Rat Routes to Berried Treasure: Recipes as Alternate Narratives of Urban Agriculture

by

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Abstract

This thesis considers the constitution of urban places, futures and belonging through foraging, urban gardening and recipe creation. Adopting a community-based research approach, the research embraces values of inclusion and is an active attempt to diversify the ways in which urban greenspaces are planned and imagined. At the heart of this research is the co-creation of a recipe book by a group of culinarily-inclined English language learners and a Métis instructor from Edmonton who is the author of this thesis. This thesis considered how participation in a community urban agricultural and recipe project could increase belonging as well as aid in building more inclusive futures for its participants and for the City of Edmonton. The recipe book created in this project is the culmination of a year of urban gardening and foraging within the City of Edmonton, Alberta; of experiencing and reflecting upon the ways in which we relate to the land, and our imaginations for our future.

Our recipes-as-stories offer a window into who and where we are, and specifically on green and wild city spaces where planning, policies and histories do not always include our voices as women, mothers, immigrants, and Indigenous people. As urban food spaces continue to rise in prominence in cities such as Edmonton, how these spaces are defined, managed, who has access to them, and whose voices and experiences are underrepresented in the planning and use of such spaces are essential questions. Through the narratives, experiences, and reflections that we gathered as we created place-based recipes, we carved out spaces of belonging and agency for ourselves and presented our own imaginary of urban agriculture. This imaginary draws from the magic of the everyday to visualize an inclusive and sustainable future in our City. Our vision and our recipes-as-practice reach beyond the generally understood boundaries of urban agriculture and include not only current and local gardens, but also global places, urban forests and intergenerational connections.
This study follows the work of English For Community Integration (ECI), an English language learning project for immigrant women, taught by a Métis instructor who is the author of this thesis. ECI Participants’ experiences in greenspace, including foraging for wild food and working in a community garden were documented. We collectively explored the impacts of these on our well-being and integration into community life, encouraged by methods of Community Based Participatory Research. We took pictures of, reflected upon and documented our experiences to create a community recipe book highlighting culinary uses of local foods and making visible our lived experiences and contributions to our communities, while accenting the importance of diverse and inclusive greenspaces within cities. Data was also gathered by way of interviews with 8 people involved in urban agricultural programs in the City of Edmonton that work with immigrant and Métis people. I obtained research ethics approval from the University of Alberta Research Ethics Board 1, No. 00102810, on August 21, 2020.
Dedication

This project is dedicated to all of the participants and all of our families who have nourished and inspired us, as well as to all of the lands that we have called, and continue to call, home. I especially acknowledge the land on which the project was carried out, and that directed our work and reflection to a large degree: Treaty Six Territory and the City of Edmonton specifically, ancestral home to First Nations and Métis people, and a traditional and current gathering place of diverse people.

Everything I know about land, plants, community and hard work I owe to my parents, Sophie and Morgan, so this project both comes from and is dedicated to them. My whole family and community supported me in countless ways throughout this project, keeping the home fires burning. A very special dedication is due to my daughter, Maiara, who coaxed me back to the beautiful City of Edmonton and whose presence was a constant at supervisory meetings, garden harvests and River Valley adventures. Gary, too, deserves some recognition for spending just as much time on the orange writing couch as I.
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Rat Routes to Berried Treasure: Recipes as Alternate Narratives of Urban Agriculture

Introduction:

Recipes, like cities, encapsulate a remarkable array of perspectives and stories. In this study, recipes are explored in connection with embodied practice in local greenspace and food production and valued as opportunities for building links between publics and urban spaces. These relations, more than symbolic, can be physical and tangible in terms of access to city green spaces, and the opportunity to get one’s hands dirty and participate in the growing or foraging of food. Moreover, as this research will show, doing so offers further opportunities to connect publics to a broader spatial landscape in which multicentered identities, communities, and belonging are nurtured. When this occurs, recipes can meaningfully be understood as sites of citizenship, connecting publics to the planning and use of urban green space, specifically, and to participation in shaping sustainable cities more broadly. The research presented in this thesis began as a berry-picking expedition in the Rat Creek in Edmonton and is, at its heart, an attempt to create social and spatial opportunities for thinking about food and place. In so doing, we build capacity and belonging amongst a community of immigrant women and myself, an urban Métis woman, to carve out an image of what a sustainable urban future might entail for ourselves and for our City.

