I wanted to sit outside and listen to the roar of the ocean, but I
was afraid.

I wanted to walk through the redwoods, but I was afraid.

I wanted to glide in a kayak and feel the cool water splash in my
face, but I was afraid

(White 1995, p. 377)

A failure to take into account people’s complex social and place-based identities when considering people’s water experiences can have serious implications. In 2010 the Red Cross and Lifesaving Society estimated that the drowning rate for Aboriginals in Canada is 6-10 times higher than the national average (Vogel 2010). In a review of water safety practices, many Inuit and First Nations communities said the typical drowning prevention training was culturally irrelevant. Swimming lesson curricula were typically designed by Euro-Canadians for use in swimming pools, and were taught during the summer by teenagers from the South who lacked the traditional knowledge of how to deal with extremely cold waters and ice (Vogel 2010). In the mix of infinitely varied socio-cultural relations with water, climate change adds a layer of confusion by causing dramatic changes in what might have been previously known local water landscapes.

In this section I reviewed the four common water themes proposed by Strang (2004; 2005). Though these meanings appear consistently across cultures, places and time, expressions of these meanings are highly variable (Gibbs 2010). Water meanings are shaped by the specific landscapes, climates, cultural beliefs and customs, and socio-economic systems through which water flows. In the following section I propose that translocality is a useful concept for exploring this tension between shared water meanings on the one hand and the infinite iterations of the expression of such meanings on the other.

2.3 Translocality

The relatively new concept of translocality offers a descriptive and analytical tool for inquiry into how places are constituted by their interconnectedness with other places (Freitag and Von Oppen 2010). In their review of translocality-related literature, sociocultural anthropologist Clemens Greiner and human geographer Patrick Sakdapolrak (2013) found that since the early 2000s the concept has most often been used to investigate how the phenomena of interest to transnationalism research—mobility, migration and social-spatial relations—operate and interact outside of the limits of the nation-state. In this body of research, the focus is typically on the movement of people. Of more interest for my research is how translocality is being used as a research perspective in its own right, offering “a way to understand the local as situated within a network of spaces, places and scales⁵ where identities are negotiated and transformed” (Brickell and Datta 2011, p. 5). In recent research, these more novel considerations of translocality have focused on corporeal, material and symbolic flows, including people, goods, ideas, images, diseases, knowledge, styles, services, and capital (Oakes and Schein 2006; Freitag and Von Oppen 2010; Greiner and Sakdapolrak 2013). In this way, research in translocality highlights the presence of local and global dynamics in places and relations, such as within and between families, homes, neighbourhoods, and cities (Greiner and Sakdapolrak 2013).

⁵From a translocal perspective, scale is non-hierarchical, fluid, interconnected and dynamic (Oakes and Schein 2006).

The influence of feminist geographer Doreen Massey's ideas about place is evident in the emergence of translocality as a research perspective (Massey 1994). She proposed a 'global sense of place' in refutation of David Harvey's (1996) argument that place-based approaches to research too often contributed to parochial, reactionary, racist and xenophobic attitudes and actions that threatened to exclude others from place in order to stop place from changing (Harvey 1996; Cresswell 1996; Cresswell 2004;). Unlike Tuan (2011 [1977]), for whom place is a pause, Massey (1994) rejected any notion of stasis within place:

The identities of place are always unfixed, contested and multiple. And the particularity of any place is, in these terms, constructed not by placing boundaries around it and defining its identity through counter-position to the other which lies beyond, but precisely (in part) through the specificity of the mix of links and interconnections *to* that 'beyond'. Places viewed this way are open and porous.

(Massey 1994, p. 5, original emphasis)

Many researchers in translocality are interested in this extroverted nature of place and the tensions and contradictions therein. One focal point of their inquiry is how the micro-localities of the body, home, neighbourhood and city are shaped by movements, interactions, circulations and processes that forge linkages to other localities across many scales (Oakes and Schein 2006; Freitag and Von Oppen 2010; Brickell and Datta 2011; Greiner and Sakdapolrak 2013). Massey (1994) reminded us that immobility and fixedness will continue to exist even in the face of increased globalization. Though she wrote before the impact of rapid global communications, her analysis remains relevant to translocality research. In developing her case for a "global sense of place", Massey (1994) cited Birkett (1991), who offered a striking example of translocality in the context of water, specifically the Pacific Ocean:

Jumbos have enabled Korean computer consultants to fly to Silicon Valley as if popping next door, and Singaporean entrepreneurs to reach Seattle in a day. The borders of the world's greatest ocean have been joined as never

before. And Boeing has brought these people together. But what about those they fly over, on their islands five miles below? How has the mighty 747 brought them greater communion with those whose shores are washed by the same water? It hasn't, of course. Air travel might enable businessmen to buzz across the ocean, but the concurrent decline in shipping has only increased the isolation of many island communities... Pitcairn, like many other Pacific islands, has never felt so far from its neighbors.

Birkett (1991, p. 38)

To the image of frequent flyers and island dwellers can be layered another of a growing group of people who turn to water for slow tourism. These travelers seek lowered-carbon adventure as they cross the ocean, for example on freighter ships that allow a few tourists—often at great expense—to join a delivery and trade-oriented voyage, or as skippers on their own private sailboat. If the ability to move across the ocean itself is a symbol of power and agency, such contrasting experiences reflect dramatic differences in access. However, they also suggest dramatically different relationships to place and movement. As with Massey and Birkett, researchers in translocality are equally concerned with those who are mobile, less mobile, *and* immobile, and how they each interact with the corporeal, symbolic and material flows described above (Oakes and Schein 2006; Brickell and Datta 2011; Greiner and Sakdapolrak 2013). Increased interconnections do not necessarily mean increased equity. Greiner and Sakdapolrak (2013) find that translocal linkages can foster horizontal and emancipatory exchanges of ideas, knowledge, practices, and materials. Alternatively, such exchanges can be uneven and hierarchical, and serve to deepen inequities or create new ones (Oakes and Schein 2006; Greiner and Sakdapolrak 2013).

Researchers described the phenomenon of being simultaneously situated across changing places as a key aspect of translocality (Oakes and Schein 2006; Brickell and Datta 2011; Hou 2013). In other words, people may feel an attachment for or identify with a variety of places at once. In the following hybrid place concepts, summarized in Table 2.1, a variety of researchers engage with this idea. Many of these concepts focus

on the urban environment, though it is evident from the translocality literature that the notion of an extroverted sense of place is relevant to rural and local locales in the global South and North (Oakes and Schein 2006).

Table 2.1: Hybrid place concepts

Concept	Description	Researcher
Ethnoscapes	Landscapes of people on the move who constitute the shifting world.	Appadurai (1990)
Kaleidoscapes	Landscapes in which migrant group identity is no longer strongly territorialized, spatially bounded or culturally homogenous, but fluid.	Nasser (2004)
Mongrel Cities	Cities are created in part by learning together through difference. Celebrates rather than fears hybrid urban life	Sandercock (2003)
Multicentred Society	Hybrid interactions between place and identity are politically important and can contribute to greater democratic control of place.	Lippard (1997)
Transcultural placemaking	Investigates identity formation processes in the context of placemaking. Emphasizes diversity, hybridity and cross-cultural exchange in the context of placemaking.	Hou (2013) Zambonelli (2013) Rios (2013)

Ethnoscapes is a term coined by social-cultural anthropologist Arjun Appadurai (1990, p. 297) to describe the “landscapes of persons who constitute the shifting world

in which we live: tourists, immigrants, refugees, exiles, guest workers and other moving groups and persons.” The unprecedented extent to which such landscapes of human motion impact the politics of and between nations merits further attention, Appadurai (1990) argued. Ethnoscapes—along with mediascapes, technoscapes, finanscapes and ideoscapes—are fluid, irregular building blocks of “multiple worlds which are constituted by the historically situated imaginations of persons and groups spread around the globe” (Appadurai 1990, p. 296-297).

Building on Appadurai’s concepts, urban design theorist Noha Nasser described *Kaleido-scapes* as “landscapes of migrant group identity which are no longer tightly territorialized, spatially bounded or culturally homogeneous” (Nasser 2004, p. 76). Her concept linked closely with translocality as she drew in particular on ideas about transnationalism. The idea of kaleido-scapes built on Appadurai’s ethnoscapes, but instead of the ‘otherness’ and reified culture that ‘ethno’ implies, Nasser intentionally chose the metaphor of a kaleidoscope that “holds within it the possibility of shifting the focus from static and enclosed interpretations of ‘ethnic enclaves’ to a more dynamic and open concept of re-territorialized localities” (Nasser 2004, p. 78). Interdisciplinary researcher Ayonna Datta (2013) argued against the deterritorialized concept of translocality that Appadurai (1990) and Nasser (2004) proposed, where virtual connections and social networks minimize the importance of connections across physical places.

Urban planning theorist Leonie Sandercock (2003) offered the *Mongrel City* as an idea that focuses on the urban scale, but is closely linked to Appadurai and Nasser’s metaphors in its emphasis on flux. Sandercock’s cities are messy and disjointed beacons of possibility. She borrowed from Salmon Rushdie’s “love song to our mongrel selves” (Rushdie 1992, p. 394, in Sandercock 2003, p. 1) to offer a love song to the great potential of hybridized urban life. In mongrel cities, “difference, otherness, fragmentation, splintering, multiplicity, heterogeneity, diversity, [and] plurality prevail” (Sandercock 2003, p. 1). Like Rushdie, Sandercock argued that hybridity should be “celebrated as a great possibility: the possibility of living alongside others who are

different, learning from them, creating new worlds with them, instead of fearing them” (Sandercock 2003, p.1).

Multicentred society is a term that art critic Lucy Lippard (1997) contributed. Several geographers have engaged with her writings about multiple senses of place (Mitchell 2001; Cresswell 2004; Williams and Van Patten 2006). Multicentredness describes the hybrid interactions of place and identity, in the context of increased human movement. As she wrote: “We are living today on a threshold between a history of alienated displacement from and longing for home and the possibility of a multicentred society that understands the reciprocal relationship between the two” (Lippard 1997, p. 20). Lippard investigated the politics of how we change and are changed by place, and is hopeful about the potential for multicentredness to facilitate enhanced democratic control of place (Lippard 1997; Mitchell 2001; Williams and Van Patten 2006).

Finally, *Transcultural placemaking* is a framework for analysis and action proposed recently by a cross-disciplinary group including landscape architects, geographers, community developers, and urban planners led by landscape architect Jeffrey Hou (2013). Planning researcher Vera Zambonelli (2013) defined ‘placemaking’ broadly to encompass: the processes in which abstract space is transformed into meaningful place (Tuan 2011 [1977]); activities for the purpose of material production of place; activities for the purpose of ‘placing’ attachment and memory; and, mundane everyday practices and activities (Cresswell 2004). Transcultural placemaking harnesses the potential for “[engendering] diversity, hybridity, and cross-cultural learning and understanding” while encouraging intentional enactment of places (Hou 2013, p. 4). Chronologically, transcultural placemaking is the most recent of the above hybrid place concepts and indeed many of the other ideas have been influential in its development, along with Massey’s ideas (1994) about a global sense of place (Hou 2013). Because of its particular relevance in this research, I will explore this concept further in the next section.

Translocal linkages cause change and transformation. Identities shift, and as identity shifts, so too does culture. Through these processes, places also change, and hybridity prevails. In the next section, I will consider how translocality and placemaking relate to water. In addition, I will investigate how translocal linkages and hybridity might be harnessed for placemaking processes, including 'watery' placemaking.

2.4 Waters, translocality and placemaking

Translocal flows affect waters, and vice versa. This is in part because water is an integral part of what makes place. Water is itself a place, it moves through places, and it flows between and connects places. Its metaphorical and physical flows through place are unavoidable. As places, waters are not just a favourite river, a buried creek or a water treatment plant, they are also our bodies, with "each of us...a walking ocean, sloshing down the hallway with damp saline innards held together by a paper-thin epidermis" (Irland 2007). Sometimes waters are the means by which translocal movements occur, as during the early colonial history of this country, when European fur traders, missionaries and indigenous people moved, and mixed, along Canada's rivers. Whatever means by which people travel, global waters remain important channels for translocal movement today. Tragically, as in the recent deaths of hundreds of North African migrants during an attempted crossing of the Mediterranean Sea, water can also be the means through which movement is halted (Reguly 2015). Despite the inextricable link between water and translocal flows, so far very little research has examined this relationship. One exception is in the field of Indian Ocean studies where researchers considered history, culture, literature, economics and diplomacy in the context of linkages along the Indian Ocean coastline. Historian Anne Bang (2009) noted that translocality is the central research perspective in this field, where hybridity, cultural change and local connections to "elsewhere" are a part of the fabric of people's everyday lives and pasts.

As growing numbers of places become as extroverted as Indian Ocean port towns, the importance of placemaking has not diminished. Instead, geographer Tim Oakes and anthropologist Louisa Schein (2006, p. 21) suggested that translocal linkages between places “[intensify] placemaking since the material and symbolic resources for that placemaking are multiplied with the flows that increasingly link places together.” Social historians Ulrike Freitag and Achim Von Oppen (2010) also explored placemaking in the context of translocality. As mobility and change increased, they observed how individuals and groups sought order by asserting their preferred patterns of action and communication (Freitag and Von Oppen 2010). “The establishment and institutionalization of cultural, social and political structures resulting from translocal practices” could be used either to assert new models or to maintain the status quo (Freitag and Von Oppen 2010, p. 7). Transcultural placemaking makes room for the former. Hou (2013) proposed transcultural placemaking as a framework for self-determination, individual agency and collective action, in which culturally relevant systems and structures can be created. Viewed from a transcultural perspective, “cultures [are seen] not as isolated from each other in today’s urban environments but able to be mutually influenced, constituted, and transformed” (Hou 2013, p. 7). Such processes promote exchange, cultural dialogue, and the critical embrace of diversity (Hou 2013). Listening is important if we are to answer Hou’s call to repurpose placemaking by emphasizing intercultural understanding.

Chen (2013) argued that waters not only have an important role to play in constructing place, they also have a voice to offer, though it is often unheeded. Waters are not silent, even when thought of as an abstract resource. Swyngedouw (2004) offered an example of the interconnected mix of narratives held in a glass of tap water.

If I were to capture some urban water in a glass, retrace the networks that brought it there...[quoting Latour] “I would pass with continuity from the local to the global, from the human to the non-human.” These flows would narrate many interrelated tales: of social and political actors and the powerful socio-ecological processes that produce urban and regional spaces; of participation and exclusion; of rates and bankers; of water-borne

disease and speculation in water industry related futures and options; of chemical, physical and biological reactions and transformations; of the global hydrological cycle and global warming; of uneven geographical development; of the political lobbying and investment strategies of dam builders; of urban land developers; of the knowledge of engineers; of the passage from river to urban reservoir. In sum, my glass of water entails multiple tales of the “city as a hybrid.”

Swyngedouw (2004, p. 28)

The idea of water as resource limits the way we understand water and predetermines how we “construct our relations to place, to others, to environments, to shores, and to communities” (Chen 2013, p. 274). Each glass of water contains a myriad of translocal flows and linkages that, if considered, remind us that this water is really made of waters that are “situated, lively, and shared” (Chen 2013, p. 275). The unruly waters, those that burst pipes and flood cities, do not fit into an ordered sense of what water in place should be, and because of this these excessive and unintelligible waters tend to go unheard as well (Chen 2013).

“When one set of interlocutors (for instance humans intent on unfettered industrial activities) refuses to listen to the communications of another (for instance dying fish populations), the rejected communications are relegated to non-sense, constituting a denial of the intelligibility of the other. Once the voices of others are relegated to non-sensical noise or even to mere static, then a response is no longer required.”

Chen (2013, pp. 277-278)

Thinking *with* water is one way to amplify these often-ignored communications, and change the way we think *about* place (Chen 2013). A ‘watery’ perspective can offer insights into the permeability of places, the seeping of water through place, how water relations join us to others upstream, downstream and across ocean currents, and how water quality and quantity—or lack thereof—shape places (Chen 2013). As with the process of transcultural placemaking, listening to waters will involve both concrete planning endeavours, and reflections of a metaphorical and critical nature. Sofoulis

(2005) described one example of such listening, in which outdated ideas about the proper place of waters were confronted. The Sydney water utility was asked to listen to water when, in 2004, a small company launched a legal challenge against the utility to maintain the right to operate a sewage treatment and water recycling system that would reclaim for neighbourhood use the effluent that the water utility discharged into the ocean. In another example, Wong (in Christian and Wong 2013) took a watery perspective when she compared a small wetland beside a college campus parking lot to a prominently positioned rectangular reflecting pool beside the new eco-building library. One, permeable and connected, teemed with life. The other was sterile. To Wong, 'chaotic' or 'natural' ecological processes were more desirable than 'neat' or 'tidy' human control, though she is in the minority if most campus and municipal landscaping is any indication (Christian and Wong 2013, p. 239). Urban land development that welcomes unruly, excessive waters through swales, rain gardens, cisterns, dry creeks and wetlands offer ephemeral water place for neighbourhood communities, both human and non-human. Like Chen (2013), we can find metaphorical inspiration in water's transgression of boundaries and frequent disregard for physical constraints. We can also ask questions about how the presence and absence of waters in place facilitate or deny opportunities for placemaking, attachment and belonging. Making room in our urban places for waters that allow us to engage with water's fundamental meanings should be part of transcultural placemaking, because such lively waters gather and connect communities.

2.5 Summary

Following Gibbs, I have looked at the variability of water in its forms, aesthetic impacts, landscapes, and associated meanings, rituals, traditions and practices. Hamlin and others showed that thinking *waters* instead of *water* brings our attention to the transformative and dynamic aspects of waters, and their inherent multiplicity. Bakker, Linton and others argued that waters are constituted in part through their interactions with macro processes such as capital flows and cultural shifts, and always in the context

of power. Exploring Strang's work offered an understanding of some of the fundamental meanings of water shared across cultures, expressed in diverse ways according to the specificity of waters, geography, time and culture. Greiner and Sakdapolrak and others described the emergence of translocality as a research perspective which focuses on the implications of increasing connections generated by the movement of material, corporeal and symbolic flows between and across local places. Hou and colleagues introduced the potential impacts of placemaking processes in transcultural environments. Finally, Chen introduced the concept of watery placemaking. In the following section I will describe the methodological approach taken in this study to investigate these themes in the context of immigrant water narratives in Waterloo Region.

Chapter 3: Methodological and ethical framework

To remember water together requires listening to each other's stories of water. As we listen, we can begin to glimpse the fountains, rivers and rains of other places and times that nest, through people's memories, in the waters of here and now. In this chapter I describe my approach to listening that drew from collaborative and feminist methodologies. I explain the ways in which I attempted to share authority with participants, and the limits to this collaboration. As an outsider researcher, I discuss the influence of cross-cultural and intercultural methodological concerns on my research design. Finally, I offer a detailed account of the data collection and interpretive process.

3.1 Methods overview

My research was intended to explore immigrants' experiences of water. For this purpose I used a collaborative oral history method to conduct 15 interviews with immigrants, defined broadly as people who immigrated to Canada within the last 15 years and who resided in Canada at the time of the interview, regardless of their Canadian status. I approached the research as an outsider, separated as I am from immigration by two generations. In an attempt to prevent the harm sometimes caused by researchers in cross-cultural research contexts, I drew on ideas about shared authority and transculturalism. During the interviews I used a collaborative interpretive approach. I then listened to and transcribed the interviews, and began to describe the various water themes in a spreadsheet. Meanwhile I set up three small group meetings for participants to share water stories with each other and provide me with feedback on their thematic priorities. Through collaborative thematic analysis, I used the participant-identified priorities and themes from the literature to interpret the narratives. Throughout the interviews and follow-up meetings, I talked with participants about the possibilities of sharing their water narratives with a broader and more public audience.

3.2 Positionality and learning from people's stories

In this research, I am an outsider, although Bridges (2001) and Tinker and Armstrong (2008) argued that the distinction between outsider and insider is blurrier than it may first appear. My personal experience of immigration is two generations removed. I know very little about the family history on my dad's side, except that each grandparent's families had been in Canada at least one or two generations, trying to scrape livings together in small-town and rural Ontario. When my maternal grandparents talked about their immigration journeys, my grandfather remembered the challenges of learning a new language as a boy, and my grandmother remembered how happy she felt to leave behind the overt classism of Edinburgh society. My Swiss grandfather immigrated as a child to farm with his family in the Niagara Region of Ontario. My Irish grandmother emigrated from Scotland as a young woman to join my grandfather whom she had met when he worked with the Royal Canadian Air Force during the Second World War. According to researcher Victoria Freeman, my lack of awareness of my family history is typical of many North American families descended from Irish, Scottish, or English settlers, including her own.

I was struck by the amnesia of each generation: our family memories often went back only as far as our grandparents...I have come to realize how much immigrants lose of their family memory because it is tied to physical places - to houses, farms, towns, landmarks, battlefields and graves.

Freeman (2000, pp. xvi-xvii)

My own parents chose Milton, Ontario, as the place to raise their family. At that time it was a town of 35,000, bordered mostly by farmland and the Niagara Escarpment corridor. The population changed very little during the two decades in which I lived there because the town lacked additional water for new developments. While Mississauga to the East and Toronto beyond evolved into diverse cities, Milton, at that time, did not. I grew up surrounded mostly by people who looked and seemed fairly similar to me, a white middle class girl with a mixed middle class and working class background. It was not until volunteering overseas after high school and working at a

community development organization after university that I discovered an interest in intercultural communication and learning.

I believe in the transformative power of stories, and that has been a key influence in my research decisions (Rossing and Glowacki-Dudka 2001). In Thomas King's lecture on the power of stories, he quoted Nigerian storyteller Ben Okri who wrote that:

One way or another we are living the stories planted in us early or along the way, or we are also living the stories we planted—knowingly or unknowingly—in ourselves. We live stories that either give our lives meaning or negate it with meaninglessness. If we change the stories we live by, quite possibly we change our lives.

Okri (1997, p. 46)

Lippard (1997) addressed the importance of story in her book, *Lure of the Local: Senses of Place in a Multicentred Society*, a survey of place-based community arts projects across North America. She concluded that stories are powerful tools for communicating across and within mobile societies. Societies are increasingly restless, made up of hybrid places and cultures, with each person's relationship to the local—including our local waters—mediated through complex layers of belonging (Lippard 1997). In fast changing times, stories have become important reference points for communicating values and beliefs (Lippard 1997). It is through cultural forms such as storytelling, myth, art, and ritual that we maintain and evolve shared meanings (Strang 2004). In such a way, stories open our imagination, allowing us "to see alternative paths and new ways of thinking" (Luna 1993, p.137). As Lippard explains,

[n]arratives articulate relationships between teller and told, here and there, past and present. In the absence of shared past experience, stories become even more important. Where once the stories detailed shared experiences, today it may be mostly the stories themselves that offer common ground. Once you start hearing the stories, you are becoming a member of the community. You become related.

(Lippard 1997, p.50)

Inspired by Lippard, I spent the 2000s exploring the transformative potential of story through my work in community development, including creating a place-based digital story collection and helping to organize a storytelling festival. This research is a continuation of that focus and another attempt to anchor story to place, in this case drawing attention to and learning from the water relationships that immigrants carry with them to the Grand River watershed. In this way I hope my position as an outsider researcher makes sense as a deliberate choice.

3.3 Ethical framework

This research is situated within the dynamic and complex mix of philosophies, procedures and interpretative approaches of qualitative research. A key concern of contemporary qualitative research is to uncover the meanings individuals give to their lives, seeking truths awash in individual experience and interpretation (Rubin and Rubin 2005). Such a research approach situates the researcher as an instrument of inquiry, whose biography and position in the world affects her research process from start to finish (Lofland *et al.* 2006). In contrast, early and mid-20th century qualitative researchers sought to create unbiased and objective descriptions of reality, often focusing their lens on indigenous communities. In the process, these early qualitative researchers created representations of “the other” that supported racist perceptions and colonial policies in the West (Denzin and Lincoln 2005). Several trends in contemporary qualitative research, relevant to this study, indicate the extent to which qualitative inquiry has shifted from its early days. Indigenous research has gained traction as an important ethical orientation, in which research relationships must be considered from a counter-colonial perspective (Tuhiwai Smith 1999; Nicholls 2009; Fielding 2014). There is also a growing focus in qualitative inquiry on using participatory approaches to engage people in—and facilitate their control over—decision-making processes regarding the policies and programs that affect them (Cargo and Mercer 2008). Furthermore, qualitative inquiry will continue to expand to include more focus on ecological values, human flourishing and non-Western forms of living,

culminating in a reintegration of the sacred into secular concerns (Guba and Lincoln 2005).