The City of Edmonton, located on Treaty Six territory, boasts the largest urban park in Canada (The River Valley Park Space); land that thousands of years ago made it the gathering place for diverse peoples that it continues to be. Edmonton currently has one of the highest immigration rates in Canada (IRCC, 2019) as well as the second largest urban Indigenous population in Canada (University of Alberta, 2021). Placemaking in the City, however, tends to be rather generic and concentrated in alleyways or parking lots in dense downtown spaces rather than encompassing the City’s many River Valley trails and other green spaces. Examining such urban greenspaces can open up many layered and complex histories and perspectives of the City that combine natural setting, heritage, and culture (Wall, 2016). Urban greenspaces can be spaces of exclusion for immigrants and Métis (and other Indigenous) people ((Hordyk, Hanley, & Richard, 2015, Kabisch & Haase, 2014, Pincetl & Gearin, 2005, De Lano, 2020). This exclusion can be linked to general barriers to access to such spaces, but also more specifically to greenspaces as providers of food. Immigrant populations are more likely to suffer from food insecurity
characterized by a lack of quality food sources, and by having to build new “food literacy and culinary capital” (Girard & Sercia, 2013, pp. 33) differing from those in their countries of origin, while traditional Métis (and other Indigenous) food and medicine harvesting practices are often discouraged in urban greenspace (De Lano, 2020, Kermoal and Altamirano, 2016).

This project uses a Community Based Research approach to document and analyze the everyday experiences of food harvesting in green and natural spaces in the City and recipe production. These activities included participating in the Prairie Urban Farm (PUF) community garden at the University of Alberta and foraging in the Rat Creek/Kinnaird Ravine (an urban park space within the City of Edmonton). Mitchell (2009) likens community based research to berry picking. We draw both methodological and literal inspiration from this work, as our project involves both a community based model and the actual embodied practice of picking berries as a community. In coming together to harvest food and create recipes, we reflected upon our own realities, built community networks for ourselves, and increased our agency as citizens capable of re-imagining both greenspace and the future of the City.

This project culminated with the co-creation of a recipe book based on experiences with, and reflections on local food production as well as interviews with agencies and individuals to shed light on the overall context of diversity in greenspace and urban agriculture in Edmonton. Through an iterative process of embodied practice and group reflection and coding of materials, students from a program called English for Community Integration (ECI) and myself combined all of the data sources into a recipe book that will be disseminated in the wider community. Examining citizen creativity as well as embodied experience in food practices at a local level, we highlight a hidden potential for revelation and agency; a kind of manifesto and guide for a new and multifaceted right to the city (Lefebvre, 1991) by way of multilayered stories that communicate diverse perspectives about greenspace, food production, and belonging. Just as we might not see a recipe book as community engagement, we may not think of forests and farms as defining spaces of the urban experience; as representative of the diversity we find in multi-ethnic cities such as Edmonton, or as pathways to more inclusive, sustainable futures. This project nurtures such pathways of thought and possibility and the following questions are considered:

How can participation in urban agriculture/foraging and the creation of place-based recipes support feelings of belonging for a group of immigrant women, and myself, a Métis woman in Edmonton?
How can such citizen participation facilitate the re-imagining of communities, urban agriculture and greenspaces in Edmonton towards a more inclusive and sustainable future?

Research Context: Urban Agriculture is Our Jam

This research started with picking berries and making chokecherry jam. The impetus for the study came about during a pedagogical project initiated by the sister organizations of Multicultural Health Brokers Co-op (MCHB) and Multicultural Family Resource Society (MFRS), now coordinated by the latter. MFRS is a not-for-profit organization “created by and for immigrant and refugee families who dared to dream of an inclusive, intercultural, and equitable Edmonton for their children” (Multicultural Family Resource Society, n.d.). English for Community Integration (ECI) programming has the goal of helping immigrants and refugees feel less socially isolated and more connected to their new communities. I have been the primary instructor and curriculum developer of this program since it began almost ten years ago. In the last three years, at the request of ECI participants and aligned with my own interests and values, we have adapted programming to include emphasis on connection to urban green and natural spaces, and students have produced food from fruit collected in these spaces. The idea to include recipes and cooking in the ECI program came from the students themselves within the context of evolving classroom discussions and field trips to the Rat Creek/Kinnaird Ravine to gather fruit from which to make jams and jellies.

My own interest in the Rat Creek Ravine began when I moved to the nearby community of Parkdale ten years ago. I accessed it as a place to feel more at home in the City, having spent most of my life living rurally, picking berries and plants in the summer to be turned into teas and jam for the winter months. The Ravine space drew me into community life more generally as I became involved there in a community mural project as well as a yearly neighbourhood nature walk. In 2018 my daughter and I were asked to interpret the historical roles of Sarah Kirkness and her young daughter who lived on River Lot 26, where the Rat Creek Ravine is located, for a small community play in the Ravine. I was certainly not chosen for my acting prowess, but because my daughter and I live in the neighbourhood and are Métis, as were Sarah Kirkness and her daughter. This was a particularly thought-provoking activity for me, feeling the soft dirt of the Rat Creek trails through the thin soles of my great-grandmother’s moccasins (a part of my period costume for the play). My daughter and I answered questions about the land and offered participants freshly picked Saskatoons. I listened to my daughter recite her lines (her 10-year-old acting chops much more refined than my own), explaining that she had just come from
picking berries with the Fraser girls from the next River Lot over, number 28. I had been visiting these trails (in sneakers and winter boots) since my daughter was the size of a saskatoon berry inside me but had not known that Maggie Fraser’s nieces had lived next door and picked berries in this same Ravine. Maggie Fraser would marry John Belcourt (brother of the Métis matriarch Victoria Belcourt) and give birth to my great-grandmother, Florence, whose wild rose beaded moccasins I wore to play the role of the Frasers’ neighbour (and berry-picking partner) that day. The following year my daughter and I painted a mural as part of the Ravine project, depicting the lovely beaded wild roses on those very moccasins, reminding passers-by of the many footsteps that have travelled these paths before us.

Some previous ECI students had painted their own murals for this project as well, depicting the community’s diversity on the Ravine’s previously unpainted retaining walls. As the current ECI students and I began to take walks in the Ravine, these participants asked me about the meaning of the mural I had painted, and about who the artists of the 60-some other murals were. They showed a keen interest, as well, in learning more about the natural space of the River Valley and how they could utilize it, becoming especially excited about collecting food and preparing it. ECI summer programming generally includes trips to City attractions such as museums and art galleries, with a lesser focus on greenspace, but this past summer programming was limited by Covid-19 related restrictions, leading to an even greater emphasis on programming involving gardening and foraging. ECI students, participating in a Covid-19 adapted online version of the course, began to ask in May 2020 about the many community gardens they saw popping up around the City, and the decision was made to try to include interested students not only in the berry foraging trips to the Ravine, but also in a community food security and garden project located on the University of Alberta’s South Campus. Prairie Urban Farm (PUF) offers communities the opportunities to share space, learn about growing food, and build communities in support of food security and environmental resiliency. PUF was a space that drew my attention immediately when I began my studies in Community Engagement in downtown Edmonton. My own experience of home and community is rooted in rural greenspaces and related to food: potluck dinners, sharing garden produce, picking berries etc. I jumped at the opportunity to carry out ECI programming at PUF because students had shown interest in community gardening projects and also because, for me PUF, like the Rat Creek Ravine, felt like home. In fact, PUF even smelled like home, being located beside the pungent dairy barn at the University Farm!
Urban Agriculture and Exclusion in Edmonton - The Proof is in the Pemmican (or lack thereof)

The deeply sensuous experience of working in the Garden at PUF and gathering berries in the Rat Creek Ravine reminded me of some key pillars of my identity that had been misplaced in the bustle of inner city living and academic pursuits. It was not surprising to me, therefore, that lack of access to viable greenspace for foraging and connecting to land in urban centres has been identified as detrimental to the physical and cultural well-being of Métis citizens generally (De Lano, 2020). Lesser access to greenspace is one of several ways that immigrant populations in Canada experience greater social exclusion as well, which English for Community Integration (ECI) specifically aims to address in the City of Edmonton with participant-led programming. In framing this work it is therefore important to understand the context and history of urban agriculture and greenspace in Edmonton, in order to shed light on how and why some communities have been excluded from these spaces, as well as how these exclusions shape the production, management and use of greenspace and urban agriculture in Edmonton.

There can be a bias in the use of natural space based on whiteness (Edmiston, 2018, Brean, 2018). Jacqueline Scott (Scott in Brean, 2018), a doctoral scholar working on topics of race and racial representation in greenspaces, commented in a recent interview:

> You look at who’s in the ravines, it’s mostly white people. So even though we can get to the ravines from the subway, from many people of colour communities, there’s something about the outdoors where they get a consistent message that we don’t belong there. (Scott in Brean, 2018).

A similar feeling was brought up by one of the interview participants in this study:

> As immigrants, you just see that as a river you saw when you’re on the bus or transportation, you don’t know that you can actually access it...I don’t think there’s quite a physical barrier, but it’s just like the psychological barriers, like oh am I supposed to be doing that, like am I going to be locked out? Like if I show up, they’re not the only person of colour over there and how they feel about that. (Marco, interview participant)

For the historian William Cronon (1996), nature and the environment are shaped by culture, and our contemporary understandings of them and are, moreover, heavily laden with colonial and settler imaginations of the ‘new world’ in the North American context. Such visions have tended to identify nature as either outside of human experience (first as a place of darkness, but more latterly as a space for encounters with the sublime; ibid.), or as a frontier of civilization shaped through the conversion of
wilderness to agriculture and settlement. The feelings of exclusion Marco expresses in the preceding quotation are not solely related to the accessibility of greenspace but might also be understood in relation to an exclusion from the ways in which greenspaces are comprehended and physically articulated in Edmonton within the narrow confines of a colonial imagination.