Quilting is an important social and artistic activity in Waterloo Region, a craft and ritual steeped in the history of local settlement, often conducted in community over shared stories of everyday life. As such, quilting provides a fitting metaphor for the design of this research process, following feminist theorist and cultural critic bell hooks (1990). To allow for participant input, this research design was by necessity, connected, responsive, intuitive, pragmatic, and flexible (Denzin and Lincoln 2005). Like a quilter gathering scraps of fabric, researchers may cull from a myriad of possible strategies, methods, and empirical materials in designing their process. They use the resources at hand to conduct an inquiry, piecing together new tools and technique as needed along the way. Just as a quilter might begin a new project without a set plan, decisions about the relevance and appropriateness of research questions and strategies become clearer as the researcher engages with the research context (Denzin and Lincoln 2005). As a result, the research process is intentionally cross-influenced, interwoven, and interdisciplinary.

I used a quilting approach for decisions about methodology *and* method, the former being the principles that guided the research design, and the latter being the tools employed to do the research (Cram 2013). In the next section I will first describe oral history interviews, the primary method of this research. I will then review the methodologies and theories from which I borrowed and culled as I considered my approach to interviewing and research design: shared authority, feminist methodologies, and cross-cultural research. Finally, I will discuss the influence of decolonizing methodologies on my research process.

3.3.1 Oral history interviews

Oral history is a qualitative research method used to interpret the meaning that participants give to their experiences, as documented most typically in an interview

setting (Yow 2005). For oral historian Alessandro Portelli (1991, p. vii), oral history is collaborative and dynamic, “floating...in time between the present and an ever-changing past, oscillating in the dialogue between the narrator and the interviewer, and melting and coalescing in the no-man’s land from orality to writing and back.” Historians Paula Hamilton and Linda Shopes (2008, p. viii) described oral history as a “deeply social practice connecting past and present and, at times, connecting narrative to action.” Oral historians are as equally concerned with the research process as with the final product, and sometimes the desired final product is not an oral history document, but social change outcomes (see, for example, Kerr 2003).

Oral history methods have sometimes been criticized for their dependence on individuals’ memories that can be unreliable (Yow 2005). Portelli (1981) suggested that the memory critique misses the point, since “the importance of oral testimony may often lie not in its adherence to facts but rather in its divergence from them, where imagination, symbolism, desire break in.” Narratives with factual errors, Portelli (1981) argued, are often more revealing than those without. Portelli (1997) also encouraged oral historians to privilege story over facts:

History, we had been taught, is facts, actual and objective events you can touch and see; stories, in contrast, are the tales, the people who tell them, the words they are made of, the knot of memory and imagination that turns material facts into cultural meanings. Stories, in other words, communicate what history means to human beings.

(Portelli 1997, p. 42)

Another potential limitation of the oral history method is the potential that personal narratives may not reveal the structural issues that impacted participant experiences, (Yow 2005). There are several examples that show that the opposite can be just as likely (Kerr 2003; Neufeld 2008). Finally, the self-selection of extroverted, gregarious participants for oral history interviews could limit the selection of narratives available for analysis (Yow 2005). With awareness of these issues, however, the researcher can address them directly, by paying attention to structural issues in his own interpretation of the narratives, and by seeking out and helping to put at ease more reticent

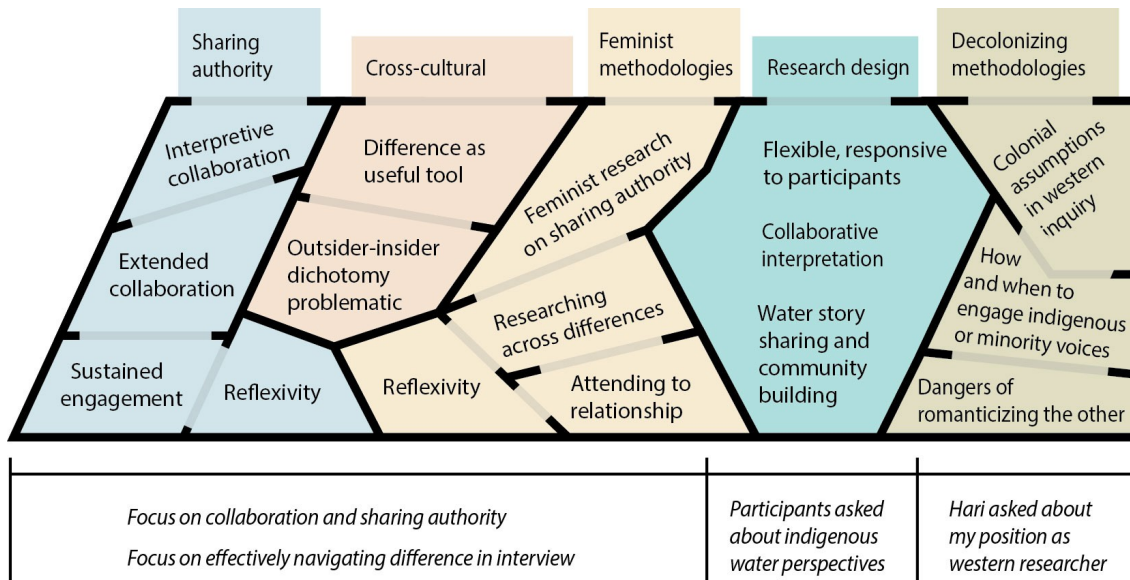
participants. As with any method, it is the researcher's responsibility to maintain an awareness of how choice of method will influence the data collection process.

3.3.2 Shared authority and collaborative oral history

One methodological discussion from which I borrowed was oral historians' perspectives on shared authority (see Figure 3.1 for complete list of research influences). Many oral historians are increasingly interested in shared authority and how power relationships, including between interviewer and interviewee, influence the interview process (Frisch 1990; Borland 1998; Kerr 2003; Shopes 2003; Yow 2005). Though oral history interviews have the potential to empower participants by valuing their worldview and stimulating reflection (Dunn 2005; Yow 2005), they also have the capacity to set up a power imbalance in favour of the interviewer (Yow 2005). According to Frisch (1990, p. xxii), shared authority in oral history moves beyond one-directional knowledge distribution from the haves to the have-nots, enabling instead "a more profound sharing of knowledges, an implicit and sometimes explicit dialogue from very different vantages about the shape, meaning, and implications of history."

Frisch (1990; 2003) argued that participants are often collaborators whether recognized as such or not. Consciously or unconsciously, in a spirit of cooperation or tension, participants often collaborate with the interviewer during interviews to generate oral history interpretations. The challenge is how to communicate this collaborative interpretation by explicitly sharing authorship of the final product (Frisch 1990). As researchers have responded to this challenge, the focus moved away from the collaboration during the interview, to an extended collaboration period. For example, folklorist Katherine Borland (1998) encouraged a feminist oral history approach in which researchers identify their participants—female or male—as a first audience who

Figure 3.1 Research influences



may collaborate with the researcher by validating interpretations or, more importantly, identifying areas of disagreement. By opening themselves up to an exchange with participants, researchers move beyond “simply gather[ing] data on others to fit into [their] own paradigms,” resulting in a richer analysis (Borland 1998, p. 330). In a more recent example, public historian Daniel Kerr (2008) incorporated shared authority into The Cleveland Homeless Oral History Project to address his own fears that an academic oral history project might subjugate participants by prioritizing the demands of academia over their needs. A properly designed oral history project, he argued, could “lead to efforts by... participants to intervene in the world around them” (Kerr 2008, p. 233). To ensure that the participants could use the project for their own purposes, Kerr incorporated a multi-session participant interpretation of the homeless oral histories into his research design, leading to the identification by the participants of several key themes upon which to base actions for social change. In order to share authority with participants the researcher will require extra time and a willingness to reconsider or even reject design elements that were found wanting in the collaborative context. The

result is a richer interpretive process with findings guided by those whose stories are under the microscope.

Collaboration is not always possible or desirable. Shopes (2003) argued that some forms of shared authority could objectify participants. And while she generally supported the idea of shared authority in oral history, especially within interviews themselves, she used the example of oral history interviews of former Klanswomen to show that there are some oral history participants with whom researchers should not share authority because of irreconcilable difference in values and worldview (Shopes 2003). Co-director of the Centre for Oral History and Digital Storytelling Steven High (2009, p. 20) cautioned against a blind commitment to sharing authority, fearing such an ethic “might some day lead (or force) researchers to abdicate their responsibility to “speak truth to power”.” He called, instead, for researchers to be courageous in sometimes offering conclusions that could prove undesirable to collaborating partners. In any case, Shopes (2003) suggested that collaboration and shared authority should not preclude a critical scrutiny of participants’ perspectives.

Canadian researchers have also heeded Frisch’s (1990; 2003) call for shared authority⁶. In his review of the key themes from a 2008 Canadian conference on “Sharing Authority”, High (2009) found evidence of a shift in research perspective, from “knowing about” to “knowing with” (Greenspan and Bolkosky 2006, pp.. 431-49, in High 2009). One of the conference themes was a concern about power and community. Participants questioned with *whom* authority would be shared, since community is neither homogenous nor static, but “multiple, contingent, and contested” (High 2009, p. 14). Participants also argued against the traditional idea of a “productive scholar” who moves on, post publishing, from one community to another (High 2009, p. 17). Instead they advocated for a sustained engagement with community collaborators, in which

⁶See *Journal of Canadian Studies*, Volume 43, Number 1, for a special issue entitled: Sharing Authority: Community-university collaboration in oral history, digital storytelling, and engaged scholarship, including an article by Elizabeth Miller about participation as part of her process in making a documentary film about water.

trust could build over the long haul. Another theme identified was reflexive listening in the research process. Researchers strove for an ethic of reciprocity in their research, and grappled with the ambiguity of their position, in which they may identify at times as outsider, insider, researcher, and community-member.

3.3.3 Feminist methodologies and oral history

According to bell hooks (2000, p. viii), “feminism is a movement to end sexism, sexist exploitation, and oppression.” As a research methodology, feminist theory offers a perspective, rather than a specific set of methods to follow (Reinharz and Davidman 1992). Many feminists have raised questions about representation and what it means to speak for—and about—others (Lorde 1982; Alcoff 1991; Borland 1998; hooks 2000; Scharff 2010). To speak across differences—including of culture, citizenship status, race, sexuality, gender, and power—can be counterproductive, and even dangerous. Too often, those who have spoken for or about others have unintentionally reinforced or increased the oppression of the group of which they speak (Alcoff 1991). While responding to these concerns, feminist theorist Linda Alcoff (1991) challenged the notion that the best solution is for researchers to speak only for themselves. Such a choice would require that a researcher retreat from her responsibility to speak about societal issues, thereby reducing the ability of research to be used for social change. Furthermore, to *speak* only for oneself cannot erase the fact that the *practice* of life’s daily activities implicates each of us in the possibility or negation of others’ wellbeing (Alcoff 1991). Scharff (2010, p. 84) argued that instead of “attempting to ‘solve’ the problems involved in speaking to, for and about others, we should seek to critically reflect upon them.” Reflexive analysis is a feminist tool used to critically reflect upon the power-dynamics and dilemmas about representation (Scharff 2010).

Feminist researchers are particularly concerned with the relationship between the researcher and the researched (Patai 1987; Borland 1998; Rickard 1998; Scharff 2010). Drawing on this focus, some oral historians have incorporated feminist methodologies. As discussed previously, such methodologies have guided researchers in

sharing authority with research participants (Borland 1998). Other oral historians have drawn on feminist methodologies to improve the experience of the research process for participants (Patai 1987; Rickard 1998). From a feminist perspective, oral history interviews offer “the possibility of both affirming and destabilizing a personal narrative” (Rickard 1998, p. 35). Oral historian Valerie Yow (2005, p. 160) suggested that the positive impact on participants of oral history interviews depends on, but is not guaranteed by, the interviewer’s ability to communicate a noncritical listening style to the participant, comprising the following: “1. You have something to say that I think is important. 2. I listen and accept that your version of the story is true for you. 3. I seek to understand rather than to judge.”

When an interviewer is successful in creating an encouraging atmosphere of mutual respect, several positive impacts can arise. First, oral histories can validate the knowledge of participants, and since oral histories often focus on the marginalized, oral histories can offer validation to people who are often undervalued (Yow 2005), or simply can ensure that their stories are told (Patai 1987). Second, prompted by the interviewer’s questions, oral histories can also offer participants opportunities for self-discovery (Yow 2005). Finally, interviews can provide an outlet for feelings that are not readily shared in casual conversation (Yow 2005). For example, feminist scholar Daphne Patai (1987, p.10) wrote of her experience at the end of an oral history interview, when the participant said, “[i]t’s great talking, getting everything out. Even if it’s not with a close friend, at least with someone who for a while anyway really listened.”

The oral history process may be unsettling for participants for a variety of reasons, many of which relate to power dynamics. Sometimes the participant develops a new awareness of problems affecting them during the interview, but is then left on his own to deal with them when the researcher leaves (Yow 2005). Interviews can generate an illusion—though sometimes real—of friendship and intimacy, when often the reality is that after the interviews are over, the interviewer and participant are divided by significant geographic, socio-economic and cultural distances (Patai 1987). Despite the

inherent power imbalance in an interviewer-participant relationship, Yow (2005) and Patai (1987) cautioned against assuming that participants have zero power in oral history interviews. Participants are likely to choose the information that they wish to share and what they wish to keep to themselves (Patai 1987; Yow 2005). As evidence, Yow cited a participant who told interviewer Gwaltney (1980, p. xxiii): “I know you must have sense enough to know that you can’t make me tell you anything I mean to keep to myself.” Furthermore, participants come to the interview with their own agendas that might include the need to tell their own version of a story (Yow 2005) or the hope that the interviewer might intervene to solve a problem in the participant’s life (Patai 1987).

3.3.4 Cross-cultural considerations and indigenous methodologies

Because of the problematic nature of researching across differences, as already discussed, I grappled with my position as an outsider researcher. I differed from the participants in a variety of ways including culture, citizenship status, and translocal attachments. I attempted to widen my reflexive toolkit to understand how to be ethical, sensitive, and effective in conducting cross-cultural research. I was aware of concerns about voice, and questions about who should speak for whom. I also knew it might be difficult for me to understand the water experiences of the participants. For example, disability rights activist James Charlton (1998) argued that it is impossible for able-bodied researchers to understand the disability experience. Critical diversity studies scholar Alan Wong (2009) found that in the context of oral history, the interview process could be held back by the lack of familiarity that comes with shared markers of identity.

However, a small group of researchers argued that difference, if openly acknowledged, could benefit an ethical research process (Biddulph 1996; Bridges 2001; Tinker and Armstrong 2008). Sociologists Claire Tinker and Natalie Armstrong (2008) found that researchers from inside *and* outside a specific cultural group could elicit valid, albeit different, responses from participants. When an outsider researcher

acknowledged their lack of cultural knowledge, there were a variety of potential benefits. Participants, striving to help the interviewer understand their underlying beliefs, tended to provide highly detailed responses. The participants also feared negative judgement less because they knew the researcher did not share their value system. Similarly, outsider researchers could ask questions that might be overlooked or avoided by a researcher who shared cultural values and context with the participants. Despite the evidence of these potential challenges and benefits of interviewing across difference, I knew that the outsider/insider dichotomy itself was itself problematic (Bridges 2001; Tinker and Armstrong 2008). Tinker and Armstrong (2008) argued that such fixed categories do not adequately reflect the differences within groups, nor identity's multifaceted and flexible nature.

Researchers can differ from, or be similar to, the people they are researching in a variety of ways: age, caste, ethnicity, religious belief, physical ability, personality, sexuality, and class to name but a few...

Researchers are always both insiders and outsiders in every research setting, and are likely to oscillate between these positions as they move in and out of similarity and difference, both within and between interviews.

Tinker and Armstrong (2008, pp. 53-54)

With all of this in mind, I cautiously incorporated the strategies advocated by Tinker and Armstrong (2008) in an attempt to conduct the cross-cultural interviews effectively.

After the interviews were completed and some time had passed, one of the participants, Hari⁷, who had since become a friend and colleague, asked me how I would address the fact that I was a Westerner researching non-Westerners. He sent me an article in which he had highlighted the following excerpt:

⁷Participants in this study will generally be identified by their real names. Following an oral history approach, I received ethics clearance to seek permission from participants to identify them by name. The four participants who chose to use pseudonyms are indicated in the participant biographies provided in Appendix 6.

Too often, researchers from the “advanced” democracies assume that research is not seen as threatening, that research participants will not actively mislead the researcher, and that the community being studied has linguistic and cultural conventions about groups and individuals similar to those found in North America and Western Europe.

Fielding (2014, p. 1068)

I had focused first on how to share authority and invite collaboration, and second on how to navigate differences in the interview process. With Hari’s encouragement, I began to reflect anew on the wider implications of my research position.

It is more challenging to consider the systemic and historic baggage that research carries than it is to consider how to conduct an effective and sensitive interview. Indigenous and non-indigenous researchers have argued against the colonial assumptions embedded in Western inquiry, in which non-indigenous researchers place “Others’ under the research microscope” (Tuhiwai Smith 1999; Nicholls 2009, p. 117; Christian 2013). Conventional research traditions can reinforce historic and contemporary patterns of oppression. To avoid this may require extraordinary effort. Many researchers have argued for indigenous methodologies (Tuhiwai Smith 1999; Christian and Wong 2013; Fielding 2014). Filmmaker Dorothy Christian and cultural studies researcher Rita Wong (2013) were critical of their experience with the *Thinking With Water* workshop. They argued the facilitators—and later, editors—of *Thinking With Water* should have done more, earlier, to engage indigenous and minority voices. It is not enough, they argued, to simply invite people from diverse groups to participate. In order to prevent marginalization, researchers need to “decolonize our relationships with each other” by considering “the ways in which normative knowledge infrastructures are still strongly tied to colonial ways of thinking that construct Indigeneity as other” (Chen *et al.* 2013, p. 7). Such work involves surfacing the colonial assumptions buried in academic conventions and everyday habits (Chen *et al.* 2013). Included here would be the troubling habit that First World people have of romanticizing “the ‘authentic, essentialist, deeply spiritual’ Other” (Tuhiwai Smith 1999, p. 72). It may be through simultaneously reflecting on these buried assumptions and

attending to relationship that I will best address the ways in which my own research practices should be further decolonized.

[Y]our methodology has to ask different questions: rather than asking about validity or reliability, you are asking how am I fulfilling my role in this relationship?...This becomes my methodology, an Indigenous methodology, by looking at relational accountability or being accountable to all my relations.

(Wilson, 2001, p. 177)

3.4 Research design: “It’s the stories that attracted us to this project”

The design and recruitment materials for this study were reviewed and approved by the Office of Research Ethics at the University of Waterloo. For this study, participants were recruited using opportunistic and snowball sampling methods (Patton 1990), drawing from my professional relationships with local gatekeeper organizations—The Working Centre, Future Watch, the Kitchener Downtown Community Health Centre and the Multicultural Centre—as well as my personal network within the local social justice community. I followed up with potential candidates by email with an information and consent letter and flyer, and then by email, with texts and phone calls to set up an initial meeting (see Appendix 1 for recruitment materials). About a third of the participants came from presentations I did about my research at my former workplace. It was important to me to find participants through my own relationships, and to build the process slowly, contacting potential participants through organizations or people they trusted (Yow 2005). For example, I decided to generally only recruit participants through colleagues with whom I had a personal connection. In the case of the Multicultural Centre where my connections were weaker, I did not attempt to recruit. Instead I connected with one of their staff members to seek interview space for a participant who requested we meet there. This interaction with the worker built trust and he subsequently shared the study information with each of the Multicultural Centre’s peer group facilitators to share with their groups. I knew that some immigrants might have reason to feel vulnerable: precarious residency status;

difficulties in accessing housing, employment and social services; or because of pressures from within their own local ethnic communities. Indeed the first participant I interviewed said she was okay with sharing her thoughts within the academic community, but was hesitant to share her thoughts in a more public forum, fearing that people from within her close-knit ethnic community might disapprove of her perspectives.

My experience working with immigrants as a social service worker benefitted my recruitment process in two ways. First, I had many connections in the immigrant community through which I could draw participants relatively quickly. Second, several research design considerations were apparent to me because of the experience I had gained as a social service worker serving immigrants. For example, I intentionally widened the parameters on who might be considered an immigrant, having witnessed the frustration felt by immigrants when programs were limited to immigrants belonging to narrow categories such as those who had arrived within the past three years. Another outsider researcher conducting this study would have found a completely different group of participants to interview, or may have had significant challenges finding anyone at all. Many social organizations are protective of their participants for fear of research fatigue. As the staff member at the Multicultural Centre told me, everyone wants to research the immigrant experience. The only reason he was willing to work with me was because my research asked for something new:

Normally if you came in here asking to interview immigrants I'd say turn around and find somewhere else to find immigrants. There's an overabundance of people wanting to interview immigrants about their experiences in their first five years of life here. Yours was interesting though, because it's not the same story. And you're smart to go about this in a more relational way...Posters on the wall won't do anything. People roll their eyes when they read those posters.

(Settlement worker's observation, Sarah Anderson Research Journal 2012)

That being said, one major recruitment restriction I encountered was related to language abilities. Funding for interpretation was not available and English is the only

language in which I am fluent. My language abilities limited participation only to newcomers who came to Canada with intermediate to advanced English skills or those who had adequate time to develop English language skills in Canada. The unintentional but likely impact of this limitation was that most participants were from a social class that had provided them access to English training prior to immigration. In the future, the use of a participant-directed visual medium such as photography prior to the interview, or mapping during the interview, would offer the participants a means through which to overcome some language barriers and also give more control over the data collection process to the participants⁸.

As discussed earlier, research conducted by a cultural outsider poses the risk of reinforcing unequal power relationships. Beyond addressing this challenge through methodologies that emphasized reciprocity and collaboration, I also attempted to create a culturally sensitive and non-hierarchical interview setting through specific preparations. To prepare, I consulted online resources for cultural and geopolitical briefings, and place-specific maps and images (Centre for Intercultural Learning 2011; BBC 2015; Wikipedia n.d.; Google Maps n.d.). Though limited, these provided useful starting points for reflecting on possible cultural differences and similarities, and more specifically for providing me with mental images of the landscape that helped me as listener. During interviews, I acknowledged my position as outsider to the immigrant experience and I was explicit in encouraging participants to let me know if I said or did anything that made them uncomfortable. I conducted interviews in the location preferred by each participant, where they were most at ease and free from distractions. This included their homes, workplaces, and schools, and other locations such as the Multicultural Centre and the Victoria Hills Community Centre that were easily accessible by public transportation.

I held an initial one-on-one meeting with most of the participants, for the purpose of accomplishing several relational, logistical, and research tasks. First, I could

⁸See Allon and Sofoulis (2006), Datta (2013), Golder *et al.* (2013) for examples of self-directed photography by participants.

begin to establish the trust and rapport necessary for a successful oral history interview, learning about what might help to set them at ease during the interview (Nairn *et al.* 2005). Second, through sharing information about the project with the participant, I could begin to familiarize them with the oral history research process, and the type of information I would be looking for, and answer their questions. I could seek their consent to participate, explain the consent forms, and obtain their signature. Third, I could familiarize the participant with the digital recorder and discuss potential distractions particular to interviews held in the home, such as care giving responsibilities or sound quality issues—for example a buzzing fridge. I also informed the participant of their rights to the interview recordings, and reassure participants of the confidentiality of the interview recordings unless otherwise given permission via a signed release, following oral history best practices (Oral History Association 2009). Fourth, I could gather geographical and personal details for help in understanding the context of their water memories. Finally, I could begin to trigger the participant's thoughts and memories related to water. More unexpectedly, I found in some cases that this initial meeting also became an opportunity for the participant to negotiate with me about their own interview agenda.