Urban agriculture has similarly not escaped a bias towards whiteness and has likewise been bound to colonial preconceptions of the garden, as well as culinary aesthetics and tastes (Maurer, 2021, McClintock, 2021). In *Why Grow Here* (Merrett, 2015), a collection of essays on Edmonton’s gardening history is presented, and we find a narrative of the urban garden focussed largely on the cultivation of European food varieties. Proving that fruits and vegetables from Europe could be grown in the Northern City of Edmonton was in fact linked to increasing settlement in the West once the Hudson’s Bay Company sold its landholdings to the Dominion of Canada. One of the greatest supporters of this boosterism vis-a-vis gardening prowess was Frank Oliver, using the Edmonton Bulletin to praise the gardening exploits of the likes of Donald Ross, “the father of gardening” in Edmonton, to help build the reputation of the young City in the minds of prospective settlers (Merrett, 2015: p. 20). Ross, according to the Bulletin, was much more interested in cultivating European plant varieties than using local food sources and is said to have remarked, describing the use of his cultivated produce in the hotel he owned: “pemmican and dried buffalo meat has long been a stranger at the table, and its place has been taken by substantial meals more in keeping with the onward march of civilization” (ibid., p.24). The landscape’s abundance of native berries was seen, as Merrett documents (ibid., p.39), as a boon for attracting settlement, but largely because of the qualities of the growing conditions. By the late 19th century the landscape was being transformed as cultivated lands and nascent cities replaced prairie grasses and aspen forests. A foodscape shaped by one’s relationship to the bounty of an indigenous landscape had been replaced by one characterised by familiar plots of brassicas, tomatoes, leaf vegetables, European berries and fruit trees. Michael Moss (2010) researching European cultivation in the Indian colonies, notes that the vegetables of the colonies were not only valued as something familiar to the settlers, but because they were viewed as nutritionally, aesthetically and culinarily superior. The settlers in Edmonton, in the same way, quite literally rooted a colonial sense of their superiority in the produce of their gardens, and for the most part the contributions of wild local plants, indigenous cuisines, and Indigenous peoples were given a back seat in Edmonton’s food histories. In this way, Edmonton’s abundant gardens as a source of boosterish pride became part of a larger narrative of who did and did not belong in the future of the City. They reflect the City’s early preference for attracting
white and British-origin settlers to Edmonton, while actively trying to keep others out, specifically African American, Asian, French Canadian and Eastern European immigrants (Cook, 2020, Simons, 2017).

Despite the rapid settlement of the region, gardening and greenspace in Edmonton were not then, and are not now exclusively European and/or white. The City’s ravines and broad river valley have supported Indigenous foragers, and as I recall above the Métis (including my own relatives) gardened in River Lot 28 in what is now the centre of the City (Taylor, 20008; Snyder, 2017) as well as many other River Lots (Thompson, 2020, Snyder, 2017). Many immigrant families also gardened and foraged in the City, including some Chinese immigrants who ran market gardens as early as 1935 (Merrett, 2015). Today, there is something of a resurgence of interest in exploring the City’s protected green spaces as sources of food and community. Yet, such endeavours in diversifying the use of Edmonton’s green spaces still feels fragile, or partial, within today’s urban agricultural landscape. River Lots are now almost exclusively protected park space in Edmonton, where City policy renders many types of traditional Métis foraging (and that of other Indigenous groups that reside in Edmonton) illegal (De Lano, 2020). Nor has the history of Métis land use in Edmonton been prominent in the City, especially when that history involves activities deemed women’s work such as gardening and foraging (De Lano, 2020, Kermoal, 2016, Long, 2021). Immigrant involvement in early gardening in Edmonton is also very difficult to trace through historical records (Merrett, 2015).

Progress has been made over time with respect to the inclusion of diverse voices in placemaking/placekeeping in Edmonton, but the storying of greenspace is not an area that receives attention in terms of increasing or making visible diverse cultural expressions, uses and understandings. The City’s food strategy (Fresh) developed in 2012, emphasizes the importance of representing the diversity of cultures in the City in the food we can buy, cook and eat (City of Edmonton, 2012) but does not reference diversity in urban agricultural practice specifically. The Fresh Food Strategy has been linked with the new Edmonton City Plan (2020), just released this past year, which also emphasizes diversity and inclusion in city-building but, like Fresh, does not reference diversity and inclusion in sections referring to urban agriculture. There is no mention in either report of immigrant or Indigenous stakeholders or urban agriculturalists, other than one section in Fresh that suggests immigrant group associations should

1 The recent creation of an Indigenous art park (INIW) River Lot 11∞, on the site of a former River Lot is an exception.
3 https://www.edmonton.ca/city_government/city_vision_and_strategic_plan/city-plan
participate in festivals and events to showcase food in public places. While the City Plan and Food Strategy silo considerations of urban agriculture from those relating to diversity and inclusion, we argue for the need to integrate both through engaging diverse citizens and stakeholders in the conceptualization and practice of urban agriculture in Edmonton through embodied practice in greenspace, moving away from placemaking that does not consider landscape and greenspace, as well as conceptions of urban agriculture that do not represent or engage with diverse cultural communities in the City.

Including considerations of landscape and diverse cultural communities as part of the storying of Edmonton can create more inclusive future greenspaces, and in fact can help to fill in gaps in the historical context of city building and urban agriculture. For example, for those who know where to look, often guided by knowledge passed on through kinship networks, remains of Métis Red River Cart trails can be found in the River Valley (Dumont, 2015), as can asparagus plants, once part of Chinese gardens (Merrett, 2015) and goji berry bushes also likely planted by some of the earliest Chinese immigrants to Edmonton (Bajer, 2021). This project, in its community/practice-based reflection and recipe creation, as well as in its more traditional academic research component, aims to address, albeit at a small scale, historic and present exclusions in the planning and practice of urban agriculture in Edmonton. We highlight, based on our experiences growing, harvesting and preparing food in the City, how belonging in the City and city space itself can be reconceptualized toward more sustainable and inclusive futures through citizen participation in greenspace and urban agriculture, and their re-storey-ing of such spaces.

Methodology: *Burried* Epistemologies or Embodied Pathways to Inclusion, Belonging, and Re-storying Land:

In order to include our own voices and experiences in re-storying the city in which we live, this study followed the methodology of Community Based Participatory Research. CBPR prefaces the involvement of communities as co-researchers, and English for Community Integration (ECI) students were directly involved in research activities from the impetus of the study and inspiration of the research questions, through to dissemination of results (Hacker, 2013). The fact that this research was carried out collaboratively with ECI participants addresses the issue raised in previous studies around the social exclusion of immigrants from programs, services and community (Popay et al., 2008). Participants actively included themselves in community life by way of group reflection on the gardening process, creating recipes, and telling their own stories. This focus on strengths, or assets, is a departure from
deficit orientations which focus on problems or negative aspects of communities that might seem to necessitate professional or top-down solutions (Lightfoot et al., 2014, Morgan & Ziglio, 2007). CBPR facilitates the engagement of participants in research that is meaningful to them and challenges social exclusion while building capacity for transforming their personal experiences and local communities (Cahill et al., 2010).

Because this is a CBPR study, the process of compiling the recipe book was of as much importance as its dissemination. The process allowed ECI participants to build capacity as photographers, foragers, gardeners and researchers, to use and share their expertise, to build relationships and community with other participants and with the land, and to carve out spaces of belonging within their new communities. The process itself constituted the most important impact of the study toward the goal of increasing inclusion and feelings of belonging and resiliency of immigrant citizens. The process also represented an increase in diversity in placekeeping\(^4\) in Edmonton, by highlighting local spaces, citizens and ingredients, and will allow participants’ stories and recipes to be shared with the larger community while also accenting the importance of natural spaces and urban agriculture within cities. The recipe book foregrounds the contribution of immigrant and Métis citizens to urban agriculture and the possibility of shifting understandings of food and space within cities.

The decision to include the creation of a recipe book specifically in this study came about not arbitrarily, but for three key reasons. Firstly, ECI participants identified interest in learning about gardening and foraging, and especially in recipe creation and sharing as an extension of this process. Many of the participants had shared their own favourite dishes with the group prior to this study, utilizing the kitchen space at the community league where the class is taught. The sharing of food was always one of the most popular activities in the class, and ECI students and staff suggested forming a group specifically around the sharing and preparing of recipes.

\(^4\) The term placekeeping is a reframing of the term placemaking. It describes: “a unique form of expression, design, process and praxis that prioritizes the ecological, historical and cultural setting of ‘place’; and engages an expanded role of community in the design process and activations. It also unsettles and re-presences Indigenous histories and futures in the civic commons within urban areas (public places such as parks, trails, venues and libraries). Indigenous placekeeping empowers diverse Indigenous principles and processes as a means of re-imagining and transforming landscapes, public spaces and structures in urban centres. In these multi-faceted ways, Indigenous approaches to placekeeping have much to teach municipal and cultural institutions about building cities that are more regenerative, community-driven, enduring (seven generations), inclusive, and life-sustaining.” (Chung-Tiam-Fook, 2020. Para. 7).
Secondly, previous research has identified recipes as “a form of knowledge reproduction and social exchange” (Salmón, 2012, pp. 7). This current research therefore used recipes to connect participants to landscape and community, as well as connecting our stories and culinary knowledge to the wider community through the sharing of recipes in the co-created book. Harvesting food and creating recipes was a process of social exchange between participants as well as with the landscape and the foods that it provides. Salmón (2012) asserts that modern society detaches people from their direct relationships to, and social processes involved in, “eating [a] landscape” (ibid, pp. 8). Recipes and local food production and harvesting can re-connect people to social processes lost through the commodification of food and the isolation of urban citizens, a stifling of their right to the city (ibid). In this study in particular, we see the isolation from land and food systems that Salmón describes through our own personal experiences as immigrants who are learning to connect to a new land and new types of food, and for me personally as a Métis woman who seeks to re-connect to traditional foodways on urban land that is valued mostly for recreational use.