The second meeting began the oral history interview process. During the interview I viewed my responsibility as interviewer to frame the topic through careful choice of open-ended questions, to inspire remembering, and to provide the participant space to “answer as he or she chooses, to attribute meanings to the experiences under discussion, and to interject topics” (Yow 2005, p.5). Meanwhile, I attempted to ensure that my research agenda did not hamper my ability to listen to the “web of feelings, attitudes, and values that give meaning to activities and events” which were expressed subtly through tone and body language, and therefore would not be easily captured in audio recordings or transcripts (Anderson and Jack 1991, p. 12). Instead of a set of interview questions, I developed a question guide (see Appendix 2) to be used flexibly, ensuring that the interview process would remain at least partly participant-driven (Thompson 2000). The questions were open-ended and designed to prompt the recollection of participants' sensory experiences of water, their personal reflections on

water meanings, and some comparison between their earlier experiences of water and their water experiences in Canada. I sought confirmation of the appropriateness and clarity of the questions by checking them with a colleague who works as an intercultural health promoter with the Kitchener Downtown Community Health Centre. I also conducted mock interviews with two colleagues who were first generation immigrants. They offered feedback and insight into the cross-cultural research process.

Though I had intended to follow-up a second time with willing individual participants to capture memories and stories triggered by the first interview, and allow the opportunity for another round of questions, I abandoned this practice after the first attempt, as it was too time intensive. Instead, I replaced these second interviews with a series of three group follow-up meetings to respond to many participants' interest in hearing each other's water stories. In some cases this change likely meant a loss of narrative data, especially in the case of a few participants whose time availability for their interview was limited to an hour. However, this loss was outweighed by the benefits of the group follow-up meetings. These greatly augmented the potential for participants to shape the narrative interpretation, as well as to build community amongst participants.

Sharing authority does not make for a very efficient process, though such efficiency is sometimes prioritized in the context of conventional academic norms. While requiring additional time and a willingness to adapt the research design—in consultation with the Office of Research Ethics, the collaborative approach did offer more opportunity to learn from participants and benefit from their interpretive insights. For example, during the first meetings with two participants, each told me explicitly that they wanted to participate in this study in order to raise awareness of the complexity of water issues in the area of the world from which they migrated to Canada. Stacey (1988) argued that feminist researchers must at times privilege methodological concerns over substantive interests, in order to reject positivist approaches that often reinforce hierarchy, objectification, and a false sense of neutrality. Following Stacey (1998) and Frisch (1990; 2003), I attended to the focus that each participant brought to

his or her interview, sometimes surprised and even momentarily disappointed with the direction the participants took in their response to the open-ended questions. When I began the interview process I thought what I wanted was to hear intact anecdotes about personal water experiences. But this is not how most people talk or think aloud (Gee 1985). In the case of the two participants, I agreed that I would accommodate their agenda if they could also accommodate mine. Their description and analysis of structural water issues offered important layers of meaning through which to interpret their water memories. Their interviews were among several that played an important role in making room for one of the key themes, Acting for Water, to be discussed in Chapter Four.

In this section I described how I recruited and responded to research participants. The process was helped greatly by my previous experience working with immigrants. I sought to balance responsiveness to the participants with efficiency, knowing that my flexibility could make the process more reciprocal, and develop the rapport necessary for possible collaboration. In the following section, I will describe how I, in collaboration with some of the participants, interpreted the water narratives.

3.5 Data analysis

I followed a thematic analysis approach for this research, and invited participants to collaborate in the identification and prioritization of themes. Braun and Clarke (2006, p. 79) define thematic analysis as “a method for identifying, analyzing, and reporting patterns (themes) within data.” My interpretive approach was inductive (Braun and Clarke 2006). This meant that I listened first and foremost to the participants’ narratives for patterns, rather than interpreting their words through the filter of a preconceived theoretical framework. Braun and Clarke (2006) argue that thematic analysis is a useful method for collaborative research. Table 3.1 lists the variety of strategies I used to invite collaboration in the interpretative process, some of which were influenced by Borland (1998), Frisch (1990; 2003) and Kerr (2008) as discussed earlier in this chapter.

The interpretive process began in the interviews themselves, when I began to make interpretive notes about themes and patterns. After I spent considerable time listening to the interview recordings, transcribing the interviews—with help from two transcribers—and writing up narrative summaries for several participants, I compiled a list of initial themes. Eight participants commented on these themes during three

Table 3.1: Collaborative and intercultural exchange research design elements

Action	Comments	Research basis
Agenda-setting in first meeting	<ul style="list-style-type: none"> - Two participants used this meeting to negotiate an adjustment to the interview agenda, to include more room their agenda 	Frisch 1990; 2003 Stacey 1998
Interpretation during interviews	<ul style="list-style-type: none"> - Listened for interpretive comments from participants - Responded to participant concerns and topics of interest 	Frisch 1990; 2003 Stacey 1998
Community building and intercultural exchange	<ul style="list-style-type: none"> - Noted widespread participant interest in hearing each other’s water stories and stories from local Canadian-born people - Sought opportunities for learning and sharing between participants, as with the following three actions 	Gee 1985 Lippard 1997 Rossing and Glowacki-Dudka 2001 Hou 2013

<p>Small group follow-up meetings where participants could be a first audience for findings</p>	<ul style="list-style-type: none"> - Shared water narrative overview with each follow-up meeting participant prior to meeting (see Appendix 3 for an example) - Discussed initial findings (see Appendix 4) and invited feedback - Identified three priority themes based on participant discussion - Shared meeting report with all participants (see Appendix 5) 	<p>Borland 1998 Hou 2013</p>
<p>River walk</p>	<ul style="list-style-type: none"> - Organized walk along Grand River in response to participants' interest in connecting with local waters - Three participants and water practitioner and activist Susan Bryant joined me - Shared water stories. Susan talked about the grassroots work that she and others had done to respond to the contamination of Elmira's water by the Uniroyal Corporation. 	<p>Gee 1985 Lippard 1997 Hou 2013</p>
<p>Connected with participants through water stories film</p>	<ul style="list-style-type: none"> - Discussed animated water film project with four participants - Sought involvement through use of audio recordings from their interviews, photos. - Created and shared three minute film with all participants 	<p>Lippard 1997</p>

Feedback by email and phone	<ul style="list-style-type: none"> - Sent Results Section and quote summaries for feedback - Sought permission to use quotes and participant's names. - Eleven out of 15 participants responded by email and/or phone. 	Borland 1998
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follow-up meetings and together they identified three thematic priorities: the sacredness of water, the control of water, and responsibility for water, that became Acting for Water. I then returned to the transcripts and began to assemble a more comprehensive list of themes in a spreadsheet, returning often to the audio to stay connected to participant voices and expression. The spreadsheet became huge and unwieldy. As I sifted through, I transferred each category of theme to a MS Word document for easier reading. At this point, I took time off to have a baby, and after returning to the analysis process months later, I went back to the themes that the participants themselves had prioritized during the small group meetings. The three themes they had prioritized corresponded with some of the richest categories of themes in the Word documents. I added a fourth theme, Connecting through Water, because it was common to all of the interviews and was also important in the water meanings literature that I had reviewed. I wrote about these four themes, exploring the various ways that that they were expressed through the interviews, focusing in particular on how these themes were expressed through the words and voices of the participants themselves. Finally, I examined the ways in which these participant-identified themes interacted with Strang's common water themes and the idea of translocality.

3.6 Summary

Chapter three began with a description of my own position in relation to this research, as a relative outsider to the immigrant experience, with a longtime interest in intercultural story sharing processes. Drawing on a variety of researchers, I then

constructed an ethical framework for this research. I followed hooks in using the metaphor of quilting to capture the iterative, responsive, and intuitive process of developing a methodological approach and research design. The quilt design included oral history interviews as a key method for documenting the participant water narratives. Frisch and others introduced the concept of sharing authority by inviting collaboration in oral history research. Feminist researchers such as Alcoff described concerns about voice and representation in the research process. Patai and other feminist researchers offered strategies through which to attend to the researcher relationship with participants. Approaches to indigenous methodologies became important to the fabric of the quilt as, encouraged by one research participant Hari, I reflected further on the effect of my position on the research experience. Researchers such as Tuhiwai Smith and Christian and Wong challenged me to consider the extent to which my research process was based in assumptions based in the colonial history of the West. One last thread in the quilting process came from Tinker and Armstrong and others, who found that research conducted ethically by outsiders can offer valid, results and can benefit the research process. The rest of the chapter offered details of the research design and execution. I described how I recruited and interviewed participants. I also described how I responded to participant interest in each others' stories, by adding a follow-up discussion component to the research design. Finally, I described how I used a collaborative and thematic approach to interpreting the narrative data. In the following chapter I will describe the four key themes from the water narratives that were identified in collaboration with the participants.

Chapter 4: Results

In my neighbourhood, a few minutes walk from my house, is a small pond, formed by the runoff of water from the parking lot of a self-storage operation. It is separated from the neighbourhood by a barb-wired fence. When I visit with my daughters, we clamber through a large hole in that fence to walk through the goldenrod and grasses that surround the pond. Our neighbour Greg and his daughter Maya told me about their rambles there. I would never have explored it otherwise, assuming it to be a pool of dirty water, or worse, a place that was somehow unsafe. Now that I know, we go there in the winter to toboggan down the hill onto the ice, or look for muskrat tracks. In the spring we watch to see if another family of Mallard ducks and Canada geese will grow. Once we saw a Great Blue Heron standing in the shallow water. This year, for the first time, many neighbours near the pond found American Toads living in their yard. To find such life in a busy urban neighbourhood requires a practice of paying attention. If, as with this past spring, the practice is lost to busy days and weeks, the pond will continue to be a place of life, but without our own lives as obviously intertwined.

Just as I did not, at first glance, notice this tiny pond and the life that inhabits it, we do not readily perceive the diversity of experiences and meanings of water that each person holds until we choose to listen. Once we listen, we may find that our relationship to the waters in our own lives is transformed, as was my own relationship to our neighbourhood pond. In the following two chapters I will discuss the research findings, beginning in this chapter with the results of listening, and then moving on to the transformations in the next. The purpose of Chapter Four is to answer the first and second of the questions that guided this research, by listening to the ways in which the participants described their memories of water, considering the meanings they made of them, and identifying their water priorities. To do this with full attention will require temporarily setting aside the common water meanings discussed in Chapter Two, as well as the ideas discussed therein about translocality and place-making. As much as

possible in this chapter, I will keep the focus on the voices and water priorities of the participants. To offer context, I first describe the characteristics of the research participants and offer a sample of the many themes found in their water narratives. Second, I describe the three priority themes that participants identified during follow-up meetings, adding a fourth theme common to most of the participant water narratives, whose importance was apparent from my early readings of Strang (2004) and Linton (2010). Finally, I use the participants' stories, reflections and ideas to filter through the various ways each of the four themes were expressed in the interviews.

4.1 Participant characteristics

Fifteen participants participated in 16 interviews: eight women and seven men⁹. The youngest participant was in her early twenties and the oldest was in her fifties. Countries of origin were located across the world: East Africa (1), West Africa (3), North America (1), South America (2), East Asia (2), Southeast Asia (3), Western Asia (2), and Western Europe (1). Only two participants, a mother and daughter, were from the same country. Despite the cultural diversity amongst participants, almost all of them shared similarities in their access to education and other resources. Almost all of the participants were university-educated, with 13 out of 15 participants holding at least a bachelor's degree. Five participants came to Canada with graduate-level degrees and eight participants either hoped to pursue graduate-level education in Canada or already had. This pattern was likely linked to Canada's recent immigration policies, that prioritize economic class immigrants—those who will transition quickly into contributing to the Canadian economy (Root *et al.* 2014). Furthermore, as mentioned earlier, my language abilities restricted participation to immigrants with intermediate to advanced English skills, a language level that can be indicative of having had access to higher education levels. A missed opportunity also narrowed my research to what

⁹See Appendix 6 for brief participant biographies

appears to be a more typically middle class or upper middle class of immigrant¹⁰. Given the need for greater sensitivity in interviewing refugees and refugee claimants, I delayed contacting an acquaintance in a local refugee settlement home to gain confidence in the interviewing process first. Though the colleague received my inquiry positively, she was unavailable for meetings during my narrow available window of time.

Four main participant characteristics drew the participants to the interview process. First were participants whose previous careers related to water. These participants were eager to contribute to water research and learn more about Canadian water issues. Second were the potential graduate students who were interested in learning about Canadian qualitative research processes. Third were artists whose careers related to storytelling. Finally were participants who were passionate about water and motivated to raise awareness of water injustices in their country of origin.

4.1.1 Range of themes from the immigrant water narratives

There were a wide variety of themes in the water narratives. Some themes that appeared across many interviews included abundance, scarcity, beauty, gardening and farming, myths and folk tales, artefacts and technologies, and conservation strategies. Examples of less common themes included health, water as a commons, water governance, irrigation, and oceans. It was not a surprise to find that the water stories the participants shared were full of the water meanings that Strang (2004; 2005) found exist for people across various cultural, geographical and temporal situations¹¹. In this chapter I will focus on the four themes from the interviews—both connected and distinct from Strang’s common meanings—that were prioritized by participants during follow-up discussions, and were also supported by my early readings of Strang (2004)

¹⁰I did not collect data on participants’ income levels and participants’ comments indicated that individual positionality in terms of class and financial status was a complex matter.

¹¹See Chapter Two for a detailed discussion of the themes of water as: a matter of life and death; an expression of spiritual and social identity; a generative and regenerative force; and a symbol of power and agency.

and Linton (2010). These are *sacred water, connecting through water, controlling water, and acting for water*.

4.1.2 Participant representation in the results and discussion

During the writing stages of the analysis, I noticed that I emphasized and privileged certain types of comments. Because my interest was in part on how water culture might be transformed, I generally prioritized the narrative threads that offered a glimpse of water habits and interactions that contrasted with those in Waterloo Region. One such focus was a group of comments about experiences of water unmediated by indoor plumbing, or comparisons of such childhood memories against later shifts in water technology towards modernization. I also attended particularly to personal reflections on the cultural, spiritual and personal meanings of water. Finally, I focused on comments that were particularly compelling, often because they expressed emotion, reflectiveness or they shared something that surprised me.

I generally did not focus on descriptions of participants' daily interactions with water—such as details about water infrastructure systems, specific strategies for conserving water, or descriptions of holidays spent near water—unless the comments included a reflective quality as described above. This avoidance was not because such responses were not rich and worthy of future research in themselves¹². Rather, the emotional and reflective responses became a natural focus of this research because of their perceived salience for the majority of participants. I also generally did not give as much space for expository or persuasive comments about structural issues, but I did include many comments that offered reflections on the personal meanings of such issues. Because the analysis of water conflicts and politics were particularly dominant in the contributions of four participants, and such concerns were a key focus of one follow-up meeting, I gave these comments a significant amount of space in the results.

¹²For example, a potential future study into the effect of translocal movements on people's relationship to water, could involve participant use of Community Effective Mapping to map out a household and community water systems and waterways, from before and after a move from one locality to another.

Out of the six participants with the strongest representation in the results discussed below, based on the number of references to their comments, only two are women. While this imbalance surprised and bothered me, it can be traced back to: 1) the particular focus of some of the women's interviews; and 2) the types of water experiences that seemed most interesting for exploration here. Some of the women's main responses lay outside of the thematic focuses as discussed in the following section. For example, of the eight women who participated, one woman, Lettie was an outlier, because she expressed so much fear of water bodies that her sense of alienation dominated our discussion. Alejandra's water narrative offered an interesting point of view. She was the youngest participant and told of growing up with indoor plumbing and occasional water shortages in Mexico City. Her voice, however, did not stand out amidst the passionate viewpoints offered by many others. She also moved back to Mexico soon after the interviews, so could not participate in further discussions about water priorities. Two women—Naema the mother and Mashal the daughter—influenced the thematic interpretation of the narratives with their commitment to describing the impact of the hydropolitical, but in their shorter interviews they did not have the time or inclination to offer as many personal reflections or comments. Finally, one woman, Rocio, communicated a strong level of concern for the waters of her life. She had professional experience as a water practitioner in Colombia. However, in the interview, she seemed to feel held back by her intermediate English language skills.

4.2 Truth and limitations

This research explores what can be learned from immigrant experiences of water. Yet immigrant experiences vary dramatically, depending on their individual position in time and space. Within any given cultural group, differences including gender, religion, class, education, personality, family, and place-attachments affect the ways in which individual immigrants experience life in general, and water in particular. Such was the case in this research. The participants who shared their water narratives with me offered their own points of view, filtered through their particular life

experiences. For example, this research would have been different had most participants not had access to advanced education and the resources necessary to immigrate to Canada as economic class immigrants. The nature of the participants' individual water and life experiences limited the meaning making processes of this research. If qualitative researchers are, as Guba and Lincoln (2005, p. 120-121) suggested, to pay more attention to the "experiential, the embodied, the emotive qualities of human experience," then it is necessary that individual experience will shape *and* limit inquiry.

When exploring the meanings embedded in individuals' experiences, Guba and Lincoln (2005) suggested authenticity as a key indicator of research validity. "Are these findings sufficiently authentic...that I may trust myself in acting on their implications?" becomes a key question for evaluating the rigour and truth of any inquiry (Lincoln and Guba 2005, p. 205). Authenticity is measured by the fairness of stakeholder representation, and by the capacity built amongst participants and their communities. From this perspective, results are more authentic when the research process itself leads to increased awareness, critical thinking skills, and capacity to act for social or political change for participants and their communities, and—I would add—for the researcher also (Lincoln and Guba 2005). In the case of this research, truth may not be found in drawing generalizations about immigrant water relations from the individual water experiences of these 15 participants. However, there *is* truth in the sense of community that emerged as they shared water stories together. And there was much to learn from the patterns of water experiences, beliefs, and concerns that participants shared here.

4.3 Interview themes overview

Four key themes in the immigrant water narratives were Sacred Water, Connecting Through Water, Controlling Water, and Acting for Water. During small group follow-up meetings, the participants prioritized three themes —Sacred Water, Controlling Water, and Acting for Water—through their responses, their questions, and

the stories they shared with each other. Although the fourth theme, Connecting through Water, was not highlighted explicitly during the follow-up meetings, I added it here because it was an implicit theme in the follow-up discussions, and was also a dominant theme in the participant narratives and the water meaning literature as discussed in Chapter Two. In this section I will describe each theme, beginning with a brief overview and ending with a more detailed discussion of the various aspects of the theme. As much as possible I use participants' own words to describe each theme and demonstrate its importance to the participants.

4.3.1 Sacred water

Many participants explored water's sacred meanings in their interviews. The meanings that the participants gave to water expressed preciousness, divine presence, ancestral connection, or a means of accessing one's inner place of quiet and contemplation, encompassing both religious and secular ways of relating spiritually to water. The words that flowed through sacred water references included *awe, mystery, worship, precious, God, Allah, gods, River Goddess, goddesses, shrine, spirit, soul, holy, ancestors, love, miracle, blessings, prayer, fearful, and demonic*. Participants' responses to sacred water were sometimes ambiguous, in part because of the complexity of the relationship or, in the case of a few participants, because their experiences of modernization, immigration, or their own shifting faith had disrupted previously held water values, beliefs or practices. When participants spoke of sacred water, their voices often changed in tone, and sometimes their faces lit up with joy. This joyfulness of water became a recurring thread in many participant narratives. However, one participant responded to her own experience of sacred water with fear, and her response, though fairly unique amongst participants, pointed to another key aspect of sacred water that was described by several participants: its power and mystery. Water worship, as in the giving of honour and worth to water, was also an important topic within this theme. Nine participants discussed their own spiritual or contemplative rituals in, around and through water, and two participants discussed the specific idea of water worship.

4.3.1.1 Joy

One aspect of sacred water that appears in many participant stories is the joy felt while interacting directly with water. Hari, from Nepal, was in his thirties and immigrated from Nepal in 2011. He, in particular, identified with this joy, describing it as multi-faceted, encompassing the physical, metaphysical and spiritual. His choice of words paralleled many other participants' accounts of water. Hari described his experience of this joy when remembering his routine with a younger sister of fetching water for home and farm use. While thinking of how water spilled and splashed as they made their way along the path from the pond, Hari commented:

You would feel that when you toss water, you feel as if the water is surging through each and every vein of your body...I can't express it in words. I don't have exact words to express it in concrete terms. But you would definitely feel imperceptible joy going through you, the whole body. A new joy. I mean, experience a lot of joy, tremendous joy, working with water.

Abel also underlined the sensory joy of water, where spirit and play collide, as he describes a large public celebration in Asmara for Tismet, the yearly commemoration of Jesus' baptism. Abel is a man in his forties who immigrated to Canada in 2003, after having left Eritrea to attend university in Germany as a teenager. From his laughter as he described Tismet to me, it seemed as if the holiday often ends with being soaked by holy water:

Baptism in Eritrea, it's a big, big holiday. Do they call it baptism also here? So in Asmara we have at the centre of the city, there is a huge place there. At the baptism day, everybody goes there, for the Christians, Muslims, whatever. Everybody's coming there. And after blessing the water, oh my goodness. You have to see that. It's a lot of fun there. People, they take water because it's the blessed water. Everybody takes water and even on the road they splash you in your heads because it's a blessed water on that day, the baptism day. I saw,

when I visited after independence, my country, I saw a lot of tourists there. From European countries, from I don't know. There's a lot of tourists there. I saw them had lot of fun with the water there, because that's the time every kid is waiting for.

Often the most keenly felt joy was in celebrating the abundance of water after a time of scarcity or waiting. Several participants, including Osei, Diyen, Nada, Abel, Mashal, Naema and Lettie, described the joy and blessing of new rain. Osei is a 38-year old man who immigrated to Canada from Ghana in 2005 and Diyen is a 36-year old man who immigrated to Canada from Cameroon in 2010. They each described rain itself as a symbol of blessings within their respective communities, the Ga and Nso people. As children they both took rain showers with their siblings. For Diyen, this was a way for children to welcome the rain and be literally showered with its blessings. When Osei showered, he and his brothers made full use of the humid microclimate to gather a delicious treat. Using buckets, blankets and candles they attracted a specific type of fly that could be roasted and eaten, part of the blessings offered by rain. Such appreciation was in part a response to the long wait through a dry season. For Nada, a woman in her fifties who immigrated to Canada from Syria in 1999, this long wait meant that rain was more personally meaningful when experienced in Syria than in Canada. A first drop of rain falling after a long dry Syrian summer was observed first through the sense of smell, and it became a reminder of one's own vitality and mortality:

Here, it rains in summer, but back home it's dry, dry bad summer. Dry and hot summer. So when autumn starts and first drop of rain comes, sometimes it comes big and alone and it goes blop like this and immediately you smell the ground and the soil, you smell it, and what do you feel? You can't express what you feel, you don't know. You don't know how to put it in words. It's just inside you, in the heart, in the stomach, in the bones. How much you are connected to life. How much you are alive. How much you are afraid to lose this life. How much this water is you. You, this drop of water, yes. Yeah. One unit. [laughs]

In Canada, Nada explained, rain in Kitchener or Toronto “*is nothing—neutral—to me*”. Urban Canadian rain seems far removed from Nada’s inner landscape of associated rain memories and sensations. Like Nada, Mashal had also noted a new relationship to rain in Canada. She missed the smell of rain mixing with the particular soil of her original home. Mashal is a young woman in her mid-twenties who, like her mother Naema who also participated in this research, immigrated to Canada from Pakistan in 2010.

One thing I still remember and I still cherish and I really want to enjoy it is when it used to rain and the smell of the rain on soil. It was beautiful. Seriously. I don’t know if it’s related or not. But that was water, right? I really miss that. I haven’t really, I can’t—[pause]. Because every country’s soil I guess is different, right. I haven’t really smelled it here.

When she spoke to friends in Pakistan and it happened to be raining there, her friends called the weather amazing. For her friends—and Mashal when she lived in Pakistan—rain was “*a very precious thing,*” and even more so in recent years as they experienced environmental changes such as shortened monsoon seasons.

Abel shared a different kind of story about waiting for water, where the response to water’s arrival is not so much joy but appreciation of the absurd in a very tense water situation. For Abel and his childhood peers during the Eritrean War of Independence, finding water streaming from a tap after a long wait—sometimes days, sometimes weeks—was like winning the lottery, a big, exciting event. Usually the water was turned off, so if a child tried the tap (as they would again and again, hoping this time would be *the time*) and found water running it was great news, a kind of joy. Bittersweet were the times when, a child having tried the tap, found it not working and forgotten to close it, someone in the military would make the decision to turn the water supply on at precisely the time that no one’s able to make use of it, nighttime. As Abel said,

You are fighting for a drop of water and overnight [the neighbourhood]'s flooded [laughs]. And we made a lot of fun about it. It's fun. On the other side, if you see the flip side of it, it's a lot of suffering. But, you know, when you try to make fun of it because that's your daily life, you don't have a choice. Otherwise you get crazy.

Instead of abundance of water or rain, here, the blessing was the neighbourhood mentality: when water was used by those in power to inflict suffering, the neighbourhood's response was one of resilience, optimism and good humour.

4.3.1.2 Power and mystery

A separate aspect of sacred water is its capacity for power and mystery, described in various ways through the stories and comments of Hari, Diyen, Osei, Nada, Hailing, and Lettie. "For many of us, water possesses spirit", as Chen *et al.* (2013, p. 5) remind us. In Diyen's and Lettie's stories, the spirits in water could be called upon to perform mysterious acts. For someone in Diyen's or Lettie's community, to be skillful in using water for the greater good, or even to exact revenge on another, was a way of gaining or maintaining power and respect. Diyen conveyed a sense of awe and appreciation as he described the mysterious and powerful ways in which some people in the Nso community used water, though he was more ambivalent about his own relationship to water's power. As a child he almost drowned while swimming in a pond and since then he was uneasy around water but also drawn to it. The times when he faced his fears and swam in the Atlantic Ocean or an Ontario lake, he felt transformed by the experience of surrender.

Oh, it was a good feeling. I had life jacket and when I'm going to water I always have life jacket. I don't want to master the water, I want to enjoy it, I want to float in it. There's a feeling about water that makes, I swim and I

found out that I was so relaxed and so balanced...I think it's beautiful that things you just get scared of, actually those things are good for us.

Diyen laughed, telling me he always said his prayers when he was around water. He had witnessed many water rituals. One demonstrated a person's power through thunder and lightning, another was used to locate a missing drowned body, and there was even a ritual to help heal marital discord by drinking from a river at the point where its turbulent waters entered the calm waters of the sea. He noted the difference between his faith in Nso water rituals and the typical North American desire for scientific explanation.

Also, in my village, when the rain is coming, when it's March and the rain doesn't come, then the Fon, the Fon, the king, the chief [laughs] he's going to take a drum, a big drum and there's going to be a woman behind it, the Queen's mother, and she's going to carry on her back traditional stuff. And other people, other traditional dignitaries are going to stand in line and are going to go to rivers and do sacrifice and immediately they do sacrifice the rain is going to come that very day...There are mysterious things linked to water. The one I believe is when water is not forthcoming. And the Fon is going to make sacrifice. And the day won't pass without heavy rain. Yeah that rain is gonna come back. Yeah I've seen it. I grew up in Kumbu and I believe that. Here [in North America] people need proof, which is good, which is good. But, life doesn't need an explanation, you know what I mean.

In contrast to Diyen's mostly positive associations with water's power, Lettie's response was a sense of alienation. Lettie is a 52 year old woman who immigrated to Canada from Nigeria in 2005. Her roots are in the riverine area of the Niger Delta in Nigeria, a landscape full of water, including swamps made of tidal flats and interconnected creeks. Lettie told me how her people in the Niger Delta worshipped a water goddess and made sacrifices to gain the goddess' blessings. However, Lettie's parents moved away from the riverine area and raised Lettie and her siblings in a

Christian household in urban Nigeria. Lettie believed in the water goddess as a spirit that animated rivers and other water bodies, but saw her as a threatening presence. Her stories about water in the landscape, both in Nigeria and Canada, revolved around fear. Lettie told me about one time as an adult that she travelled along the Bonny River in the Niger Delta to go to a friend's father's burial. When forced to travel by water, she felt safer in a crowd, choosing the large "flying" boat that could do the trip in 30 minutes, and where she could sit in the middle with "[her] back to the water". But this particular day she missed the large ferry and had to hire a water taxi. It was just herself, two friends and the taxi driver on the river in a small boat and to make matters worse, they became lost as dusk fell. Lettie's and her friends' fears grew to terror:

Lettie: Because in the Nigerian villages, some of the villages, you have to pass through some creeks to get to the village. So if you don't know the route, you keep going on the water for hours, and that was what happened. This water in the night was glittering. [Sound of Lettie's hand slapping]. That day we thought we were going to die in the water.

Sarah: When you say glittering, it was...

Lettie: Glittering, the water was shining, it was like ah! [sound of Lettie's hand slapping down] It was very demonic. Very. We were so scared, even the man at a point was, was afraid...When we eventually got there the man was very happy because we were screaming! We were three of us, we were screaming!

...And I started remembering all the things my mother was telling us about the river. The rituals, and all of those things. All of those things started coming to my head and I was so scared. I said, ohhh, the water goddess want to use us for the ritual. We drown inside this water, now we will just go deep, ah!

More typically in participant stories, water was perceived as powerful through its dual capacities for destruction and life. As Levi-Strauss (1995 [1955]) described, water is both maleficent and beneficent. *“The dramatic thing about water is that it’s scary, it kills you. It kills you if it rains a lot. Or if you sink in the river. Or if it is cold and wet, like, yeah. It is just like love. You can enjoy and you can die because of it. So powerful”* (Nada 2012). Participants responded to this aspect of water’s power with attitudes of resilience, respect, awe, and even bravado. Hari described how, as a boy helping his father plant and tend their rice paddies, the nearby river held a strong fascination for him, to the point of tempting him towards some near drowning experiences. Hari was aware of the risks, having known people who died in floods, including a close friend’s father, but he was compelled to test his strength against the current again and again. His father attempted to protect him from harm, frequently warning Hari to remember that water is the abode of the god Indra, and as such it is in water that *“something miraculous, something mysterious always works. You never know what that mystery is, but there is mystery in water.”* Hari’s father left room for ambiguity: Indra, through water, was capable of both benevolence and destruction. Hari explained that out of deference to Indra, the people of his village behaved reverently towards rivers, streams and ponds, keeping the area around them tidy and unsullied. At the same time, they accepted the destruction of floods as something out of their control, and also as necessary to the well being of the local agricultural system. Hailing is a 40-year-old woman who immigrated to Canada from China in 2002 and had spent her early childhood years in the riverside town of Fuzhou, and her late childhood years living in Hua Yin, at the foot of the Hua Shen mountain. In Fuzhou, Hailing remembered the resilience with which her grandparents and their peers faced yearly floods, now a relic of the past since flood bank infrastructure was built later in Hailing’s childhood. She experienced the yearly flooding of their house as a time of chaotic fun, when the world turned upside down. For the adults in her community, however, it was a yearly disaster. Yet the older generation’s attitude toward the flood was one of acceptance and resilience.

Their mentality is they accept it...And the Chinese people have a kind of character resilient, so in order to survive, they have learned, after five thousand years life experience, they learn to survive. In order to survive you're able to handle it—just face it. The water comes, destroys things, and then it will go, and then you start to build up a life. It comes and goes. It's becoming a circle. So, I don't know, in one way it is bad, but in another way, it...it is, yeah. So they just learn how to deal with it; carry on, life able to carry on—for to be able to have life carry on is most important theme in the family. The family value it is 'carry on the life'...So all this character for the Chinese resilience, and self-sacrifice, and discipline, and respect for the elders, everything it's surrounded by [being] able to survive, to carry on the life, from generation to generation.

4.3.1.3 Worship and water rituals

A third aspect of sacred water in participant narratives was worship and water rituals, taking many forms. One example was the practice of worshipping gods or goddesses through water, discussed by Chaitali, Hari and Diyen. Chaitali is a woman in her mid-thirties who lived in urban and suburban Mumbai, India for most of her life. In the last decade she left India, first moving to Houston, Texas, then London, England, and finally Waterloo in 2011. She described several Hindu rituals involving water, both public and private, but focused in particular on two daily rituals using holy water at home. One was a bathing ritual. She remembered being taught a mantra by her grandmother.

When we actually bathe, take bath every day, we chant this mantra...“In this water I invoke the presence of divine waters from all rivers including Ganga, Yamuna, Godavari, Saraswati, Narmada, Kaveri and Sindhu. Seven rivers. These rivers are considered as goddesses and I pray to them for considering me for their blessings.”

As an adult, this mantra reminded Chaitali of the importance of water and remembering the sacredness of those seven rivers. Interestingly, this sense of the connection between water for washing and the sacred rivers continued for Chaitali in her interactions with Waterloo tap water. Now it was the water from the Grand River and local aquifers which become endowed with the same sacred properties as the water in which she bathed in India.

*Because of this mantra I think Ganga, Saraswati is here...in Canada as well.
This helps me to connect more with my roots.*

Sarah: *Can you tell me more about that?*

Chaitali: *Because these seven rivers they are in India, but we are saying wherever we are, the water from those rivers will be with us. So it is seen. In Canada as well, we are getting same water.*

The other daily ritual Chaitali described was her family's evening prayers. Here the sprinkling of holy water throughout the house and on family members again brought the sacred Ganga river goddess to be with them. Hari also described Hindu rituals with holy water, though his perspective on who or what was being worshipped through water had shifted since childhood. When he was a boy, his mother's daily bath in sacred waters was so important that every day, even during the winter season when water was very scarce, Hari fetched clean water for her and she would spend an hour in prayers while bathing. Hari says in Hinduism *"water is...equal to nectar. It's like nectar. It is something pure. It's something holy, pious. That's worth offering to god. So, therefore, water holds a very important place."*

Throughout our interview Diyen talked about the Nso's belief that gods and mermaids lived in local water bodies. They were called upon for many rituals, such as the many described earlier. Another example was the ritual of talking through water,

taking what in the following example could have been a simple shared drink of water between mother and child, and making it a prayer and an explicit statement about shared values and hopes:

And I remember in the village there's a ritual people do. Yeah. Somebody, if I'm going somewhere, anybody, the mom can just take a scoop of water and talk on it. And talk on it. And say oh my child, like chant incantations. My child's growing, I wish well for my child. I wish that he should be as good for other people as he's been good to me. I'm not offering him bad luck I'm offering good chance and good success in life, as any child. She would pour the water on the ground. She'd pour it again, she'd pour it again. Then she would drink it. And give you to drink. And then she would drink it again and then like spit it out so it comes like a fountain, no?

In Diyen, Hari and Chaitali's examples, what stood out was the way these rituals endow commonplace water interactions with sacred meanings, so that water's spiritual value is never far from mind. These rituals seemed to give worth to water itself, as well as the gods and goddesses within water, because of the way they brought mindfulness and reverence into water habits.

It is interesting to note that as adults Hari's and Chaitali's relationship to their worship and ritual practice had shifted. For Hari, the shift was mostly in his perception of meaning and worldview:

So I interpret it in a different way, slightly differently. I think that, in fact, water is of life. If there is no water, there is no life...So therefore, when I interpret that belief right now, scientifically, so I think this is the worship of water, not the worship of some invisible god...Water has a very important value, very important place in Hinduism on a whole and especially the society I come from.

For Chaitali, her growing environmental awareness and professional training in science had made her uncomfortable with the ecological impacts of certain rituals. Despite facing disapproval from members of the older generation, such as her grandmother, she altered some of her ritual practices because of her concern for the health of waterways. When worshipping the Ganapathi idol for the Ganesh Chaturthi festival which culminates in the immersion of clay or plaster of Paris idols of Ganapathi in local water bodies, she immersed the idol in bath water instead of a local water body, to limit pollution from the plaster of Paris, cement and paints and objects used to decorate the idol. She also no longer agreed with the ritual of Rangapanchami, a festival that delighted her as a child for its colourful water splashed on everyone. The chemical dyes in the water and their polluting effect concerned her, especially when celebrated en masse by millions of people, as in India. The water impacted by these rituals was the same water in which children swam or from which people got their drinking water, and this worried Chaitali.

In another example of water rituals and worship, Osei and Diyen each mentioned traditional water prayer ceremonies. Osei described a Ga ritual that used water to show worth to and open up communication with honoured ancestors. The Ga libation ceremony is a water prayer in which water is poured three times on the earth to call on the ancestors who are prayed to, consulted for decisions, and called on for blessings. In this ritual water is a powerful force: a sacred element in itself, and a medium through which the Ga people connect with the wisdom, power and support of their ancestors. Diyen also mentioned Nso libation ceremonies briefly, but Osei's detailed description was of a memory of an important moment in his life that he said he would love to revisit again and again. Osei remembered watching as a boy when his grandfather, a fetish priest, conducted libation ceremonies.

And then they will call...the four corners, the four pillars of the earth and then they'll call the four elements, which is earth, wind, water and fire. And then they call the seven days creation... and then they pour the water and then call the ancestral spirits, you know our ancestors who has fought and gained this

liberty that we are living. The libation ceremony is such a powerful thing that it ties in with wherever you are. You know because we have ancestors here [in Canada] who have fought to create this environment that we are enjoying right now. They are our ancestors and we are also living ancestors because what we do may account to the next generation, okay? And in their time they will also call libation and call upon us. So it's a circle, evolving circle... that continues and goes on and on and on, forever and ever.

(Osei 2012)

Osei went on to describe the sounds, scents, and sights of the libation ceremony, as experienced by himself as a four-year-old child. Huge drums, men in their ceremonial regalia, and the smell of tobacco smoke from his grandfather's pipe made up some of the sensual details of a memory that was precious to Osei and connected forward to his present day values and roles as parent, artist, musician and Ga elder in Waterloo. As with Chaitali, Osei continued to find the sacred Ga water rituals to be relevant and important to his life in Canada.

Christian baptism was another example of a ritual in which water's sacred meanings appeared in participant narratives. In the case of Rocio and Lettie, baptism offered a sense spiritual wellness and a deepened relationship with Jesus respectively. Rocio was in her late twenties and she immigrated to Canada 2010. For most of her life she lived along the Bogota River watershed in Colombia. As a Catholic, Rocio was reminded of her baptism each time she entered a church, where she would make the sign of the cross with holy water. She sensed God's presence in the holy water, feeling cleansed in spirit and soul. Illich (1985) suggests that this sense of cleansing that Rocio describes is linked to the purifying powers associated with waters.

Rocio: So water to my church, Catholic church, means to receive in some way the spirit and in order to have the... no sorry I'm so confused. Because I don't have the words to explain.

Sarah: It's hard to talk about abstract in the second language, so I can understand, it's frustrating. But I think I understand.

Rocio: Yeah, like to have benefit from water, like, in a positive way, to, to clean your spirit and your mind or body, everything.

Sarah: So that was in church through the process of baptism. And did that somehow also affect how you felt about water when you were outside of church or was it two separate things?

Rocio: I think some point it's related, because it's still water, but inside the church it's—I think it's more the sense that you are in church and you have this water to make this thing, the cross, to make the cross and to feel pure. But you can feel pure with water if you care about it, if you—you can see God through water as well outside the church

Sarah: Is that something that you felt that you could see?

Rocio: Yeah, I can feel it.

Rocio's spiritual relationship to water extended beyond the church walls, and flowed into her passion for water in the landscape and her personal water ethic, as could be seen through her career safeguarding Colombian watersheds as an industrial microbiologist.

For Lettie who was baptized as a young adult, the immersion aspect of baptism in her church was an exciting way of identifying metaphorically with the death and resurrection of Jesus. She remembered the event with obvious delight as an important part of her identity as a Christian.

I was a teenager actually when I got born again. And we were very excited and vibrant in my church at that time. We look forward to it because we saw it as something that was going to be a wonderful experience. That you would be immersed in the water and as you come out you identify with his death and resurrection, right? So you died with him, you resurrected with him, right?

This memory contrasted sharply with her other experiences of rivers and streams that were full of terror and alienation. In this one case she felt safe in the river, surrounded by the fellowship of her congregation, her pastor, with a sense of the blessings of God upon her. Compared to Rocio, the emphasis in Lettie's baptism memory was on the experiential, communal and metaphorical aspects of baptism. Water itself played a minor role, and did not take on further spiritual significance for Lettie beyond the role it played in the ritual of baptism itself.

A secular phenomenon that arose several times throughout participant stories was the ritual of going to water to seek peace and renewal. Reynaldo, Naema, Hari and Hailing each gave examples of more-or-less secular ways of giving worth to water. Reynaldo is a man in his forties who immigrated with his family to Canada from the Dominican Republic in 2010. Naema is a woman in her mid-fifties who immigrated with her family, including her daughter Mashal, to Canada from Pakistan in 2010. Both Reynaldo and Naema mentioned the importance of sitting beside water in the landscape and connecting to their inner self through quiet reflection. For Naema, being able to sit beside water offered an opportunity to feel peace, reflect on life's problems and even talk to water, and the chance to appreciate the beauty of God's creation. Reynaldo's relationship to the sacred in water was ambiguous. He went to water to be alone, relieve stress, and get away from everyday life. He felt peace by water, and has consistently sought out water for this purpose throughout his life. Having lived in Kitchener for one year at the point of our interview, he had found a spot at the Grand River to go to, and an artificial lake near his work in downtown Kitchener, each offering a combination of water, trees and wildlife to observe. Since coming to Canada new understanding of

aboriginal people's spiritual relationship to water, especially to rivers, has resonated with Reynaldo, who grew up in a river landscape. He both believed and didn't believe in a spiritual meaning to rivers. *"Obviously if it's just water flowing, it doesn't have any conscious behaviour. But then again, somehow it's not just water flowing. It's like you can connect to something other than just water."* Yet, he explained that in his culture a river has no more meaning other than being *"a source of water or a source of recreation."* Ultimately, Reynaldo himself concluded that *"it's just a river, and water flowing, and that's all."*

Many participants were concerned that cultural and spiritual values around water had been lost to modernization. Hailing spoke about a loss of a worshipful relationship to water. She witnessed a dramatic change in water infrastructure from the neighbourhood water hole to indoor plumbing while growing up in Fuzhou, China, and also after immigrating to Canada. Throughout our conversation, Hailing reflected on the implications of this shift. One story she shared illustrated the relationship she perceived between labouring for water and worshipping water. Each summer Hailing and her parents would spend a day picnicking at a quiet mountain pond that they climbed to from town, starting out very early in the morning. For Hailing this experience was precious in part because it was something she had to wait for each year, and in part because the journey to the pond was hard work. There was nothing instant or easy about the experience. *"It's interesting, eh? Right now you have more luxury and convenience. But then, it's interesting, at that moment, because you don't reach, you don't access it [the pond] so easily, you have to wait for the whole year to be able to get it—it's becoming more treasure."* Hailing wondered what happens when water that must be worked for changes to effortless water. Her conclusion, drawing from her own experience, was that less effort means less valuing of and personal knowledge of water. *"Somehow you lost that kind of, what do I say, the feeling of worship something. Because it is hard, you start to value it and worship it, right? [But, when] things become easy, you have less kind of value, sense...Because [water is] so convenient for us to have...we have less sense of it."*

4.3.2 Water as connector

This theme overlaps with the theme of sacred water because of the tendency people have to gather together around water for rituals of reverence and contemplation. However, here the focus moves away from the sacred in water to capturing the ways that water flows connect people both relationally and culturally. As participants and people in their communities carried out water roles and activities in their everyday life, water connected them within a web of relationships, but especially to family, friends and neighbours. The words that bobbed along the surface of these water references included *family, neighbours, friends, lover, poetry, song, story, picnic, bbq, play, fun, share, competition, organized, and tradition*. The most common example of water's flow through social connections in participant narratives was the fun of gathering at the waterside. Ten out of 15 participants described some kind of recreational water gatherings, using phrases such as "*wonderful time with family and friends*" and "*really being in contact with nature*" (Reynaldo, speaking about picnics at local rivers); and "*it was something that brought all of us together*" (Hari, speaking about skipping classes to swim in the river with friends). Whether it was a quiet mountain lake picnic in China or a barbecue beside a favourite spring in Syria, water offered the chance to turn away from everyday work and chores and to be refreshed, in one's self and also in one's relationship to others. Water flowed through many other social interactions in participant narratives. Several participants spoke about the simple act of offering water, a valuable role with rich social meanings. Some participants told stories of informal systems of water cooperation and organization. Finally, several participants discussed the ways in which waters' flows created and mirrored arts and culture.

4.3.2.1 Offering water

Offering water to another, whether through a drink of water or a bucketful for the household, was important in many participant narratives. In participant stories this gesture worked to reinforce social ties, sometimes as a signal of welcome, hospitality, and respect, and sometimes through the value it earned them. As Osei described, it was a simple gesture with profound meaning:

So, for instance, growing up when you go to somebody's house back home, the important thing is that they ask, "can I give you water" because they believe water is a source of life. So once they see you even if they don't have anything they offer you water and that's a good gesture, right—you're welcome, you know?

Similar to Osei's example, when participants talked about offering water or bringing water home, the implicit message seemed to be that offering water meant to have value. For children, bringing water home was an important contribution they could make to their family's daily needs. Hailing, Hari, Abel, Majdi, Diyen, and Michael each described their own role as water carrying children. Diyen remembers when he was so young that he was unable to carry water like his older siblings. To carry water from the well or spring was the best thing he could do for his mother and he longed to be strong enough to offer her this help. Majdi is in his late thirties and immigrated to Canada from Lebanon with his wife and first child in 2003 and has had two more children in Canada. When Majdi as a child filled buckets for his household at the local fountain, to offer water to seniors was a way of showing respect and value. :

I knew that if I was to fill my bucket and an older person came in I should wait and let them fill first because I shouldn't let an older person wait, especially a senior person...I would have my bucket under the water and someone comes and I would take it out and invite them to fill ahead of me.

As a child Abel faced many risks in bringing water home. The streets were full of violence, and a 6 p.m. curfew meant the water needed to be home on time or risk being shot. The importance of his daily water contribution to his sense of self was underscored by his reaction when forced to return home empty handed.

Imagine now, we are all kids, and you hear every single day shootings. Somewhere they kill people. And we are all kids. You have to run. We have

water, we have buckets.It's obvious, anh? Because when we run with water, imagine now we have something like a liquid, any kind of liquid, and...there is no cover on the buckets. And you run. You can imagine, maybe, if you get ¼ of it home you're lucky. So you can imagine now what it means. And most of the time some kids, even myself it happens a couple of times, just without a drop of water I get back home. Just without drop of water. And our parents, they know. They don't blame us. They know, but they try—that was the most... how can I say that, the most important and a blessing for the family—they don't blame you and they try to cool you down because you cry. Other neighbours they bring home a bucket and you bring maybe nothing or ¼ of it.

Though Abel was brought to tears, perhaps of frustration, shame, or sadness, Abel's parents soothed these feelings away, reassuring him of his value, water or not.

4.3.2.2 Cooperation and organization

Another aspect of connection were the stories that participants shared of cooperating and organizing for water use. Several examples in this section hint at traditional ways of knowing and interacting with water, based on agriculture and culture. Some traditions of water cooperation and organization were linked to specific gender roles. Whether gendered or not, participants often expressed appreciation for traditions that were in the process of being, or, more often, had already been lost to modern infrastructure and changing culture. Finally, some examples in this section relate to survival during times of crisis, and the importance of neighbours helping neighbours.

Osei spoke at length about traditional water governance in his childhood home of Prampram, Ghana, where he had both witnessed the strength of traditional ways and the problems that resulted from the loss of those traditions, as people became more Westernized. He was frustrated with the stereotype of Africans being ill equipped to

manage their own affairs. *“No—it was colonial interruptions that really brought confusions into African affairs and really took from Africa.”* Before colonialism there was a traditional council in each community, and the council created structures of community support, agricultural production and resource use that made the community self-sufficient. Water interactions were orderly, from the filling and maintenance of communal pots for drinking water, to knowing which waters along the local river and stream systems were for what uses, to designating bathing areas for women and men, to the maintenance of a water reserve. Osei was proud of the 1000-year-old knowledge that informed these systems and connected the Ga people back to their ancestors who had travelled along the Nile River¹³. *“These are all things that our elders have look, they’ve studied the water, they know the water flow, so therefore you’re not doing washing to run into the community water site where people take water and drink okay, so things are really in an order.”* In Osei’s childhood, these traditional systems still existed, but soon he experienced the shift away from traditional water infrastructures. Clean water bodies were destroyed and new infrastructures were inadequate. He describes his generation as being one that is used to being taught what to do. People, influenced by individualistic material desires, wanted to own a piece of land or a bungalow and, to satisfy this new market need, whole communities had been developed far away from water sources. Osei felt that his generation was lost, not knowing who to follow.

So everything became congested, confused. People don’t really understand what they’re doing anymore and by so doing they’ve also lost track of how our traditional councils are run right and how we can really keep things in a sustainable and efficient function for everyone. So people are really caught in between and therefore don’t know which is better, right.