Finally, the recipe as a genre itself functions as methodology beyond that of CBPR. Recipes as methodology and method, as Kowalchuk (2018) explains, is not a new concept, but rather one that has been silenced by masculine and colonial thought. Kowalchuk sees the recipe as both a feminist text and an investigative tool containing knowledge on food and medicine; formulas invented by careful observation and trial and error. She explains that recipes refute the dominance of formal knowledge and professional work over traditional knowledge and domestic work. Agricultural practices and knowledges have been understood in the same light, observing that they have often been undervalued because they are seen as being traditional (outdated) or the realm of women’s work, occurring as everyday practices outside of the formal economy. Shiva describes such practices as “Real humanity” (Shiva, 2020, 3:04). Kowalchuk (2018) further explains that recipe books often house collective knowledge, rather than championing individual authorship and ownership of knowledge, which is also a key reason for choosing recipe as methodology (and method) in the current study. Each recipe is unique and particular to one participant but placed together as a body of collective work they form a book, and also a community. This community is at once very connected to local places and food while spanning time and space, connecting to other temporalities and places. The recipes were tweaked and invented during the process of the present research but were often based on past generations of recipe/knowledge keepers and will be passed down to children/future generations.
The idea of recipes informing community and place in the City is influenced by the work of Granzow and Jones (2020), who point to the idea of gardening as epistemology, explaining that gardening can be interpreted as a craft (also Jones et al., 2021), or philosophy, because gardeners create possibilities to shape convergences of community, place and culture. Hall (2016), as well, describes varied ways of interacting with space in order to study it, such as through talking, walking, touching, seeing, smelling and sitting. Here, we add gardening, harvesting, and creating recipes as methods of inquiry. Recipe creation is presented as an extension of the process of producing and/or harvesting food in the City, as a key process of urban agriculture. Recipes in this study function as alternate narratives that link land, culture and people in multifaceted ways and can thus incorporate and celebrate unbounded and layered spatial and temporal identities (Riesto, 2018), both of the citizens that inhabit Edmonton, and the City itself.

**Methods: Gathering, Sorting and Sharing Berries:**

This project involved embodied practice in greenspace and a simultaneous iterative reflection process thereon. It encompassed what Mitchell (2009) would describe as “berry picking consciousness” (pp. 6), a metaphor for deep reflective practice in research. This term is both metaphorical and literal in our case as our research included the storytelling, reflection and laughter that Mitchell describes as part of the berry picking/research process, but also actual embodied berry picking. Our own CBPR project involved eleven participants and myself. Participants were chosen from the existing ECI class, as the study follows the experiences of this program specifically. Two of the eleven participants joined the ECI program and this study after it began, having found out about the program through friends or by chance (seeing us at PUF) and expressing interest in joining. All of the ECI participants were born outside of Canada (except myself). Participants have been living in Canada for varying amounts of time and have different immigration statuses and countries of origin. All participants are women and have children and/or grandchildren. There is considerable diversity amongst this group in terms of age as well as country of origin. The participants come from Colombia, The Dominican Republic, Germany, India, Iran, Mexico, Peru, Somalia, Spain and Venezuela, and I am from Edmonton and of Métis ancestry.

I received ethics approval and ECI participants and myself began our formal research in August 2020 with an orientation to the spaces to be explored (Prairie Urban Farm/PUF and the Rat Creek).

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5 Berry picking is described by Mitchell as a Woodlands Cree metaphor for Community Based research projects.
Participants were invited to share information about their relationship to green spaces, gardening and foraging in their home countries, why they had chosen to participate in this study and what experience they had in greenspaces in Edmonton. During weekly visits to PUF and the Rat Creek throughout August and September 2020, participants and I carried out gardening and foraging activities and I took field notes on some of the interesting reflections and stories that were shared while harvesting. From October to December 2020, we carried out weekly zoom reflection sessions on our experiences and began to create recipes based on the harvested produce. The reflection sessions were guided by open-ended discussion questions based on senses, in order to highlight the actual embodied, lived experiences in space such as: how did you feel in the garden/forest? What did you see, smell, taste? During two of these reflection sessions, students were given boxes of similar produce to what we had harvested from the Ravine and PUF, to help inspire recipe creation after the garden/Ravine produce was no longer in season. Participants were invited to compare the supermarket produce with what we had harvested from the garden and forest.

Participants were asked to choose two or more of their favourite photos taken during the gardening and foraging experiences, and to discuss why they chose each photo and how it made them feel about: 1. Edmonton, 2. food, 3. self, 4. home country, 5. past and future. The use of photo reflection as a method occurred organically through the project. ECI students in their foraging visits to the ravine had been very interested in taking and sharing photos prior to the study. Collectively we also found that these photos helped to recall our experiences and allowed for our discussions to be less orchestrated. Participants shared their photos and interpretations with the wider group, and these conversations were the prompts for discussion and dialogue. Doing so allowed the participants to prioritise their own experiences and opinions and give focus to the research activity. Because this is a CBPR pedagogical project, the interpretation of the actual greenspace and activities and the corresponding pictures were used as part of discussion sessions to develop, code and analyze data collectively, culminating with the creation of a recipe book based on the foods collected, photos taken, and the reflections on the experiences at PUF and the Rat Creek Ravine. In this sense, the photos are also an avenue for