Majdi described a water sharing strategy between neighbouring farmers near Bakleen, Lebanon, the village in which he grew up. Majdi remembered that on designated days his grandfather dug a channel to the stream and closed off the

¹³See Amartey (1991) in kwekudee (2013) for a description of the Ga Nilotic migration story based on oral traditions.

neighbour's channel. Majdi could remember helping by sitting at the stream all day to ensure the water continued to flow to the appropriate fields. *"That's the way they've always shared water to water their crops...So, "Turn the water", I'm translating this..."Turn the water"...This is very common phrase and it's about sharing."* In contrast, Hari's childhood experience included competition for water, with farmers sometimes working under cover of night to divert streams to their own fields and away from their neighbours', without any sense of organization or sharing. Where Majdi's role as he understood it was to prevent wayward flows from wasting water, Hari's role included an element of protection: guarding his family's share of the water from those who might take it.

So my job was to keep an eye on, to make sure that the water is coming to the field. Especially during the planting season. The other farmers, they would also sometimes, when there is not enough water, they would just block the way to your paddy field and take the water to their field. And they would do that at night. And sometimes my father and me would go to the source of that canal to take the water back."

In participant interviews, women and men generally shared many basic roles relating to water, though often fetching water was a chore given to children, once they were able. Majdi's and Hari's stories of turning water involved male relatives and male responsibility. Hailing and Nada each told a story in which women connected through water. Nada remembered how rivers connected women as they went about their daily work, by conveying resources from household to household. For Nada, it was as if the love and heart of the community flowed on the surface of the river.

...but inside the heart of Damascus, the old Damascus, my city, the rivers were going underneath the houses, yeah. Like one river and houses are built over the rivers, so the river is going from one house to another to another so the neighbours, the women, used to cook something and put it in the water to go to the next house and the next lady pick it up. That's in my memory, I haven't

seen this personally but I know it was there. I know it happened, still the elder women were talking...So the river was like mail [laughs] delivery from one house to another to another and so just imagine how much love was going there, how much hearts were going floating on that water from one house to another.

Hailing described the lively riverside life of her childhood in which the concept of community comes up often in a life where much of the daily chores were conducted in public, especially for women. Here the river created a social space for women as they laboured at laundry:

*So what I remember, my grandmother they would go over there, the river side, to wash the clothes. Again it's becoming a community, the riverbank, right? And communicate. And again it's become exercise to get in touch with the life—water is the life. You touch the water, you wash the clothes, you have the sun burning your back but you have sweat, you have laughing, you have conversation. It is tough but you feel alive by touching all these elements, the earth elements
(Hailing, 2012)*

Though the laundry example was gendered, Hailing pointed out that because of Chinese Independence in 1949 when women and men began to have equal opportunity to education, many household roles were shared fairly equally between women and men. This included fetching water. It was more typical that these roles would be delineated by time, interest and ability, than by gender.

Abel and Majdi each commented on the importance of neighbourhood organization and/or support during conflict—the Eritrean War of Independence and the Lebanese civil war and subsequent Israeli air raids, respectively. Everything was in turmoil. Water and power infrastructures were down, and access to basic resources

such as water was a matter of survival. At this time, the scale that mattered was that of the neighbourhood. As Majdi describes:

The entire infrastructure of power generation and even water distribution would get destroyed. A bomb would hit and there's not time even to fix it. The municipalities were dysfunctional, the whole government was dysfunctional, so there was no...it was total chaos. People basically organized themselves in smaller communities that helped each other to go through.

In Abel's neighbourhood in central Asmara, where the military junta controlled water access, an Italian neighbour had a well at his villa where he also had a garage-based business. This man, "*Darlle Pippo*", Abel told me, was a rich man compared to most of the people in the mostly working class neighbourhood, and he shared his well with everyone "*out of generosity, nothing else*". Sometimes the line-up at his well was almost a kilometer long. This water freed the neighbourhood from having to depend on the military's unpredictable timing for turning on the municipal water supply. Thinking back, Abel thinks that the other rich households in the neighbourhood, of which there were only a few, did not have wells but ordered deliveries of water instead. Abel thinks it was likely his neighbour's access to machinery that allowed him to dig his own well. It was because of the 55-year Italian colonial history in Eritrea, that someone like Darlle Pippo lived in Abel's neighbourhood. In extraordinary circumstances, Abel's neighbours "*from north, south, east and west*" came to join the line for the very ordinary purpose of sharing water.

4.3.2.3 Oral, literary and musical culture

Another way that water flows through social connections is through the oral, literary and musical culture that develops around water. Eight participants (Diyen, Osei, Hailing, Majdi, Nada, Chaitali, Naema, and Michael) offered examples of water as a

creator of culture, either as the place at which people gathered to tell stories and/or to make music, or as the subject of poems, songs and stories that connected people. When asked, all but three participants shared cultural stories relating to water, but I will focus on the cases where water stories held personal meaning for the participants and where water acted to connect. For example, Hailing reflected on water's role as mediator of community relationships through the public exchange of stories, before private in-home piped infrastructure was available. As a child living with her grandparents in Fuzhou, Hailing made several trips daily by foot to the water hole and back. Because 50 households shared the same running water source, Hailing remembers the water hole as the place to hear community stories and news. *"Yeah I think [at that time] water becoming a resource for people to connect with each other and get to know each other's story...[The water hole was] a place for the story to be heard and to be told."* Here children like Hailing could listen to conversations, often of friendship or support, as they participated in filling the household *sui gong*, a large indoor water storage container. She contrasted this informal way of connecting to others against the contemporary North American tendency to set appointments for everything from tea with a friend to children's play. The interactions of neighbourly and family relationships were more porous and fluid when conducted through the water-related labour of Hailing's childhood.

Osei, Diyen, Nada and Majdi, all artists, spoke in particular about the way water, music, art and culture were woven together in the landscapes of their childhood and youth. During his interview Osei sang a Ga song about the relationship between water and life.

N'su fa mu, n'su fa mi, n'su fa mu, n'su fa mi
Agro yi ye mi de n'su fa mi, n'su fa mi

And N'su is the water. N'su is the water that represents life. Wherever there's water, there's life. Like you say, whenever there's smoke, there's a fire yeah, and it's also life, right so... water. I see water I see life. [laughs]

Diyen shared a sensory-rich memory, where water flowed through the sounds, tastes and stories of a mother's work creating "*the art of life*." He described a scene in which the mother bathes in the stream on the way home from the farm and when home prepares food, creating a beat with her mortar and pestle—"a *dhm, buhm, buhm*" that she'll match to a song. The song will shift into folk tales that Diyen said were mostly about water. Diyen told me several stories as examples, including one about a daughter who pleases her mother by bringing back water and other riches from the mermaids in the stream, and another about the woman who founded the Nso tribe when she found a way to cross a difficult river into new land. As an artist of life, Diyen's mother used these water stories to hold, uplift and teach her children.

Sarah: When you think back to those memories of your mom and being in the middle of that art, what did that mean for you as a young boy?

Diyen: I think that helps build me up. Because most of the stories as I told you were just like symbols. Were just like, the hand showing you direction, so you shouldn't look on the hand. If you look on the hand you'll miss the direction. They were stories to make us think, to grow like people. To make us strong. Because if your mother realize that you are somehow weak or your brothers are getting everything because they're stronger, [s]he would like to tell you stories to put you in that mind that position so that you get strong [laughs] [s]he would like to make you feel as if you belong as if you were a part of everything too.

Nada and Majdi each referred several times to what Nada called "the eye" and "*ain*" and Majdi also called "*ain*." There were slight differences in the way they described *ain* in the interview. Majdi described it as the public fountain or spring and Nada described it as the source from which streams and rivers flow. For both Majdi and Nada, the *ain* was an important motif in Arabic literature, oral culture, and architecture, as

well as itself acting as a generator of culture, by being an important place of gathering. Nada described the role the *ain* played as a generator of art and culture:

This is how humans create art. Folklore, they create their own culture just by gathering together by the eye, the water eye. And they create, entertain and try and do this and do that and put fire and cook something and dance here and song here and if you don't have an instrument to play they were like flipping a pan and going doon dooka tuk tukka doon doon tuk [beat] doon dooka tuk tukka doon doon tuk [claps rhythm of last few beats]. Like they do their music, they do their art, so it is thousands of years to create culture and water is always in culture, always.

She got goose bumps as she talked with me about the old poetry of Syria, so much of which is about rivers and springs. Water continued to be an important motif in contemporary Middle East poetry as well. Nada told me about two very different poems, one by beloved Syrian poet Nizar Qabbani, and one by Iraqi poet Badr Shaker Assayab, that began with the word, rain, repeated in Arabic: *matar, matar*. Majdi also remained close to the water folk literature of the Middle East. There are hundreds of Lebanese folk songs about water and Majdi still listened to them and heard them at weddings.

In Lebanon, the civil war and ensuing destruction of water and power infrastructure during Majdi's childhood meant that *ain* traditions were an everyday necessity and as normal for him as was the non-functioning indoor plumbing at his home. He remembered his parents' annoyance that water interactions had reverted to pre-modern habits of gathering at the public fountains, and his grandmother's easy return to earlier habits.

By the early century, water was piped into most of the houses, even in rural areas in Lebanon. The Lebanese civil war between 1975 and 1989 destroyed all the infrastructure and people went back to the [old] idea. So for my grandma it was like, "Oh this is familiar, we've always done that. Why are you complaining?"...Going back

created a lot of nostalgia and the fact that there's no more water in the taps piped to homes...[meant that] people started to meet again in that fountain place. And they started to reminisce about the older days and remember the songs, the folk traditional songs, and recite the old traditional poems that talk about the fountain. So you would find people, especially when you're lining up waiting your turn, people would stand there sometimes for hours and they communicate and they talk and they tell stories.

The return of *ain* culture meant a return to the literature and interactions at the water fountain, creating a scene similar to the one Hailing describes, where the act of going out in public to fetch water creates connection. Just as in Hailing's case where her positive memories of the water hole are juxtaposed against serious adult concerns about flooding, in Majdi's case the revival of *ain* water culture is set against wartime tensions and shortages that included fuel and food. Bakleen was the driest village in what was otherwise a water-rich region. When nearby water fountains dried up, it forced Majdi's family and neighbours to look further afield for water, using whatever fuel they could get to drive to other fountains. Water connected, but it also was a source of constant concern.

4.3.3 Controlling water

Many participants were concerned with who controlled water and how. In follow-up discussions, five participants in particular identified the control of water as a key priority in their water stories and their concerns about water. Their control-related comments were sometimes like drops in a quiet pool, with words like *sad, ethic, loss, children, and worry*. Other times the words and phrases splashed forth, like *occupation, hot issue, dominate, wars, scarcity, scary, dangerous, power, poison, crisis, corporate, injustice, hoarding, wealth, bottled water, and nightmare*. Eleven participants had experienced water as being under the control of others. In the most extreme case, water was used as a weapon of control over Eritrean civilians, by the military junta during the

Eritrean War of Independence. Sometimes local water control was lost to private ownership or shifting geopolitical borders. More common was the experience of losing control of water by witnessing drastic changes in water flows, often because of the actions and decisions of people, institutions, or states far removed from the participants' lives. In this study, participant responses to the loss of water control were varied and often emotional, including concern, sadness, outrage and fear.

4.3.3.1 Experiences of water under two restrictive regimes

Though their experiences were vastly different, Abel and Michael each described a childhood in which aspects of their everyday activities were subjected to rigid and sometimes violent external control. Water's flow through these repressive conditions took contrasting forms: in one, water represented fluidity and movement in an otherwise restrictive landscape, and in the other, water itself was used to control and subdue. Michael is a man in his mid-thirties who grew up in East Germany, studied in East and West Germany, worked in Ecuador in his early twenties and immigrated to Canada in 2002. Water captured Michael's boyhood imagination and a yearning for adventure. He grew up in a cul-de-sac of land tucked into the East German border during the 1970s and 1980s, surrounded on three sides by guarded border fences. The river that flowed through his village, a hangout spot for Michael and his childhood friends, flowed freely across the border and showed no concern for the guards or fences that restricted the local population's movements. As a boy, the river was a place of fun for Michael. But it was also the object of a boyhood fantasy of escape:

And I thought okay, how would it be if I was wanting to escape from East Germany. And I had no real reason, I was thinking that when I was eight or nine, like definitely before the wall came down. But I thought, well a river would be easy because you could just, I don't know, swim across. I mean, little

did I know like, it was so heavily guarded, I mean people lost their lives trying to cross [rivers] or cross the Baltic Sea on rafts.

The wall dividing East and West Germany came down when Michael was ten years old, and as a young boy Michael generally remembered feeling sheltered from the impacts of the repressive situation in which he grew up. He likened his escape fantasies to boyhood restlessness more than a longing for freedom. Part of Michael's family history included an actual water story of escape. Two of Michael's dad's cousins, one of whom was under pressure to get out of East Germany in order to avoid being found out for an earlier failed escape attempt, found an escape route through a water culvert. They secretly scouted out the creek over days of playing soccer in a nearby field and lost weight in order to be able to fit through the tight diameter of the culvert. One night they successfully escaped. This was the first water story that came to Michael's mind when I told him about this research.

They basically made it through this little canal, mini-canal, pulling each other with rope and made it to—like the next village was really just like three km away once they were on the West German side, and my grandparents on my dad's side have half their siblings in East and half in West. So all they needed, they went to the next police station, went to the West German border guards...and then they were connected with their aunts in a place that now takes about 20 minutes to drive to, but back then you could only visit if you were immediate family, if you applied a year in advance and needed to take a huge detour to get there, so. So for them, that little creek was their escape way out.

Whereas Michael remembered the free flowing waters of the Ulster River and the little creek, Abel shared a story from mid-1970s Eritrea when water itself became a war weapon, used to harm and kill. It had already become clear to Abel and his neighbours that water could be used as a military tool, as they waited in long lineups for water at the mercy of soldiers and strict curfews. Then, when forced to flee Asmara because of

excessive violence in the city, they experienced water being used for a more brutal kind of control and violation.

In so many places they put poison in the wells so people can't use. If you use it then you die. People went through this process. Imagine what it means. And you have to flee to find water, so many kilometers. No matter where. You just hope to find water. So you can imagine what it means. How much impact it had for the community. So they use it as a real weapon.

The poisoning happened when Abel was very young, about 6 years old. He remembers many adults in his life talking about this for years afterwards.¹⁴

Like Illich's (1985) shifting mirror, The Ulster River and poisoned wells of Michael's and Abel's stories offer two visceral glimpses at ways in which water flows in the context of power. More surprisingly was how these glimpses also revealed the power of imagination. There was Michael's boyish fantasy about escaping East Germany by river that showed the extent to which he could identify with the movement of the river. There was also the way Michael helped me to respect the truth of his childhood imagination, by holding me to an accurate interpretation of his reflections. When I suggested to Michael that he had looked to the Ulster River for freedom, he corrected me, saying he did not have a sense, as a child, of lacking freedom. Though there were extreme aspects of Michael's and Abel's water stories, they both told them in ways that checked any instinct to dramatize or exaggerate. Finally, there was the way that Abel invited me, and perhaps even challenged me, to really imagine what his experience had been. He expressed confidence in my ability to do this work, often saying things like, "*You can imagine what it means*" as he told me about water's preciousness in his everyday experience growing up. In their words, Michael and Abel held a reminder of

¹⁴As of September 27, 2015, I am waiting to hear back from Abel for more details about this story. He is in the process of reaching out to elderly Eritreans who he knows to try to get more context for these stories he remembers. He said by email that it is an important story to tell and he would like to tell it right.

the ways in which they, and each participant, shares authority for this research. Just as the participants considered the ways in which they had experienced control, as related to water, I realized that it was my responsibility to continuously reinvigorate my awareness of my own control of the water narratives discussed here.

4.3.3.2 Losing control of water

More commonly, participants experienced a sense of lost water control by witnessing a shift from water abundance to water scarcity. Hari became very concerned as he witnessed changing water flows in urban and rural Nepal:

And I remember the force of water [at the public taps in Kathmandu]...If you just hold a bucket it would be filled within a couple of seconds. But today, just before I moved to Canada, when I moved to the same place tap, there is a small water, very small, just like a faint. So I was really worried. Why? What is the reason? There used to be so much water 20 years back, but there is no more water now. It is not only at one place. We can see this in every place, everywhere. Even when we talk about rainfall, when I was a child there used to be a lot of rainfall and I would always, when it started raining, I would wait when I was at home if it started raining I would wait for the stream, for the flood to come. I would always watch, look at the stream. But nowadays, it doesn't rain. It would rain cats and dogs for many days, it doesn't rain, hardly rains for just a few days. So this is something we have to worry about.

Hari told me he also worries about how long local water supplies will last as population density continues to intensify in Canadian urban centres. Talking to him, I had the sense that he will carry his awareness of how quickly and shockingly water flows can change into this new water relationship in Canada. Like Hari, Reynaldo also witnessed changes in water flows, in his case the partial drying of a river he knew as a child, just one of many rivers affected by deforestation throughout the Dominican

Republic. He spoke of the changes in the Dominican river landscape with clear sadness and perhaps a sense of helplessness. Obstacles to improving river health loomed large and Reynaldo was doubtful of the country's capacity to implement the changes necessary to repair the damage done:

I knew they [the rivers] will never be the same. It's really very difficult because you will have to work in the whole country in order to get people to change their life habits. And in order to solve the problem as a country you will have to have hundreds of small programs going on at the same time.

Reynaldo, Osei and Mashal each linked changes in water flows to human impacts such as deforestation, climate change and a lack of leadership. Mashal was concerned with the lack of accountability at the national level of decision-making in Pakistan. During her lifetime she has observed the effects of climate change in shortened monsoon seasons and severe flooding caused by melting glaciers. As environmental change crippled Pakistan's agricultural economy, she was shocked by the lack of governmental vision and action. *"It's negligence at the government's part. They're not doing anything about it. It's like they care less. Nothing has been done so far to pre-empt this situation or to prevent this situation."* Osei was frustrated by the environmental injustice of water scarcity in present day Ghana. He noted that relatively poor countries such as Ghana suffer the most from climate change's impact, but contribute the least to its causes. He linked deforestation and climate change to the drying up of wells. Like Mashal, Osei also connected severe water shortages to a lack of leadership, in this case in the form of corrupt and negligent water governance systems.

I'm talking about there are water shortages in the cities [in Ghana]...they have to walk hours to get water. They haven't been running for a month or two or three because some pump is broken somewhere. And somebody, somehow, is not fixing it but yet they are getting paid for. And thousands of people out there are short of water...so, you know, those things scare me.

This negligence scared Osei because he knew that, before people could be free to learn and participate in decision making, they must have their basic needs met. Osei's voice was urgent as he talked about this. "[When we lose water] *we lose everything. How can you read when you have no food or water?*"

4.3.3.3 Water sovereignty

Water sovereignty was an issue that strongly concerned Nada, Naema and her daughter Mashal, and it also became a discussion point with Diyen and Reynaldo. Nada had witnessed Syrian rivers and wells that dried up during her lifetime. She blamed water scarcity on population growth and misuse of water resources, but she also pointed a finger at Israel's overuse of the region's water supply and the redrawing of geopolitical boundaries. As water flows in the region dwindled, water sovereignty became an increasing concern, rife with tension. Here, Nada spoke about a place called Himma, also known as the Golan Heights, a place she and her mother visited before it was taken by Israel during the 1967 Six Day War.

[In the past] there was too much water and now there isn't. I remember when I was a kid my mother was a tourism guide and she took me with her to one of the trips and the bus of the tourists stopped beside a river, just like a big river going and we all jumped on the sides of the banks of the river and we started filling our bottles from the river. It's impossible I think to find that now. In Damascus now the rivers are dirty. If there are rivers. And we were filling the bottles and we were putting our faces and drinking and everything. Now, that spot is occupied by Israel. I can't even go there anymore. Occupied.

In recent years she had heard that it was no longer possible to dig a well at her family's farm outside of Damascus without permission from Israel. Nada was outraged by this loss of water sovereignty. When an *ain* or spring represented timelessness and continuity, how does a person make sense of its destruction? If an *ain* is deeply linked to

cultural heritage and identity, what does its occupation signify? As she speaks about this, her emotions are palpable, with reverence and anger seeming to have equal place.

You just watch the water coming out of the rocks and you don't know from where this water is coming and you dig with your finger—where is this coming from? The rock and this is a stone and this is a stone and it's coming out of the rocks and it goes on and on and on and on and on. You sleep, you come next day, you go, you come next year, you travel, you study, you come and you find it and it's something like eternal, eternity, eternity, something like so touching, so unbelievable. So when you hear that one of these eyes dried up or closed or got used by I don't know what or taken, stolen, occupied or whatever, it's something like as if you lost your arm or leg, yeah.

Like Nada, Naema also experienced significant water changes in her lifetime. She remembered the pleasure of a long shower as a child in Rawalpindi: “*So we used to have 3 bathrooms and in those 3 bathrooms, even if someone gets to go in and take a shower it would be difficult to find your turn because we used to wallow in water and take such long time to have it at full heart's content.*” This memory lay in sharp contrast with her adult experience of water scarcity, where it became increasingly difficult and expensive to procure water for her household's use. She identified population growth as a factor in this scarcity, as did many participants. But she placed most of the blame on regional mismanagement of water resources, and particularly India's overuse and over-damming of the Indus River basin. Because of a lack of water, Naema had experienced significant personal and financial loss, having had to sell her beautiful house in Rawalpindi at a low price. I did not ask for details about each participant's personal status, and their socio-economic status was sometimes unclear. When Naema showed me photos of the house in Pakistan that she and her husband designed themselves, it was clear that she belonged to the upper-middle or upper class in Pakistan. She showed me a photo of her modern kitchen, full of marble. It seemed to lack for nothing, except water. In Rawalpindi, municipal water supplies tended to be used up first by the business centre and then the military neighbourhood. There was not much left over for her own

neighbourhood. Water was generally available in this neighbourhood only if you were fortunate to find water on the property through bore holes. Barring that, the only other option was to pay for water delivery by truck, a huge expense. The irony of waterless riches was not lost on Naema. Her experience of water scarcity seemed to represent much of what concerned her about Pakistan. She saw its potential for prosperity held back by poor governance, regional tensions, and the shadow of other countries' wars on terror. In the case of water governance, she remembered the 1960 Indus Waters Treaty with pride, and is saddened by the lack of recent vision and accountability. Both Naema and her daughter identified a lack of contemporary regional water governance leadership as a significant problem. Mashal grew up hearing her mother's stories about the 1960 water conflict between India and Pakistan. She remembered reading about the water crisis in a school textbook and imagining with fear what it would have been like to be living in Pakistan when their water supply was cut off. *"It was a disaster. And hadn't things been resolved between the two countries, God knows what could have happened...I used to fear a lot. How would it be, living without water?"* Mashal grew up in a household where securing water for everyday needs required trouble and expense. She even had a major nightmare as a child of being without water, parched, in the desert. The thought of another regional water conflict was a real fear for her.

Diyen and Reynaldo experienced a lack of water sovereignty in other ways. One key example in Diyen's life will be discussed in the Acting for Water section, about the loss of water management power from community to state and back. Another example was from his experience living in Boya as a high school student. Boya is situated at the foot of Mount Cameroon, from which flows an abundance of fresh water. He noted with irony that while there was a lot of money to be made in Boya selling water, very little water was available to the average person. For Reynaldo, who lived in the Dominican Republic where much of the ocean-front property was owned by foreign tourism companies, water sovereignty was not a significant concern, but a dormant conflict. Since almost all local livelihoods depend on tourism which itself depends on the exclusivity of beaches such as Punta Cana, Reynaldo was fairly comfortable with the lack of local access to these ocean-front areas. Ideally, he would have preferred if locals could

access the 60 metres of waterfront which by law resorts do not own, but said this was unlikely to ever happen. The tourism industry was too important and resistance was not a part of the culture: *“you don’t have any way to go against that. And we don’t have, it’s not part of our culture to push the limits or go against the status quo.”*

4.3.4 Acting for water

This theme captured the importance to participants of taking responsibility for water. At the most basic level, most participants—nine out of 15—spoke of taking responsibility for water by contributing to a variety of chores associated with water. Each participant described the ways they interacted with water as children and adults, and these descriptions usually included strategies for collecting or conserving water. However, I will focus instead on how participants took—or continue to take—responsibility for water by questioning and asserting water values at the personal, regional or sometimes international level. The examples ranged from parents concerned by their children’s relationship to water, to questions about Canada’s water ethic, to, in an extreme case, young people risking their lives to regain community control of water. Acting for water references included words like *responsibility, innovate, policy, protest, democracy, message, symbol, smart design, irrigation, science, story, worry, cost, scared, education, children, and future generations*. This focus solidified during the group follow-up discussions, when each of the eight follow-up group participants identified acting for water as an important priority. The examples found in this section suggest that Canadian immigrants who have experienced different water contexts may represent an untapped resource for imaginative, unconventional, conservation-ethic-based water behaviours.