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6 Photovoice is a method that allows research participants to use photos and narrative to identify and represent issues of importance to them and to gain insights on their own lives through deep reflection (Nykiforuk et al., 2011. 104, Nowell et al., 2006. 31, Mertens, 2020). Photovoice suits the CBPR methodology of this study, having evolved as a method within the field of Community Based Participatory Research. Photovoice was pioneered by Wang and Burris (1994), using Freire’s (1970) critical pedagogical approach emphasizing the co-creation of knowledge by students and teachers (Carlson et al., 2016) and the use of photos and narrative to identify and represent issues of importance to them (Nykiforuk et al., 2011. 104, Nowell et al., 2006. 31).
participants to produce and record narratives about their own involvement in, and understandings of, Urban Agriculture in Edmonton, to be disseminated in the recipe book. Finally, participants discussed one or more recipes that they had created/prepared with the garden/forest produce and how it made them feel about the same five topics examined in photo reflection.

The reflection on and coding of data was an iterative process, much as Mitchell (2009) describes the many rounds of washing that berries (data) require before being ready to consume and share (disseminate). I compiled notes from the general discussions, photo-based discussion and recipe discussions by listening back to recordings of the zoom sessions and then coding for themes (this coding combined all three sets of data). These themes were checked with participants to see if they captured what was discussed in the zoom meetups, or if they wished to modify or change any of them. Participants discussed how to organize recipes for the making of the recipe book, and ingredient-based organization was chosen in order to reflect the experiences we had in different spaces and highlight the process itself as our stories in greenspace/urban agriculture.

From November 2020 to June 2021, I also carried out eight semi-structured interviews with people working in urban agricultural projects in the City that involved immigrant or Métis participants or perspectives. During these interviews participants were invited to share information about the projects that they are involved in as well as to speak specifically to immigrant and Métis experiences in urban agriculture and if/how they feel that urban agricultural spaces in Edmonton are shaped by immigrant and Métis participants and perspectives (see Interview Protocol, Appendix A). Participants were also invited to share a recipe, and why it was meaningful to them. This aspect of the interviews allowed for the original research form and dissemination method chosen by ECI participants (recipes) to shape at least a part of these interviews and was a way to include interview participants in the embodied/practice based methodology of the study, having them reflect on ingredients harvested personally and locally, and on recipes that have meaning for them. Interviews were carried out over Zoom, recorded, transcribed and thematically coded. I coded the interviews after the ECI participant data had been group coded (by myself and ECI participants), in order to forefront ECI data/voices, in keeping with the CBPR methodology of the study.

Lefebvre (1996), finds rigor in creativity, while Hall (2012) finds it in the nuanced and detailed description of embodied experiences in urban space. The analysis of recipes in this study draws from these alternative ideas about rigor and sees rigor not as the complete telling of all aspects of a
phenomenon, but the detailed analysis of connection to food, greenspace and community. All sets of data (ECI reflection, photos and recipes and coded interviews) were used to answer the research questions, inform the academic article presented in Chapter Two, and to create content for the recipe book. Triangulation and rigor were achieved in the analysis of data by using the different methods and sets of data to show consistency and depth of findings. For example, the photographs taken by co-researchers and selected for discussion represented many of the same themes that were expressed narratively, and in group reflections. The iterative nature of the research process provided thick descriptive data and is visible in the stories and photos presented in the recipe book.

Analyzing the data to determine if the outcomes of the study are transformative (as is the aim of CBPR) involves looking at the material outcome in the form of the recipe book and analyzing the process that went into creating it. The recipe book represents the performing of a study; a synthesis of the transformative journey that will involve interaction in greenspaces, reflection thereon, and creation of a material representation of that process of praxis. This creation of the book also involved, in process and dissemination, the inclusion of often-absent voices, key in the analysis of transformative studies, such as women, immigrant communities, ethnic minorities, and non-English speakers (Wallerstein and Duran, 2008). Speaking to dissemination specifically, Klodawsky, F., Siltanen, J., & Andrew, C. (2017) have signaled a need to move away from overly academic modalities of dissemination in community based research, and to consider arts and community-based alternatives. We consider the recipe book to be both arts and community-based, as the creation of recipe is very much an artistic process and involves the creation of a textual and actual community. The dissemination of the recipe book and findings of the study represent the joyful sharing of a good berry harvest (Mitchell, 2009), both literally as recipes and figuratively as findings, completing a research cycle that began with a group of women picking berries in the urban forest.