There were many reasons participants were motivated to act for water, including their role as parents, their strong conservation ethic, their faith, their sense of equity, their concerns about water security in the face of climate change, their concerns about loss of traditional water knowledge, and, for many, their sense of wonder or reverence

for water. For example, Mashal spoke about the importance of intragenerational and intergenerational equity in water security and she, along with Naema, Nada, Osei and Diyen, expressed a strong sense of solidarity with people struggling with water scarcity in other parts of the world, especially those left behind in their countries of origin. Osei was troubled that colonial rule, capitalism, and industrialization have displaced traditional knowledge and communal systems for socio-economic organization in Ghana and across much of Africa. Loss of water knowledge and resulting poor water decisions at local levels and beyond are just one aspect of the post-colonial “confusion” he sees unfolding. One of Michael’s motivations to act for water stemmed in part from a family ethic of frugality, led in part by his grandfather, whose experience during World War II in Germany taught him to use great care with resources. Finally, Hari worried about the future of water availability in Canada, and asked how long water consumption will be able to continue at the current level as Canada’s population continues to grow.

4.3.4.1 How will the next generation act for water in Canada?

During interviews and especially during follow-up discussions, participants contrasted their early water experiences with their experiences in Canada. Several participants questioned the lack of an explicit or even implicit water ethic in Canada, viewing this absence as a major obstacle to more widespread actions for water justice and water security. Participants discussed what some called a “North American consumer culture” towards water. In her interview, Nada compared the Islamic-influenced ethic of water conservation common in Syria, to the lack of a sense of personal responsibility for water in Canada. In her experience, the only people who have a clear water conserving ethic in Canada are those who (as in the case of environmentalists, gardening enthusiasts or water professionals, for example) “*carry the flag*” of water conservation.

Prophet Muhammad said don't waste, even if you are sitting by the river. Don't waste water, even if you are sitting by the river. So just how beautiful this is, like feel it inside you, your head, inside your bones, feel it that this is your responsibility. But here in Canada people are not into that at all. [Sarah: Hmm?] Rarely, I see people, rarely. I see them—and they are serious about it. But it's like...a strict Catholic, you know? It becomes like...it is not like everyday. It is like a belief—it's a thing that they carry the flag of it, here.

This concern about the lack of a clear water ethic in Canada emerged in a variety of ways during interviews and follow-up discussions, including questions about how the next generation will relate to water. In her interview, Hailing in particular spoke of her concern for water's invisibility in North American culture. If water is hidden away in pipes, behind walls and under roads, Hailing asked, how could people experience water directly enough to care about taking more responsibility for water? In other words, she asked, how do we in modern society stay in touch with water? What concerned Hailing in particular were her own young daughter's water values and those of the next generation. These questions were important to Hailing because they were not only about water, but also about our identity. She reflected that *"to get in touch with water, [is to] actually get in touch with our self, as well."* During the interviews, I raised Hailing's concern with other parents and it became a rich discussion point with Osei, Hari and Majdi. Osei is determined to pass on his understanding of water's value to his kids, though they will grow up with a different experience of water than his own, especially his youngest daughter who was born in Canada. At the urging of his friend, Diyen, who I also interviewed and who sat in on part of Osei's interview, he told me the following story of his daughter's water experience in Ghana.

We take water here for granted, you know the generation that has grown up here. That's why I try to take my kids to Africa every year...We took Lily my littlest daughter to see how people collect water because she cannot understand it, right, there's no running water everywhere, so there's one place that has running water for the rest of the community and people will

bring their big jerry cans and big gallons to fill it and they will bring pots and carry it. So she was curious about that so we took her to see how it feels like, and she, we give a small pot and she carry the water in it and all this time all the water is pouring and she's like why is all this water pouring, yeah, because you're learning and don't know how. By the time she got home it was empty pail [laughs]. Yeah, so imagine it, it takes practice right, so this is the life that people lead every day and they haven't travelled anywhere before so they think that is normal life that has to be lived. So they live it good. They live it real good. They collect the water, yeah. It is hard work, it is hard work.

This experience amused both men. Lily's first attempts to carry water were endearing to them. I suspect that they also found humour in the contrasts encapsulated in this learning experience, engineered as it was by Osei and his family. He and his older kids had each been raised, for several years at least, in an environment where they were responsible for fetching household waters. By moving to a country where indoor plumbing was, for the most part, the norm, they had become insider-outsiders to this type of water relationship. Hari was ambivalent about bringing his daughter to Canada, and as he explored his water memories, they flowed in and around what he most cherished of his own childhood: the freedom to roam outdoors, his deep sense of community, and the beauty of the Nepali mountain landscape. Like Hailing, he was concerned about his daughter's and her peers' relationship to water, fearing that their relationship would be utilitarian only, and that they would lack an emotional or spiritual relationship to water. Having himself grown up sometimes drinking water he had scooped from a mountain spring with a leaf, he also felt sad that his daughter's relationship to water would be limited to playing with water in artificial settings such as the bathtub and human-made water bodies. At the same time he was happy to have come to an urban place which offers the job opportunities not available in his village, but also offers what Kathmandu could not: an abundance of water and electricity, and the relatively unpolluted water landscape of Ontario. Unlike Hailing, Osei, and Hari, who each expressed specific concern about their children's relationship to water, Majdi placed his children's water relationship under the umbrella of a broader set of

environmental and social justice values which he hoped to instill in them. Despite varying levels of interest in their children's water relationship, all four participants used their children's water relationship during their interviews as a proxy for exploring their observations, both positive and negative, about the fundamental difference between their children's environmental, cultural, and socio-economic upbringing and their own.

4.3.4.2 Acting for water by conserving water

Many participants were unhappy with the amount of water wasted in North America. Water conservation was a dominant theme in participant narratives, mentioned by 14 out of 15 participants in their memories of water, whether as children or continuing into their present life. Abel compared the water use he witnessed in Canada to both Germany and Eritrea, expressing a sense of shock and dismay that is typical of many participants' narratives.

Everybody [in his neighbourhood in Asmara] is conscious about water and we know how to use water. Just a drop of water is so important. And if you want to wash your clothes, if you want to keep your stuffs, I mean your utensils and so on, for drinking water, for tea. Everybody was conscious about using water. When I see, these days, here how people are using water I can't imagine it. It's unbelievable. Even when I went back to Germany, I mean when I fled from my home to Germany, even between Germany and here there is a huge difference. Huge...So if I compare it now, back home, Germany, Canada, these three main places for me, you can't compare. There is no comparison at all. It's a huge, huge difference...When I saw in summer time, 24 almost, more than 12, 14 hours, the whole night they flood their backyards with water just to keep it wet, your grass. It's unbelievable.

When participants discussed water conservation, their comments ranged from descriptions of strategies used to conserve water to the situations that created water

scarcity, to the ethic that underpinned their own careful water behaviours. Many who talked about water conservation mentioned that they continued water conservation practices in Canada, such as collecting greywater for the garden, keeping showers short and avoiding baths, and never leaving the tap running. Many of them also advocate to others to stop wasting water. Abel, Michael and Alejandra¹⁵ were all concerned by local water pricing, viewing the low cost as a major disincentive to conserving water, especially when water is included in a tenant's rental fee. Michael had observed that free water affected his water consumption habits, despite his water conservation values. "*I'm noticing how, you know, knowing I'm not paying for [water], it's like a commons, I may be more wasteful than I would be otherwise.*" He intended, if he became a landlord, to promote water conservation by metering each apartment separately and making tenants responsible for water costs. Unlike most other participants, Majdi and Reynaldo each had different perspectives on water conservation. Reynaldo was the one participant who did not tell me about his water conservation strategies. When the topic of water conservation came up, he commented that despite widespread water scarcity in the Dominican Republic people tended to use water "*lavishly*". With a culture that valued cleanliness and shininess while living in a dusty climate, Reynaldo explained, people used a lot of water for washing. Unlike Reynaldo, Majdi did discuss ways that he and his family conserved water when he was growing up. What was different about his interview was that he was the only participant who talked about consuming more water in Canada—specifically long hot showers—as a reaction to his past experience of scarcity.

The shower. Still can't start my day without standing under the shower for a long a time. I will just stand there and enjoy the water and that's something I was never able to do in Lebanon. Never, ever, ever. And even now when I go back I still cannot do. Yeah, it's...I don't know. Am I more careful with water? I don't know, because I stand there for a long time and I enjoy wasting it as a reaction to not having it. Of

¹⁵Alejandra (not her real name) is a young woman in her twenties who immigrated to Canada after completing her university undergraduate degree in Mexico.

course I appreciate the value of it. I understand rationally the environmental consequences. But I bask in the luxury of having it at your fingertips.

4.3.4.3 Acting for water in Kumbo

As a young man, Diyen's water values were partly shaped by witnessing others in his community act for water, at great cost. While walking home from school one day, he saw young people protest and take control of the Kumbo local water system. The gendarmerie responded with violence, and two friends that Diyen was with lost their lives. After hearing Diyen's story, I did a search online and found that the Kumbo water conflict had been documented by various researchers and stakeholders, resulting in somewhat diverging narratives, indicating the complex and politicized nature of water system ownership (Page 2002; Folifac *et al.* 2009; Denham 2011). Here I refer to Diyen's personal account of the crisis, with a few contextual details added where noted. It was clear at the outset of Diyen's interview that Kumbo's water supply was a source of pride for him, connecting to his sense of identity and culture, and his relationship to Canada. In his interview, one of his first comments was about how the Kumbo water supply system was built in the 1970s, thanks to an Nso intellectual who arranged for assistance from the Canadian government for the project. His parents had told him that before these public taps were built, they sometimes had to walk 30 kilometers to access water. Folifac *et al.* (2009) and Page (2002) both mention that local women and men provided additional funds and most of the labour for the project, building a strong sense of community ownership of the water supply system. The crisis that Diyen describes below came to a head in October of 1991, several years after the Société National des Eaux du Cameroun (SNEC) began managing Kumbo's water supply in response to a 1984 presidential decree that ordered state operation of all urban water supply systems (Folifac *et al.* 2009; Page 2002). After this changeover, tensions increased, in part, according to Folifac *et al.* (2009) and Page (2002), because service quality declined, many public tap locations were shut down, and people began to be billed for water that had until then been perceived as a common good.

Diyen set the protest and water takeover in the context of a volatile new era of multi-party politics in Cameroon and a growing awareness of and desire for democracy amongst youth. Six youths, including two of Diyen's friends, died in the conflict, shot by the gendarmerie.

I remember when I was in last year of school, secondary school. Multi-party politics just started in Cameroon. And the president has been in power for a long time, like 30 years. So we had, we were going to school we knew about one party. They taught us about democracy but we never knew it. And one day in school we had some members from the party. And to have a party in Cameroon it was like war. It's not like here where people just talking. The first time seeing it is different. Heh. And we come back from school. The president's been there for long. He privatized that water that was given to us by the Canadian government. So people go months without water and there was a lot of, people were not happy at all. And we come back from school and this multiparty politics has started that has made people grown so mad they started protesting [makes a slap noise]. They went and burned [slap] the office, that of the people that supplied the water, they called them SNEC, it was Cameroon Water something something, I can't remember now. They went and burned the office, and they went and attacked the gendarmerie. It was madness. And the friends I was going back from school, two of them were killed. I could see my friends and I could see, I could see bullet in the chest of my friend. And I was like. Is this true? Is this true? Just because of water, you know? So we have to seize that water back and the water is now controlled by the community. But the price was. The price. [laughs]. Hmm. The price was too much. And. That's what it is. Yeah. Yeah.

And ah, when the water was taken back, the Fon, the chief who organized people to go to catch [unclear word], clean it, make it clean, and look for things, and like, distill the water, make it fresh. So we were happy again to have the water back.

Diyen's story offers a glimpse into the potential of a politically engaged group of youth to make changes to how access to water is organized. It also shows how real waters can be powerful metaphorical gathering places, where a range of political and social concerns can ferment and even erupt into action.

4.3.4.4 Acting for water as students, researchers, scientists, and artists

Besides water conservation practices, several participants discussed examples of their own actions for water as students, researchers, professionals, and artists. Mashal, Rocio and Abel had immersed in water issues through study, volunteer roles and/or work in their former countries. Each would have preferred to develop careers related to water, but they faced many obstacles to securing water-related employment in Canada. Abel focused on irrigation technologies for his undergraduate and masters degrees, attending school in Germany but doing field research in Eritrea. He intended to return to Eritrea and apply his knowledge in the agricultural sector. Then war broke out in Eritrea again while he was away, and as marriage and other factors affected his future plans, he ended up in Canada. Here he drove a taxi to earn a living but still wished he could continue with a Ph.D., or find another way to contribute his water knowledge. When I reconnected with Abel to share these findings with him, he had moved with his family to Alberta. He worked in the oil fields near Fort McMurray while his family lived in Edmonton and Calgary. Mashal completed a Masters degree in international affairs with a focus on water governance and climate change before emigrating from Pakistan to Canada. At the time of our interview, she was busy with two retail jobs and was feeling frustrated, preferring to work in a field more aligned with her values and desire for environmental and social change. In Bogota, Rocio studied and worked in the field of industrial microbiology, and felt passionate about science's role in improving industrial practices to safeguard water. In her professional capacity, she worked on a variety of effluent inspection and treatment projects including preservation efforts along the Bogota River, the river that flowed through many of Rocio's favourite childhood

memories of water. When we met, she was in full time English as a Second Language training, just one step along what can be a long and arduous journey for many immigrants looking for relevant work in the Canadian job market (Sakamoto *et al.* 2010). She hoped to eventually find employment that uses her science skills and water experience. In Kitchener she volunteered on water and soil projects at local conservation areas and felt inspired as she observed the differences between nature preservation practices in Colombia and Canada.

Other participants acted for water as artists. Majdi founded and worked as artistic director for MT Space, a multicultural theatre company in Kitchener in which Nada was an artistic associate. Water emerges as an important element in many MT Space plays, and in particular in *Seasons of Immigration* and *The Last 15 Seconds*. Nada urged me to watch a video of the latter, in which water acted almost as a character itself, or at least a constant presence. The play explored terrorism using movement, dance, video, vocals and text to imagine a kinetic and verbal dialogue between suicide bomber Rawad Jassem Mohammad Abed and one of his victims, filmmaker Mustapha Akkad (MT Space 2014). Nada explained how water's presence in the play flowed from women's work, both the mundane and the sacred:

There was water all the time in the play. And people were asking us why this is like all water? Because when we went to do the woman of the Middle East because it speaks about a Middle Eastern story, we found that women are connected directly to water...So when we were doing that play we found that we can't avoid water, water is there—so we used it. When a dead person dies in the Middle East, we wash the person with water before burying the person—you wash the body with water, clean water, yeah. Yeah so [water] is in the tradition, it is in the culture, it's in the folklore, in the food, in the religion, in the prayer, in the songs.

(Nada 2012).

Osei was also an artist. He sculpted, built and sold drums, and facilitated drum circles. During Osei's interview, another example of acting for water emerged gradually as he talked about the Ga libation ceremony. He told me of his concern that such traditions are being lost, and finally gave an example of how he has been able to practice this tradition locally. In 2009, *The Book of Negroes* by Lawrence Hill was Waterloo Region's One Book One Community choice, a popular yearly initiative that encourages people across the region to read and discuss a specific book en masse. Osei was invited to lead a libation ceremony at the graves of former slaves, buried in Oxford County. It was a powerful moment for him. Through water, prayer, drum and song Osei observed his ancestral tradition in a new context, one in which Osei could connect across time with members of the African diaspora whose experience was so different from his own:

I did libation with the Book of Negroes. It ties in with slavery...who got their freedom in Canada. So we went to this county [Oxford County] and I have to pour the libation for my ancestors you know, and as I was pouring the libation the vision that came to my mind was that these are slaves that were brought into the diaspora and sold and they were born as a generation of slaves and what will be their vision and their thoughts? Their thoughts and vision will be seeing them going back to Africa? Or having an African descendant come in from Africa and fulfilling their thoughts. So when I was pouring libation on the grave this is what came in to my mind. I'm an African yet I didn't come here through slavery...And yet I'm here, I'm pouring libation on their graves. For me it was the circle and like coming back and I can feel their energy inside me talking and not me, yeah, beautiful.

Though distinctly different from each other, the art of Osei and the MT Space each act for water by helping to uncover water meanings that flow as an undercurrent to daily water interactions in North America, often unseen, forgotten or overshadowed by a pragmatic relationship to water.

This chapter began with a brief description of the participants. I described some of their characteristics and motivations. I offered a sense of the range of themes that

emerged from the interviews. The main focus of this chapter was the four key themes prioritized by the participants, those of Sacred Water, Connecting through Water, Controlling Water and Acting for Water. These themes were described and explored, primarily through the participants' own words from interviews and follow-up meetings. In Chapter Five the focus will shift. I will widen the lens to consider the transformative possibilities of the participant water narratives. What might these water narratives mean to a changing local water culture, and a complex water narrative in Canada?

Chapter 5: Discussion

I wish I could get in touch with water, this theme, around here a little bit more... In Waterloo, and in this modern world, we don't have to fetch the water. We don't have to wash the clothes by the hand...But is there any ways so we can still experience water? Not just go to swimming pool—it feels not enough. Swimming pool is entertainment. Somehow you lost the feeling of worship something.

Hailing Huang (2012)

I float on my back in the kettle lake a little ways out of the city. Where does this water come from? I know that I am in the Grand River watershed and that far away from where I lie, tiny underground threads of water seep and shift, and that eventually they form small waterways to become the springs that feed this lake. Spending time with the personal water narratives of this research is a little like this. Just as I imagine an invisible process unfolding underground to fill this lake, I am also called to imagine how the stories and reflections shared by participants in Chapter Four might permeate, shift and shape local water relations in Waterloo Region. The purpose of Chapter Five is to consider the transformative power of the participant water narratives. To do so, I will revisit the water narratives in the context of translocality and placemaking. I will also speculate about specific water culture transformations that would occur, if immigrant water experiences were paid more attention by water management and water advocacy communities.

5.1 Transformations beyond status quo water management

Research suggests that the participants' experiences of reverent and responsible relationships to local waters are important. Though such experiences are not ubiquitous throughout immigrant communities, if there are a significant number of newcomers who have experienced similar water relations, they may be uniquely poised to transform

water culture. In a diary-based study of people's everyday interactions with water in urban Australia, Allon and Sofoulis (2006, pp. 50-51) found that "exposure to different 'regimes of water' [gave] people the imaginative capacity to adopt a different approach to using water, even amidst suburban environments with [large-scale and centralized] water systems and 'saver unfriendly' fittings providing the illusion of endless supply." Based on their findings, Allon and Sofoulis (2006, p. 51) proposed that people's diverse experiences of different waters could be "important resources for change in urban water cultures." In their study, the people who felt connected, through memory, to rural or overseas experiences of different water systems came to the fore. It was these participants who tended to sidestep the dominant water systems of their urban communities, by initiating do-it-yourself greywater recycling systems in their homes (Allon and Sofoulis 2006). Through the translocal water connections that immigrants in Canada can help to forge, they too can become agents of water culture change through their household interventions and habits.

We know that many of the participants in this study were unhappy with the extent to which the water culture in Canada enables wasteful water habits¹⁶. In the follow-up discussions, participants talked with frustration about the virtual water embedded in the unwanted sales flyers that littered their apartment hallways, and the stacks of plastic water bottles they saw in recycling bins. Bottled water seemed a symbol, for many participants, of Canadians' inability to appreciate the privilege of having easy access to safe tap water. Abel also mentioned his disappointment in the federal government for their lack of leadership on environmental issues. It was clear that all of the participants at the follow-up meetings wished to see a change in Canadian water culture. However, we also know from Sofoulis (2005), that to maximize the power of people—whether through their individual water relations, or through transcultural placemaking activities—to subvert and shift local expectations of place and water, it will be necessary to challenge the status quo of current water management regimes. When Nada tossed greywater into the garden, she temporarily sidestepped the local water system. What if, as I suggest, planners, policy makers, and water practitioners pay close

¹⁶See section 4.2.4.2 Acting for Water by Conserving Water

attention to the water experiences and priorities of immigrants in Canada? Ultimately, this research is not intended to answer that question, but it can offer a sense of what transformations *could be possible* in three areas: sacredness of local waters, responsibility for waters, and community based watery placemaking.

5.2 The sacredness of local waters: sought out, restored, and revered.

Water's sacredness was not only a major theme in the participant narratives, it was also identified as a key priority during a follow-up discussion with Hailing, Hari and Abel. "*How do we maintain that sacredness?*" Hailing asked. To seek out the sacredness of local waters will require a stronger awareness of local and contemporary indigenous relations with water. Four participants mentioned a specific interest in connecting this research to indigenous water values or indigenous practices. Eight participants expressed desire for a clearer Canadian water ethic. Perhaps any central Canadian conversation about water's sacredness should begin—with humility and grace—in the footsteps of the Anishnawbe grandmothers who have, since 2003, led the way in walking the perimeters of the Great Lakes and other water bodies (Chen *et al.* 2013; Mother Earth Water Walk 2015). Listening to these elders, we may begin to understand how to honour the sacredness of local waters. To revere water through an indigenous kin-centric relationship to water requires caring for water as if it was an honoured family member upon whom we depend (Walkem 2007; Christian and Wong 2013). To understand the sacredness of local waters in this way may help us to viscerally understand the threats and harm caused to local waters when policy and development decisions are based on false notions of water as an abstract resource or commodity to be managed and sold; or of water as something separate from ourselves.

To restore the sacredness of local waters is both a physical and metaphysical process. Restoration requires safeguarding—or, better, improving—the life-giving qualities of aquifers, wetlands, rains, rivers, lakes and oceans (Christian and Wong 2013). It is not enough that important and necessary decisions about how to keep lights

on, taps running, toilets flushing, pipelines flowing, and economies growing across the country are *tempered* by consideration of the real and potential impacts that the related interventions have on waterways. Instead, a threat to the liveliness of local waters should require an urgent response. With the sacredness of waters top of mind, wastewater could not be managed in such a way that sewage overflows into rivers and lakes with every storm, or worse, is sent untreated into the sea as standard practice. Nor would it be possible to approve of the transport of heavy crude oil from the oil sands through aging pipelines built for the transport of light crude oil, especially without proper consultation of First Nations communities across whose lands the oil would flow (Calzavara 2015).

It is also the *perception* of local waters that must be restored. The pollution of local waters does not only reduce the life-giving abilities of local waterways, it may also reduce people's sense of the sacred therein. River and lake waters not deemed healthy enough for barefoot children, let alone eager swimmers, are challenging places in which to seek the sacred. Instead, these waters become reminders of loss and perhaps shame¹⁷. Hari, Osei and Chaitali seemed saddened and even disgusted when they described the pollution of the rural and urban waters near which they had lived as children and young adults. The gulf can be wide between people's water values and their actions towards water, and we know it is possible to pollute the waters we revere, and to revere polluted waters (Head and Muir 2007; Tvedt and Oestigaard 2006; Minkow and Porter-Bopp 2015). Yet, when community life, land development, and commercial and industrial activities result in disappointing, dirty, and lifeless waterways, people may respond by retreating from their responsibility for these waters. Social work scholar Mishka Lysack (2010) suggested that withdrawal has become a common response to environmental degradation. As we begin to lose a sense of the sacred in nearby waters, eventually, we may only find sacredness in the idea of waters less touched, like pristine mountain waters. To perceive the sacredness of local waters, we will need to preserve their health and liveliness.

¹⁷See Lysack (2010) for a description of personal loss expressions in response to environmental decline, including shame.

5.3 Returning some responsibility for waters to individuals

During the interviews and follow-up discussions, many participants were loud and clear in their willingness and desire to regain some level of responsibility for waters¹⁸. Yet contemporary North American messages about how to take responsibility for water have typically been uninspiring, offering very little beyond fixing leaky taps, installing a low-flow showerhead, purchasing a dual-flush toilet, and using rain barrels¹⁹. Lately, as a response to climate change, the message has expanded to encompass some more innovative measures that homeowners and businesses can implement to take more responsibility for storm water management (City of Kitchener 2015; City of Waterloo 2015). By installing cisterns, permeable paving, and rain gardens, homeowners can prevent basement flooding, and protect local water bodies, all while harvesting rainwater for landscaping. Community-based water and wastewater treatment—and reclamation—initiatives push the envelope even further, but are still fairly rare in Canada (Hellebust 2009). The cost and complexity of these more innovative stormwater management and decentralized water distribution and wastewater management measures, however, can be a deterrent. Since many immigrants in their first years of settlement live in rental apartments (Wayland 2007), such tools and strategies leave little room for their meaningful contributions. Paying more attention to the participant water perspectives suggests that it may be worth investing financially in the capacity of immigrants to contribute towards implementing these best practices at the neighbourhood level. Besides increasing a sense of belonging, such projects could be a way of employing underemployed immigrant water professionals as project animators. For new immigrant environmental practitioners, the ability to include some ‘Canadian experience’ on their résumés is essential.

¹⁸See Chapter 4, section 4.2.4. Acting for Water for a detailed discussion of responsibility.

¹⁹See Brooks *et al.* (2009, p. 260) for a discussion of how these improvements relate to other water conservation and water efficiency tools and changes that are more complex, and therefore, slower to implement.

While some environmental psychologists have emphasized guilt as an important motivating factor for taking personal responsibility for the environment (Kaiser *et al.* 1999; Kaiser and Shimoda 1999), it is clear from Chapter Four that the participants held other motivations for their feelings of responsibility towards waters. Discussions about taking responsibility should extend beyond interventions at the household level, to include the kind of responsibility that is possible through close, affective connection with specific waters (Gifford 2014). To offer more responsibility for water to everyday people, it is important that urban planners, developers, and community groups find ways to encourage the presence of beautiful and lively waters in public spaces. These waters would invite the interactions of humans and non-humans: through touching, immersing, splashing, washing, watching, and even ingesting. Ideally, these waters would encourage and support diverse life forms, while improving the health and liveability of the urban environment. Such is the case with the labourious practice of daylighting streams, in which buried urban waterways are physically uncovered and restored (Christian and Wong 2013; Trice 2013; Tramutola 2014). The process can be cumbersome, requiring major excavation, changes to land use, and the involvement of a multitude of actors (Trice 2013). However, such complexity leaves much room for a diverse group of people to take responsibility and contribute. The benefits reaped through daylighting activities are many, including community and ecological revitalization, improved flood control, reduced downstream erosion and pollution, and economic savings, and reconnecting people to nature (Trice 2013). Also, the resulting neighbourhood-based waters may invite the kind of relationship and conversations through which neighbourhood children and adults can feel a part of their wider watershed.

Even tap water can qualify as lively and beautiful, given the right context. It is important that urban planners, developers, and community groups, also encourage waters that can sustain and nourish the expression and continuation of some of the common meanings of water discussed in Chapter Two. Static urban water features such as reflecting ponds and decorative fountains do well at acting as symbols of power and wealth. They may even draw people together, and offer a small sense of peace and

renewal. However, they are less effective as a means of conveying the complexities of local spiritual and social identities, or celebrating water's role in life and death. As I thought of possible ways to share this research in public, I considered the idea of facilitating a Jane's Walk with one or more of the participants. We might search out the old springs of our neighbourhoods, now buried or dry, and use these locations as stops on the walk, where we would layer immigrant, and local—whether settler or, with permission, indigenous—water stories. As a boy, Majdi had witnessed the return of *ain* culture, with each *ain* a site of culture and community, expressed through the architecture of the fountain itself, as well as the poetry, songs and stories that collected there. By uncovering the location of old springs in Waterloo Region neighbourhoods, as part of a community ritual of exploring public spaces, these translocal layers of water meaning could be surfaced. In addition, we could use the walk as a means to instigate a project in which we could commission community-based artists to design park-specific fountains, to be used for drinking water, bathing, cooling, and play, but also as repositories of translocal and local water memories. Small-scale water projects such as this could be used to investigate the ways in which even tap water can connect people to each other, to stories, to place, and to traditions of hospitality. Such ways of taking responsibility becomes ways of remembering water, while making 'place' together.

5.4 Watery placemaking: creating place and belonging

In this research, many of the water interventions that arose from the participants' experiences of different water regimes involved placemaking, as defined in Chapter Two, citing Zambonelli (2013). For example, when Nada flipped her bowl of sink water onto the garden, she participated in placemaking through her mundane everyday practice of water conservation. Chaitali transformed abstract place into meaningful place when she perceived the sacredness of the Ganges River in her daily interactions with the Grand River water and groundwater that flowed from her Waterloo tap. Osei 'placed' attachment and memory when he performed a libation ceremony in Oxford County, connecting himself to his ancestors, to the former slaves at

whose graves he stood, to the people present at the ceremony, and to the waters and soil of his new home. Michael planned a pragmatic intervention into the material production of place by deciding to install separate water meters if he ever became a landlord. Yet watery place relations were complex. Many of the participants were passionate about specific waters. They spoke enthusiastically about the personal and cultural meaning of local springs, fountains, rivers, beaches, wetlands, and rains. They valued the relationships that arose from these waters, whether with human community, flora and fauna, or the spirit world. Some participants mentioned close relationships to new local waters in Canada, whether it was Reynaldo visiting the Grand River for peace and reflection, Alejandra camping along Ontario lakeshores, or Michael who shortly after our interview planned to canoe along the St. Lawrence river—he had canoed almost every year since immigrating—and was excited by the idea of connecting, through local waters, to a part of Canada’s history. For others, their relationship was more ambivalent, like Lettie, who remained fearful of water bodies, and Nada, who was shocked to find out that some of the beautiful lakes she saw in Canada were polluted, or artificial. Overall, however, the participants seemed interested in connecting more with specific waters. It makes sense to build on this attraction by using watery placemaking processes to invite immigrants into relationship with local waters.

There is need for grassroots community groups or water advocacy organizations to invite the participation of interested immigrants in transcultural placemaking for water change. We know that new identities and cultural structures can be created, and a sense of belonging fostered, in the process of intercultural exchange (Hou 2013). Perhaps, through such processes, a sense of reverence and responsibility for water could also be reasserted. When I discussed the possibility of extending this water story research by collaborating with participants to facilitate the public sharing of water stories, many participants responded positively. Some said they wished to hear more about indigenous water perspectives. Some said they were interested in hearing stories from settlers with a longer local history along the Grand River. One participant offered to contribute a water libation prayer. Another participant suggested creating an intimate story-sharing circle, similar to the story circles she had witnessed at the National

Aboriginal Day celebration beside Victoria Lake in downtown Kitchener. A few participants suggested sharing stories with young students through video or experiential water-based projects. Yet another participant suggested we apply for funding to create a site-specific theatre piece in which the audience would canoe along the Grand River, hosted by someone from the Six Nations. In January of 2015, I collaborated with a few participants, along with my husband, a visual artist, and my brother-in-law, an animator, to create a short animated water stories film as a way of testing out the potential for documentary film as a medium through which to share water stories (see Appendix 7 for film details). Any of these activities could be a space through which to encourage people's self-determination, individual agency, and collective action, while reimagining community and individual water relationships.

The follow-up discussions offered one chance to test out on a small scale the transformational power of such activities. In one discussion group, after Hailing, Abel, and Hari shared water stories and reflected on the interview themes, Hari mentioned how he was surprised by the commonalities in their stories. *"I thought the people of Nepal had a different experience, but I hear lots of similar emotions and spiritual ways of relating to water."* He suggested that it was people in North America whose perspective on water was so different. He told us about a cartoon he had seen of a boat with a hole in one end, and two people aboard. The person at the other end was saying, "Thank God the hole is not on my side!" The group laughed, and all agreed that this person was just like Canada, where people do not realize that we are all in the same boat together. Many of the follow-up group participants commented on the sense that through sharing water stories and concerns they had built community together.

By *intentionally* enacting place through transcultural placemaking processes, it may be possible to amplify watery placemaking activities, encouraging water culture transformations that go beyond the individual and household level. The appetite for change is already there. As discussed in Chapter Four, many participants conveyed a sense of willingness, even eagerness, to reconsider our collective relationships to waters in Waterloo Region and beyond. Sometimes the idea was expressed in the form of a

longing to return to water's spiritual meanings as in Hailing's reflection at the opening of this chapter. For many, it was expressed through disbelief or frustration about water habits and attitudes in Canada. But this need for change also came through in some participants' concerns that the dramatic changes they had seen in their local waters, such as polluted rivers or tap waters reduced to a trickle, could happen in Canada as well. They feared climate change and population growth could have serious effects on Canada's waters. Intentional placemaking could harness the willingness that participants expressed to prevent such potential realities.

Chapter 6: Conclusion

Soon we will celebrate the fifth birthday of our first child. She is curious about how life begins. I tell her about the warm water home of her early days, like a tiny ocean. She grew, and grew, and grew, and the waters became like a cramped bath. While I went about my daily life, she rocked and shifted. Finally, it was time to let go. And she was born, crashing out of those first waters into the purple-grey light of a November morning. Just like Hailing, Osei, Hari, and some of the other participants in this research, I think about my daughters and how they will relate to the waters in their lives. They are growing up in a time and place where many kids are not allowed to wander even a half a block from home on their own. At what age will I let them go to the neighbourhood pond by themselves? The irrational fear of what and *who* might happen to them if they venture away from home looms large. Without an ounce of freedom, will they learn to take the kind of responsibility for water that comes from connection, effort, and ritual?

The planning of this research began six years ago, before either of those daughters was yet here. Now it is early fall. There is a federal election underway. In the course of this research, the conservative government has dismantled a series of legislations related to water. These include dramatic changes to the Navigable Waters Act and Environmental Assessment Act, the former of which resulted in the removal of protections from 99 percent of Canada's rivers and lakes, and the latter of which resulted in significantly fewer environmental assessments for industrial development near or on waterways (Lui 2015). These developments, unfortunately, are now part of Canada's water story. In that same space of time, the federal government shifted Canada's immigration and refugee policies. Under the current system, highly skilled workers are sought for their economic value, while their human need for family reunification is, for the large part, ignored (Ibbitson 2014; Lenard 2015). The government has also been criticized for its "strong anti-refugee position", demonstrated through a series of changes since 2012 (Ibbitson 2014, p. 5). Interestingly, the

conservative government formed a majority in the last election partly on the strength of its socially conservative immigrant base in key ridings, including in the nearby Greater Toronto Area (Ibbitson 2014). Like many Canadians, I wait with bated breath to see what changes will come with the next government. Our capacity to safeguard local waters, and to create communities in which a range of newcomers are welcomed and valued, will be affected by the outcome.

Because the stories we tell, as individuals, and as communities, shape who we are and who we become, I decided to focus this research on people's water stories. By facilitating the sharing of personal water narratives by 15 immigrants, I wished to open up a conversation about the many ways of knowing and relating to water that immigrants carry with them to Canada through their memories. I suspected that these water meanings and experiences were often overlooked, not just by the professional water community, but also by the neighbours and fellow community members of these newest Canadians. I decided upon an oral history method, and sought ways to collaborate with the participants on the interpretation of their narratives. In my eagerness to learn from these narratives, I underestimated the complexity of my position as a Western researcher reaching out to a group of immigrants mostly from non-Western backgrounds. Although I strove for a culturally sensitive research approach, I was grateful to participants for pushing me further. A few of them, whether directly or indirectly, pointed me towards an acknowledgement of the indigenous water narratives that, by right, should form the foundation of this research. Another nudged me towards indigenous methodologies and decolonizing methodologies, through which I could deepen my reflexive process.

Strang's (2004; 2005) research on water meanings offered an important starting point. Through her work, I began to understand why and how water is such a powerful influence on the way people perceive the world, and themselves. The four cross-cultural water meanings that she identified prepared me for some of the meanings I might expect to hear in the participant water narratives. Gibbs's (2010) arguments for 'variability' as an important metaphor through which to perceive water were also

important to this research. In challenging Western European assumptions that have shaped much of water planning and policy making in Australia, she encouraged me to question my own assumptions about water meanings. This idea of variability in the forms and meanings of waters was reinforced and extended through the work of Illich (1985), Hamlin (2000), Allon and Sofoulis (2006), Head and Muir (2007), Linton (2010), Chen *et al.* (2013), Chen (2013), and Wong and Christian (2013), who reminded us that waters—and our ways of relating to them—are situated, lively, complex, shared, and spiritual.

Because waters are always situated, places are important to waters, and vice versa. From Massey (1994), I gained new insight into the extroverted nature of place. Researchers in translocality have also drawn from Massey to understand the networked flows—of people, goods, ideas, and diseases, for example—that increasingly connect places to one another, as well as waters. Hou (2013) and other researchers in transcultural placemaking argued for the democratic power of intentional placemaking processes in which people’s identities evolve with local culture, through individual and collective action towards social change. Finally, Chen (2013) linked placemaking to water, showing how an understanding of waters’ complexities can help in reimagining our relationship to place.

Though this research was shaped around the question of how immigrant water narratives might transform water culture, it was not possible to answer this question in its entirety. Immigrant water experiences are diverse. Several of the participants I spoke to had—as children, and sometimes adults—experienced their local water through specific water responsibilities, especially fetching water for their families. A different group of participants, growing up in different water contexts, might have had very different narratives to share. Nonetheless, it was in the passionate, poetic, reflective qualities of many of the participant water narratives that I began to understand how their individual water narratives might transform local water culture. Speaking about the waters of their lives evoked thoughts about personal values, parenting, heritage, culture, spirituality, and immigration. Many of the participant water memories were full

of concerns about power, sovereignty, scarcity, climate change, environmental degradation, and conflict. A sense of loss pervaded some of the participant narratives, balanced by another focus on the beauty and joy of waters. Looking back on how their own water interactions had changed over their lives, the participants were unhappy with what they considered to be a local water culture of wastefulness, and some of them missed the closer relationship to water that they had experienced at a younger age. Collaborative interpretation of the narratives took place during a series of small group follow-up discussions, resulting in four priority themes: Sacred Water, Connecting through Water, Controlling Water, and Acting for Water. It was particularly in the expressions of this fourth theme that the sense of a widespread willingness to contribute towards positive water changes became clear.

Most striking was the urgency of the messages many of the participants shared. One of those messages was that the sacredness of waters should be maintained, and that one way this could happen was to pay more attention to indigenous water perspectives in Canada. A second message was the importance of creating opportunities for people to take responsibility for local waters. Engaging immigrants, especially internationally trained water professionals, in community-based projects for water conservation, efficiency, and stormwater management is one way of investing in the capacity of immigrants to take responsibility for water. Finding ways to bring more lively and beautiful waters into urban landscapes is another way to invite the direct interactions between people and local waters that could inspire a sense of connection and responsibility for the local watershed. A third message was of the potential for 'watery' placemaking processes as a means through which to form local water culture together, through mutual contributions, intercultural learning, and a sense of belonging and community. The participants shared a variety of ways in which they would be willing to participate in public forums for sharing water stories and questioning the dominant water culture.

What should water practitioners and advocates take from this exploratory research?

- **As people who may have experienced water in dramatically different contexts, immigrants' water knowledge should be sought out and considered in water decision-making and planning.** This small group of immigrants from Waterloo Region offered strong messages that showed them to be passionate and motivated supporters of water culture change. Many of them emphasized water's sacredness and cultural importance, and voiced concerns about who controls water and how we—individually and collectively—can take more responsibility for water.
- **Beyond immigrants, this research calls for inclusive water thinking.** When decisions and policies about how to manage waters are based only on a Western, science-based, abstracted idea of what water is, an important part of the picture is missing. Water policy and decisions will have more impact and relevance if space is made to consider people's personal water meanings and experiences.
- **Local waters can nurture community building and place-making processes.** By giving neighbourhoods and citizens more say in how their local waters are managed, we create opportunities for collaborative water projects. These processes build community, encourage leadership, and help towards feelings of belonging. Beautiful waters become places where families and neighbours gather.
- **Finally, water story sharing is an important methodology for engaging community members in water culture transformation.** The process of exploring and documenting water meanings can be one of positive change. In sharing water stories together we form new relationships to local waters, assert water values, and build a sense of community and belonging. In other words, the process of facilitating inclusive water policy development can itself be a tool for water culture transformation.

During this writing process, I have held in my mind the doubt voiced by my colleague of the Six Nations when I spoke to him about my research last spring. Is it possible that new immigrants can contribute to positive water change in Canada if generations of immigrants have contributed the opposite? But in the end, this research is not about immigrants. As translocal flows connect place to place and person to person, making large distances smaller, we are all transformed, as are our waters. Perhaps in paying attention to how waters give meaning to our lives, and how we give meaning to local waters, we can work to reimagine our relationship to water. It is my hope that sharing water stories can accomplish several things. First, to help Canadians,

new and old, to better understand waters' meanings in our daily lives and memories. But further, that sharing water stories will help us to better understand how to preserve those water meanings, while safeguarding the waters themselves. And finally, that in listening to each other's water stories, we become a part of each other's home.

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Appendix 1: Recruitment materials



200 University Avenue West, Waterloo, ON, Canada N2L 3G1
519-888-4567 | uwaterloo.ca

Dear potential research participant,

I am a second year Master's student engaged in a research project titled **migrant Water Stories**. I am the supervisor of Professor Sarah Wolfe. The purpose of this study is to explore understandings of the diverse water experiences immigrants bring with them to Waterloo Region through an oral history project. Water stories

This study will use oral history interviews to explore and share immigrant water stories. The purpose of oral history projects is to record people's experiences in their own words, so that these experiences are not forgotten and so that other people learn from the documenting and sharing personal stories are powerful ways to create relationships between individuals in an increasingly mobile society. This shared relationship will be essential if we are to address the significant environmental and social challenges that face us locally, nationally and globally. In Waterloo Region, population growth combined with climate change will put increasing pressure on water resources. To sustain local water resources for this and future generations, new ways of thinking about water must be considered for all potential resources in the region, including underground.

In Waterloo Region, immigrants form more than 20% of the population. Immigrants are a significant contributor to Canada's economy and the main driver of population growth in Canada, accounting for two-thirds of Canada's population increase between 2001 and 2011. Yet, immigrants' potential contributions to environmental issues such as water management are often overlooked (Future Watch 2010a). The data collected during this study will contribute to a better understanding of how immigrants experience and adapt to environmental issues in Waterloo Region.

Your involvement

My research would be greatly enhanced if I could meet with you to discuss your own experiences of water. These experiences might include memories of water in your day to day life, special uses of water such as religious or celebratory, or stories you were told about water. Your participation is completely voluntary, and we encourage participation in one or more of the following ways:

1) Initial meeting: would like to meet with you in person for 5-10 minutes to introduce myself, explain how the interview will work and answer any questions you have.

2) Interview: We will edit on in a recorded session. I will schedule this at a time that is convenient for you. Further discussion is needed and your schedule allows, we can arrange a date and time. Possible locations to meet could include a community centre in your neighbourhood, or a meeting place at the University of Waterloo. We have a room for talking and a private space for you. With your permission, I will use a digital recorder to record the interview.

3) Feedback: If you wish in a recorded session, would like to check in with you about our comments with you. This will likely take 20-30 minutes and can be done in person, by phone, or by email. Because I will be exploring your own experiences, it is important for me to give you an opportunity to comment on the interview with me.

4) Possible future activities: One of the goals for this project is to record people's experiences and share them for use by the public and other researchers. If you are interested, we will discuss optional ways of

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sharing their stories collected with other participants or with a broader audience.

Be assured that if you decide to participate, you can choose not to answer questions, if you wish, and are free to withdraw from the project at any time by letting me know. You may also choose not to participate in the feedback process, to any further related activities. There are no known or anticipated risks associated with participation in this study.

Because of the importance of context and identity in personal stories, it is the practice in oral history for participants to be identified by name where permission is provided. However, all information you provide will be considered confidential unless otherwise specified. Your name will not appear in any thesis writing, publications or presentations resulting from this study unless you provide express consent to be identified and have reviewed the audio file or transcript and provided the use of the quote.

All study information, such as audio recordings and notes will be stored in a secure location, accessible only by the research team, which consists of myself, the research assistant Rachel Wunder and my supervisor Dr. Sarah Wolfe. Materials will be stored indefinitely, in case they may be of use for future publications or related activities. In this case, no information or comments provided by you will be shared with our colleagues or others.

Contact Information

If you have any questions regarding this study, or would like additional information about participation, please contact me at 226-3215 by email s.anderson@uwaterloo.ca. You can also contact my supervisor Professor Sarah Wolfe by telephone at 519-4567-3869 or by email at sewlofe@uwaterloo.ca.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research Ethics at the University of Waterloo. However, the final decision about participation is yours. In the event that you have any concerns or questions resulting from your participation in my study, please contact the director of that office, Dr. Susan Sykes, at 519-4567-3605 or ssykes@uwaterloo.ca.

Thank you in advance for your interest and assistance with this research.

Sincerely,

Sarah!Anderson!
!
University of Waterloo!
Environment and Resource Studies!
@ Sarah!
s.anderson@uwaterloo.ca!

!



Immigrant Water Stories

Volunteers needed for a research project on immigrants' stories about water.

Project participation would involve an interview of approximately 1 hour, during which I would ask you questions about water in your life.

About the Project:

This project uses an oral history method to record immigrants' experiences and memories about water, in their own words. Recording these experiences will contribute new ways of thinking about water in Waterloo Region. This is an important task because population growth and climate change will put

CONSENT FORM

By signing this consent form, you are not waiving your legal rights or releasing the investigator or involved institution from their legal and professional responsibilities.

I have read the information presented in the information letter about a study being conducted by Sarah Anderson of the Department of Environment and Resource Studies at the University of Waterloo, under the supervision of Professor Sarah Wolfe. I have had an opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be audio recorded.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from the research, with the understanding that quotations will be either anonymous or attributed to me only with my review and approval.

Furthermore, I am also aware that audio excerpts from the interview may be included in related presentations, with the understanding that audio recording excerpts will be either anonymous or attributed to me only with my review and approval.

I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project has been reviewed by, and received ethics clearance through, the Office of Research Ethics at the University of Waterloo. I was informed that if I have any comments or concerns resulting from my participation in this study, I may contact Dr. Susan Sykes, the Director of the Office of Research Ethics at 519-888-4567 ext. 36005 or ssykes@uwaterloo.ca.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Yes No

I agree to have the in-person interview and any follow-up conversations (telephone or in-person) audio-recorded.

Yes No

I agree to the use of anonymous quotations in any thesis or publication that comes of this research.

Yes No

I agree to the use of direct quotations attributed to me only with my review and approval.

Yes No

I agree to the use of audio recordings in presentations attributed to me only with my review and approval.

Yes No

Participant Name: _____(Please print)

Participant Signature: _____

Witness Name: _____(Please print)

Witness Signature: _____

Date: _____

Appendix 2: Interview Question Guide

Question Guide		
Question Theme	Example Questions	Justification
<p>1) Acknowledging position as outsider researcher</p>	<p><i>You mentioned that you grew up in Warsaw. I don't know a lot about what life was like growing up there.</i></p> <p><i>Can you tell me more about that?</i></p> <p><i>You mentioned using water to prepare for prayer as a Muslim. I'm interested in learning more about that.</i></p> <p><i>Could you explain that in more detail?</i></p>	<p>See Bridges (2001) and Tinker and Armstrong (2008) in Chapter 3.</p> <p>Thompson (2000) and Portelli (1997) offered a perspective as oral historians, supporting the argument that there are some benefits to outsider research.</p> <p>Portelli (1997) commented that outsider researchers tend to elicit more narrative and information, whereas insider researchers elicit explanations, theories and judgments.</p>
<p>Country of origin water memories</p> <ul style="list-style-type: none"> - Childhood - Adulthood 	<p><i>Take a few minutes to think about your childhood / time as an adult in [location].</i></p> <p>If direction is needed:</p> <p><i>You might think about places where you lived or visited. Your family and friends. The activities that filled your weekdays and your weekends. Whatever was important to you.</i></p> <p><i>Is there a memory of water that comes into your mind as you think about this time of your life? Please</i></p>	<p>Anderson & Jack (1991) argued "if the participant is to have the chance to tell her own story, the interviewer's first question needs to be very open-ended".</p> <p>It is also important to send the participant the message that they will be given adequate time to reflect on and respond to questions (OHA 2009).</p>

	<i>take your time and describe it.</i>	
Concrete personal context (optional)	<p><i>When were you born?</i></p> <p><i>Who did you grow up with?</i></p> <ul style="list-style-type: none"> - Parents, guardians, extended family, siblings <p><i>Can you describe where you lived as a child?</i></p> <ul style="list-style-type: none"> - Rural, urban, village, city, house, apartment <p><i>What kind of work did your [parents, guardians, extended family] do?</i></p> <p><i>Did you go to school and for how long?</i></p> <p><i>What kind of work did you do in [insert country / city]?</i></p>	<p>Though I emphasized open-ended questions throughout the interview, I began with concrete personal context questions when it seemed that the participant was reticent and needed to be set at ease. This strategy was helpful for one participant whose level of English was at Canadian Benchmark 5, making it difficult to engage in complex conversation. Because these questions are relatively simple to answer, they helped to establish trust and rapport, and prepared the participant to answer more complex questions later in the interview (Yow 2005).</p> <p>For other participants it was possible to skip this question category and instead elicit these details when exploring the participant's water narrative through the open-ended water memory question.</p>
Water context: - Childhood - Adulthood - Broader context	<p><i>Can you describe where you got your drinking water / wash water from?</i></p> <p><i>Can you tell me about any time you have spent at creeks, rivers, ponds, lakes, oceans or any other bodies of water?</i></p>	<p>This question category will serve as a reminder of possible areas to explore further through probing questions, depending on the topics elicited through the open-ended water memory question.</p> <p>This list evolved and grew through the process. New</p>

	<p><i>How was water a part of your daily life?</i></p> <p><i>How typical do you think [the experience you just described] was?</i></p> <p><i>Were there issues in your household, village, region, city, country, community that affected your water experiences?</i></p>	<p>themes that arose from the interviews were water rituals, and parenting.</p>
Water narratives	<p><i>When you think about the stories, either true or not, that you were told when you were growing up, did any of the stories have water in them? Can you tell me about the ones that included water?</i></p>	<p>Because of the richness of the participant's personal memories and reflections about water, I decided not to use the responses to this question in this research.</p>
Comparison	<p>Open-ended example:</p> <p>"We've talked a lot about your experience of water in Kampala. How do you compare this experience with your experience of water in Canada since you moved here two years ago?"</p> <p>Focused approach building up to a comparative question:</p>	<p>According to Yow (2005), a broad comparative question is useful and effective in the following situations: when the participant is invested in the success of the interview; when the participant has likely already considered this question; and/or when the participant has reason to be particularly interested in this type of question, such as having an analytical personality. Broad comparative questions may not be appropriate or effective when the participant has not thought about the question before and</p>

	<p>Following a series of questions about water memories from before moving to Canada, ask questions about parallel experiences with water in Canada.</p> <p>Examples (in response to a participant who has spoken extensively about their memory of water scarcity as a child, with emphasis on their own and their parents' emotional response):</p> <p><i>Can you tell me about water availability in your home in Canada? How is water a part of your daily life in Canada? How has this water availability felt to you? How do your own children feel about water use at home?</i></p> <p>Final broad comparative question after series of focused questions:</p> <p><i>Thinking back to your experience of water as a child and your experience in Canada as an adult and a parent, how do you compare these two experiences?</i></p>	<p>is not accustomed to an analytical approach. In the latter case, the interviewer should ask a series of focused questions about the experiences to be compared, and end by asking the broad question.</p>
Further	<i>We talked the last time we met about what an oral</i>	The purpose of oral history projects is to record people's

<p>participation option: public oral history element</p>	<p><i>history project is. Many people are interested in learning from others' stories. For example, I have met with local water professionals and activists, and they have said they are interested to hear about the water experiences of immigrants. While I assure you that none of your stories will be shared without your permission, I would invite you to share some of your stories with a larger group of people. Are you interested in sharing some or all of the stories you have shared with me with a larger group of people?</i></p> <p><i>There are many different ways that people share stories publicly these days. Some ideas might be to share your stories with other research participants, to use some of the recordings at a public event, to create a website that features some of the recordings, or to create a book. How do these ideas sound to you? I would like to get your ideas about ways of sharing stories that would feel most desirable to you, but I can't commit at this point to helping with any one particular approach, until I</i></p>	<p>experiences, so that they are not forgotten, and so that others can learn from them (OHA 2009). Oral history is both a process and a product, with the product being a preserved personal narrative (OHA 2009). It is important to me as a researcher to invite participants to share their stories publically, but only if they desire to, and only in the manner in which they are comfortable doing so.</p>
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	<i>have talked to other participants.</i>	
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Appendix 3: Example of condensed narrative

Hari Interview Summary

Note: this summary is abbreviated from parts of the interview recordings, with minor word changes for sake of brevity.

I feel nostalgic when I remember my childhood. I lived in a tiny village on the slope of a hill. Our house was situated on a terrace with orange trees, a cow shed, two milk buffaloes, and two oxen for plowing. When I got home from school I had to fetch water in a bucket. We were lucky we had two ponds nearby - others had to walk a long distance. One was used for drinking water and the other was used for cattle.

Fetching water was a tiny job given to children. Adults did the difficult chores. I had six siblings including myself. I would fetch water with my sister just below me. It took three or four minutes to walk to pond. We would rinse the pot, make it neat and clean, fill it with mug, walk back to cow shed. First enough water for cattle for next morning. Then we would fetch water for us. We would travel back and forth many times because we used small buckets. We might slip and fall on the trail with bucket of water on our head. We would really enjoy fetching water, playing with water.

It's hard to express the joy with playing with water... Sometimes we would sprinkle water at each other. There was pure physical joy. In winter when it was cold there was less joy, but in summer the joy you feel when you toss water...you feel water surging through each and every part of your body. It's hard to express but definitely you feel imperceptible joy through whole body. [You feel] lots of joy, tremendous joy through working with water. A metaphysical, spiritual joy.

In the winter the water would dry up. There would be just a little water, just enough for my mother to have a bath. She spent an hour every morning worshipping at the alter with pure

water. Most people in Nepal are Hindu. Water is considered to be the shrine of Gods and Goddesses. There's the God of water, Indra. People believe that if Indra is angry, he won't give water. It is the duty of people to make Indra happy, so they will get water in time for crops and drinking. People keep the areas surrounding water clean. This is what I believed in and practiced as a child. Never spit, never urinate near the water.

Now, when I remember that time, I think that water is of life, indispensable. When I reinterpret that belief, I think it is the worship of water, not God. Water is important to Hinduism and Nepalese society... I believe in the power of God, in the sacredness of water, holiness of water. All these values were instilled by my parents, neighbours, teachers, family, whole network, friends. They became a kind of value system for me. Even if I try to separate, I can't. It's a part of me. For my daughter's generation, they tend to look at it more as a functional object, something we need, not spiritual. *Hari suggests it's both up to parents and the school system to instill water values.*

The flood in the river sometimes... it fascinated me. If possible I would try to cross the river by walking through floods. If father caught me he would shout at me. This happened many times. I never knew when flood comes because of hills. One day, the river was big. For pleasure, joy, I wanted to cross river. Maybe I wanted to show I was big enough. I had heard of many people swept away in floods. Father would tell me how he had rescued people and helped them to cross during rainy season. In the middle, I was not able to stay upright and was swept. But I was able to get up again by luck, and crossed rest of way. I had to walk 30 minutes to the suspension bridge to cross over.

Maybe [this fascination was] because my father would tell me many times to be careful about these things: 1) when you climb a tree; 2) when crossing river because water is the shrine of God, therefore miraculous and mysterious; 3) wasps; 4) cliffs. Father's cautions worked on my psychology as child. [I wanted to] do what I was prohibited from doing.

In grade 9 I played truant with friends and went to the river during the rainy season. The most important thing was to dive into water. We looked for a deep place to dive from suspension

bridge. I was scared. The water was very deep. [My friends] were much bigger and would force me. I was afraid and fascinated at the same time. Afraid of dying, remembering my father's cautions. I dove into the water and the current was strong, it can throw you away in the wink of an eye. It was a kind of adventure. I remember one friend, a kind of bully; he'd try to use his physical strength. I was trying to walk out but he pulled me to a deep spot. It was a tug of war. I felt suffocated and drank water. I still feel scared when I think about it. Oh yes. Water was something dangerous. But on the whole water brought all of us together. We'd eat mangoes in the grove after swimming.

My closest friend's father was swept away by a flood and he died. Many people were killed. There was a sense of awe, respect, and fascination for the water. Many different emotions at the same time. It was both destructive and constructive. My friend's father who was swept away, it was his fault, not [as you might think] because water intruded into his territory. He was coming back home and had been drinking. He wanted to show his manliness by crossing the river. He belittled the water. So he was swept away. He was holding an umbrella and he was asking his friends to help him but they dared not.

As a young adult in Kathmandu and in the village, there was scarcity. There's a pond in the village that almost dried up. I really worry about this. In Kathmandu I used the stone taps for water for cooking and drinking and I took baths there. I remember the force used to be so strong that you could fill a bucket in a couple of seconds. Now, today it's like a thread. Why? What is the reason? Everywhere this is happening. There is less rainfall now than as a child. Then I would watch for floods to come along the stream. Now, it hardly rains. This is something we have to worry about.

Masters studies: I'm interested in the politics connected with water. Nepal is very rich in water. The mountains are sources of water even when there is no rain. There's a good opportunity to produce hydroelectricity to benefit people. To exploit the natural resource of water in a sustainable way. But it's not happening because of politics. Weeks ago there was an agreement between Chinese company and Nepal to dam our largest river. The agreement

was signed but other parties blocked because it didn't follow proper protocol. This is politics. Yet, without hydro power, there is no development in Nepal.

There isn't much hydro power generation happening at the community level. The dams are built on really big rivers. People's connections are more with smaller rivers, streams, rivulets, ponds, wells. People are scared of the large rivers because they're too large to swim or make use of. The spiritual relationship to water is more at the small watershed level. But still, hydroelectric power conflicts to an extent with these meanings. But both can be done. Hydro power can be harnessed without damaging ponds, swampy areas, etc. So big rivers and hydroelectric power can be the basis of Nepal's economic activity.

In Canada it's different. When I saw water here compared to Nepal the rivers are clean and I was so happy to see them so clean. In Kathmandu there's a huge scarcity of water. You have to be careful. Here, you can use as much as you want. *Hari comments that when he first moved to Canada he didn't understand where the source for this water was.* I didn't see much rainfall in Canada therefore I wondered how come the water is so available? With so many buildings, how is it possible to manage water for so much use? I'm very happy from a utilitarian point of view to see how it's managed in Canada. But I'm worried as the population grows, to what extent will the water use be sustainable at this level?

It's very conflicting as a parent. I realize my daughter is missing something very important in her life. I grew up free to play in fresh air, fresh water, open field. Surrounded by relative and neighbours. That won't be possible for my daughter here. She can play with water, but in an artificial spring. She can play with water but with bathing suit on. It gives you satisfaction but not the kind in my village. In this sense I feel pity for her because I've taken her to a different world, a different concrete world where everything is black-topped.

But at the same time I'm happy. If I stayed I wouldn't have stayed in my village, because there's no prospects for me there. I would have to live in a city and there the situation was very scary. No water, no electricity, dirt, dust, the river through Kathmandu a drain. I'm happy she has come to a place where there is no scarcity of electricity or water and no

stinking dirty rivers. Therefore I feel both sad to be away from the village and in a way happy. We people will be very different. My background and her background will be worlds apart. Laptop, video, mobile phone. She knows how to use these. For me I learned typing on computer just a few years back. I didn't know how to dial a number on the phone when I came to the city.

The way we experienced water is completely different from the way young people experience water. They don't have the opportunity to see the sources of water, to see what it originally looks like and tastes like. They are deprived of experiencing the real feel of water. There's a feeling from drinking water from the source, a completely different sort of joy. I used to drink water on a leaf plate at the source. [In Canada it tastes] like artificial water. Compared to that original water. Something incomparable. The satisfaction is completely different.

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Appendix 4: List of initial themes

Some initial main themes from the stories shared by all include:

Water and life – water connected to everything, water is life, sacred, precious

Water conservation – growing up being careful with water, valuing it as a precious or finite resource

Spirit and water – finding spiritual meaning in water

Water and fun – splashing, playing, joyful, sensual, adventure, exploration

Water and togetherness – picnics, celebration, ritual, swimming, play, poetry, stories, song, welcoming the rain. People gather around water. Hospitality through offering water.

Water and responsibility – taking action; working together to help maintain water supply for family and neighbours, sometimes in very difficult circumstances; the sense of self esteem that comes from having something to contribute as a child; personal duty to think of future generations and people in other parts of the world and their access or lack of access to water

Water and concern – many people had deep concerns about state of water in their country of origin. Water scarcity, water pollution, poor water infrastructure, climate change and deforestation; feel guilty for being in Canada because wanted to be with country of origin working with others. When spring dries up or is occupied, like losing an arm or leg.

Water and global issues: economy, the promise of hydroelectric projects, hope and deep concern for the way forward, racism, legacy of colonization, war, occupation,

Water and beauty, peace, reflection

Water and destruction: acceptance, respect and/or fear of drownings, floods, bad spirits

Water and stories

Water and immigration / interviewee's children – longing for ways for children to connect with nature, culture; satisfaction that children are living now and not wanting them to feel torn; knowing immense difference between children's experience of world (and water) and parents'

Costliness of water = conservation of water

Appendix 5: Follow-up meeting summary

Immigrant Water Stories - Follow-up Meeting Notes for participants, June 2012

Thanks to all of you who contributed to water discussions at recent meetings. These gatherings made it clear that sharing water stories builds community and mutual learning. It was good to see the shared interest we had in reflecting on water values and reimagining the water ethic in K-W.

What's the purpose?

- Many participants were interested to hear more about the purpose of this research
- Some liked the community-building aspect of the research
- Some wanted the stories to be used to influence the water practitioner community or water policy-makers
- Different water meanings come out of your water stories. One participant asked which meanings will influence people to use less water? Which meanings should be targeted towards policy? Which meanings promote community building?

Where's Canada's water ethic?

- Many of you commented that Canada lacks a shared water ethic. There doesn't seem to be anything to guide people in knowing what is ethical and what is reasonable when it comes to water in Canada.
- Many immigrants come to Canada with a water ethic of conservation, influenced by religion, culture, values and experience.
- Some continue to follow this ethical code in Canada and some don't.
- Consumer culture in North America is strong. It influences many immigrants to change their behaviours, including towards water.
- Some participants were concerned that most Canadians didn't seem to understand water's value. What if climate change and population growth made Canadian water scarcer? What about people in other countries where water is scarce?
- It is important for people to understand that it's possible to live enjoyable lives using half the water of the average Canadian.
- Bottled water was mentioned a lot. Many participants saw bottled water as a key example of the lack of a water ethic in Canada. Participants asked: Aren't people in Canada aware of what a privilege it is that everyone has access to safe drinking water here? *Sarah's note: Although most Canadians have access to treated water, a significant proportion of Canada's indigenous communities experience water contamination and boiled water advisories on a regular basis.* Why do people choose to pay extra for bottled water instead of drinking their own tap water? Bottled water creates more plastic waste and gives too much power over water supplies to corporations.

Power and conflict

- As one participant said, “where there’s water, there’s power and wealth”.
- Many participants directly related the water scarcity they had personally experienced to civil war, foreign occupation or foreign control of water. Water is a source of international tensions in the regions where many participants grew up.
- Some participants were concerned about corporations’ disproportionate level of power and control. Coke might be available in every village, but too many people in the world still don’t have access to clean drinking water.
- Some participants were disappointed by the federal government’s position on the environment and deeply concerned about what their negligence will mean in Canada and internationally.
- Some participants commented that they expected to see more wars about water.

Water is sacred

- When using water involves a level of difficulty (such as going to fetch the water at a nearby water hole or public tap), you respect its value and sacredness.
- Many participants had religious, cultural or personal values of water as sacred
- Some participants wanted to highlight the sacredness of water in Canada, saying:
- When we protect the earth, we protect ourselves. We are part of the earth. We need to recognize this. When we hurt water, we hurt ourselves.
- When you believe that water is the abode of God, you keep the watersheds clean.

Taking action

- Many of the participants are interested in taking action on water issues. Some hope to pursue water-related careers in Canada, or are in the midst of water-related graduate research. Some have already explored water themes in theatre.
- One group of participants stressed the importance of experiential learning. We are more likely to appreciate water’s value if we have emotional and physical experiences of water.
- This group felt that sharing stories about water is a way of experiential learning and more powerful an influencing tool than statistics

The discussions sparked questions such as:

- What kind of community water project will offer children powerful experiences of water?
- How can we arrange for participants to share their stories within university classes involving future water practitioners and planners (ex. Engineering, Biology or Environmental Studies).
- How might participants create books, documentaries, or performances to share their water experiences more publically?
- How might this research influence decision-makers both in Canada and beyond?

Thoughts on the process

- Participants commented that they enjoyed learning from each other
- Participants were sometimes surprised by their similar water experiences
- Sharing water stories together in these meetings built a sense of community
- Many participants indicated an interest in participating in more community building water activities
- One participant remarked that this research goes deeper than typical token attempts to include immigrant voices

Appendix 6: Brief participant biographies

I based these brief biographies on the details of the participants' lives at the time of our interview in 2011/2012. In some cases I have added relevant details that have emerged in the time that has passed since. The names in italics are pseudonyms for participants who preferred not to use their real names.

Abel Negasi is a 43-year-old man who emigrated from Eritrea to Germany as a 16 year old. In Germany he completed language studies and an undergraduate degree and masters degree. His graduate research focused on irrigation technologies in Eritrea. He had hoped to return to Eritrea to work on irrigation problems. When his plans changed, he immigrated to Canada in 2003. Abel drives a taxi on night shifts in Kitchener but wants to work in a role more related to his field of study. In Eritrea, Abel lived in the centre of Asmara. He also spent two years living in Sudan in Khartoum and Kassela. Since our interview in 2012, Abel moved with his family to Alberta, where he found work related to the oil sands.

Alejandra immigrated to Canada from Mexico in 2009. She grew up in Mexico City and studied Environmental Engineering for her undergraduate degree. She worked as an environmental professional for several years in Mexico before doing her Masters Degree in Environmental Studies at the University of Waterloo in Canada. Since our interview in 2012, Alejandra moved back to Mexico City where she works as a sustainability coordinator.

Chaitali Maybhate is a 35-year-old woman who immigrated to Canada in the fall of 2011 with her school-age son and husband. She grew up in India where she lived in Thane, a Mumbai neighbourhood, for 25 years. As an adult she moved to Hyderabad, a suburb of Mumbai. In 2005, she moved to Houston, Texas in 2005 and London, UK in 2008. She has a Masters Degree in nutritional science. She hoped to pursue a career

related to nutrition in Canada. She also looked forward to gardening in the new home that she hoped to buy with her husband.

Diyen Julius is a 36-year-old man from the Nso tribe in Cameroon who moved to Canada in September 2010 from Cameroon with his wife, a Canadian who he met in Cameroon. Diyen was born in the village of Kumbo, and also lived in Buea, Bamenda and Douala. Diyen is a painter who works as an artist. Since 2012, Diyen moved to Toronto.

Hailing Huang is a 40-year-old woman who moved to Canada in 2002 and has lived most of that time in the Kitchener-Waterloo area. Hailing spent her childhood living on the East coast of China in a city called Fuzhou. She also lived in North-Western China for five years in a mountain community called Xi'an. Hailing said she is interested in stories and the way they bring people together at the heart level. Hailing is a mother of a nine-year-old girl. She works as a counselor at KW counselling, while studying for her MA at Wilfrid Laurier University. Since 2012, Hailing has opened up a private practice offering counselling services.

Hari Bahadur KC is a 38-year-old man from Nepal who lived in the agricultural village of Dhurkot until he was 17 years old, after which he moved to Kathmandu to continue schooling. As an adult Hari worked as a university instructor, an interpreter for BBC World Service, and an interpreter with the Indian embassy. In 2011, Hari moved to Canada with his five year old daughter and wife. At the time of our interview he was pursuing a Masters in English Literature, with a possible focus on Nepalese water rhetoric. Since 2012, Hari and I ended up working together at the Working Centre, where Hari worked as an employment counsellor. Since then, Hari returned to school full-time to pursue a Ph.D. in International Governance.

Lettie is a 52 year old woman from Nigeria who grew up in the city of Warri and had family roots in the village of Port-Harcourt. As an adult, Lettie lived in Lagos, where she raised her two children as a single mother. In 2005, Lettie immigrated to Canada. I met

her through her work as an employment counsellor. Since 2012, Lettie returned to school and completed a Masters degree in Social Work.

Mashal Masood is a 26-year-old woman who immigrated to Canada from Islamabad in Pakistan in 2010. Mashal is passionate about issues of international governance, climate change and water governance. She completed a masters degree in international affairs in Pakistan but her degree was not recognized in Canada. She recently applied for a masters program in international governance, but was turned down. She works in two retail jobs and feels frustrated by her underemployment. She has ideas to contribute and strong motivation to work on issues of great importance to her, including water governance. Since 2012, Mashal moved to Mississauga.

Majdi Bou-Matar is artistic director at MT space, an intercultural theatre company in KW. He emigrated with his partner and child from Lebanon to Kitchener in 2003 and has had two children since. He grew up in a small town in the mountains of Lebanon during the time of Lebanon's civil war, and moved to Beirut as a university student after the war. He is also artistic director of IMPACT, an international theatre festival in Waterloo Region. Majdi is 38 years old.

Michael Bernhard immigrated to Canada in 2002 where he has worked for several years as an adult educator and community developer. He recently began splitting his year between Kitchener and Europe where he leads summer bike tours. Michael grew up in East Germany, close to the former East-West German border in the village of Borsch, now part of the town of Geisa. He lived there until the end of high school. During university, Michael spent part of his time in East Germany, part in West Germany. He studied as a physiotherapist, and left Germany when he was 23 to do clinical work in Ecuador before moving to Canada, where he changed careers. Since 2012, Michael bought a house in Waterloo Region. He also moved back to Germany where he works for much of the year as a bike tour guide and program coordinator. He married a Canadian wife and maintains strong ties to the local Waterloo Region community.

Nada Humsi Nada is a theatre artist who is currently artistic associate with MT Space in Kitchener. She divides her time between Kitchener and Toronto, where she has a mother and sister. She moved to Canada from Syria in 1999 and she is in her fifties. Since 2012, Nada now lives full-time in Waterloo Region.

Naema is a 54-year-old woman who in 2010 immigrated with her family to Canada, from Islamabad, Pakistan. In Pakistan, Naema taught undergraduate and graduate level English Literature courses. In Canada she works in a retail position and as a peer facilitator through the Multicultural Centre.

Osei is a 38-year-old man who immigrated to Canada from Ghana in 2005 at age 32. Because his dad was in the army, Osei moved around a lot as he grew up. He was born in Sekondi-Takoradi village and lived with his parents in Prampram from age one to five. He also lived in Accra. As an adult, Osei chose to live in craft villages on the coast of Ghana, where he could be a part of an artist community, and have better access to natural materials for his art practise. He lived in Gomoa Fetteh for eight years and had his children there, and then lived in Kokrobite for four years before moving to Canada with his Canadian wife. They had a daughter together in Canada. In Kokrobite, Osei had his own craft shop at the beach where he built drums and art and hosted free drum workshops. In Kitchener Osei owns Creation Africa, a showcase for Osei's artforms of wood carving, drum building, and drum workshops.

Reynaldo Valerio, in his 40s, moved to Canada in December 2010, partly to pursue a PhD in Social Work. He grew up in San Juan and then Santo Domingo in the Dominican Republic. Rivers surrounded San Juan and Santo Domingo had the sea, so Reynaldo was always in close proximity to water. He immigrated to Canada through the Skilled Workers Program, hoping to build a new life for his family. Since 2012 Reynaldo has created his own consulting business with his wife.

Rocio Monroy is a 28-year-old woman who emigrated from Colombia to Canada in 2010. Rocio grew up in Soacha, near the Bogota River. She lived in Bogota during her

university studies. Rocio was an industrial microbiologist in Colombia. In Canada, she studies English as a Second Language full time. She planned to do a masters degree in Canada. Since 2012, we discussed Rocio's career plans a few times. When we last talked she was torn about whether to continue to seek a water-related career in Canada, or to try to secure an unrelated job to pay the bills.

Appendix 7: Description of water film



Water Ways is a three-minute animated video that combines excerpts from audio recordings of participant interviews with hand-sketched portraits of each participant and simple motion animation. My husband Julian van Mossel-Forrester did the drawings and my brother-in-law Chris Henschel did the editing and animation. The voices of four participants are featured in the film, exploring themes relating to the sacredness of water.

[Water Ways can be viewed at https://vimeo.com/118312910](https://vimeo.com/118312910)