Literature Review: Muskrat Manifesto or Multicentered and Intercultural Futures

Rat Creek Ravine, the berry-rich greenspace where this project began, takes its name from the Muskrat, whose tale as told in some versions of a Nehiyo and Anishinabe creation story recounts the humblest of creatures laying the groundwork for change for the rest of the community. After the great flood it is only the Murkrat, not known for being the strongest of swimmers, who is able to grasp a handful of dirt from the depths, from which the world will be built anew atop the shell of a great turtle (Johnson, 1976). Lefebvre’s ideas about space, as well as the power and importance of inclusive and diverse narratives (of
which the Muskrat’s story is but one example) theoretically shape this study that includes marginalized voices of people (and natural places) in Edmonton through everyday use and embodied practice in greenspace and urban agriculture. Theoretically, the study begins with Lefebvre and diverse narratives in city-building, while in practice it began as did the Muskrat: re-imagining the city through the embodied experiences of those often excluded from its green and wild spaces, one humble handful of dirt at a time.

Urban agriculture makes food an urban question and in so doing produces emergent spatializations that reorder places and publics (Granzow and Shields, 2020). Spatializations can create social relations, but social relations can also shift or create new spatializations. That is, the dominant and top-down ordering of places and publics create the rules by which acceptable social relations unfold and are deemed as the norm and generally unquestioned, but the using of space in ways contrary to these norms of behaviour can contest this organization and suggest new possibilities, poking holes in what seems to be the dominant or only way of organizing space and social relations (Shields, 1999). In order for urban agricultural practice to truly represent an overturning of spatializations that favour colonial perceptions of space, however, those marginalized by the dominant epistemology must be involved in bringing about change, as they are the ones who truly inhabit the city (Harvey 2003, Lefebvre, 1991). Tornaghi (2016), thus highlights the importance of investigating even small-scale alternative models of urban agriculture, as they can represent moments of possibility toward shifting how urban agriculture, and urban life more generally, is imagined.

Lefebvre’s right to the city describes a movement of sectors of day to day life; a group of people joining together to re-shape a space according to their experiences and perspectives. The production of greenspace and natural places in cities, as we have seen in the section on the historical underpinnings of nature and gardening in Edmonton, is often univocal. Dominant social, political and economic forces shape the way nature is viewed, accessed and used. Through appropriating a natural urban space, gardeners and foragers that are themselves marginalized by colonial spatializations go beyond questioning the primacy of state and economic organization in shaping cities (Lefebvre, 1996) to also counter perceptions of nature as elite, pristine and white. Gardening, foraging and recipe creation can all be seen as modalities of urban agriculture that represent alternative stories to colonial constructions of space in cities. Urban Agriculture can, then, also be viewed in a more nuanced sense; as representing small movements that attempt to create alternative spaces and re-work the relationships between food and the city, as well as place, publics and nature (Granzow and Shields, 2020). When I think about the
right to the city in Edmonton, I therefore think of our small group of women and of our experiences at PUF and in the Rat Creek Ravine. I also think about recipes as both representative of our group’s collective strengths, being a genre that most of us are familiar with and fond of, as well as an interesting way to underscore food as an urban issue and to story our experiences in urban agriculture from a multilayered lens. Community gardens have been identified as spaces that allow for the expression of non-commercial and alternate cultural values and uses of space in the city (Eizenberg, 2012, Granzow and Shields, 2020) and community gardeners and foragers represent, then, the muskrats of the city who grasp soil from which to create a whole new type of city, surpassing the ability of those who may be perceived as the more expert swimmers (city planners).

Examining agricultural practices and knowledges specifically, Shiva (2010) observes that they have often been undervalued because they are seen as being traditional or the realm of women’s work, occurring as everyday practices outside of the formal economy. Women-centered agricultural perspectives often recognize kinship with plants, animals and natural spaces themselves (Shiva, 2009, Diamond, 2017). This relational understanding of nature and natural space contrasts with the colonial understandings of natural space existing as separate from the human world and to be set apart and preserved as pristine or dominated as lesser (Cronon, 1996, Ermine, 2007). Shiva (2010, 2020) and others (Carolan, 2011) have thus emphasized the importance of studying everyday, embodied practices outside of both the formal economy and dominant cultural representations, such as gardening, foraging and cooking; things we can do with our hands. To Shiva (2020) such practices represent real humanity, akin to Lefebvre’s lived experience (1996). Ermine (2007) describes a similar sense of real humanity based on our reciprocal relationships with the natural world and asserts that “Western dominance impedes the fullest development of our humanity” (ibid, p.200). Embodied practice as research favours lived and sensuous experience in space (relation to space) as a way of knowing and researching, rather than rational representations of space (viewing space from a distance) and can thus better comprehend non-Western ideas of natural space (Shiva, 2009, 2010 Diamond, 2017, Littlebear, 2000, Ermine, 2007), as well as non-dominant cultural expressions that exist outside of rational planning and the formal economy (Carolan, 2011, Eizenberg, 2012). Embodied practice and recipes in the current study are a way to (re)connect

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7 To give a local example, a recent study that I completed on Métis plant harvesting rights in Edmonton and 5 other cities in Alberta found that gender played a role in the lack of attention given to rights relating to urban plant harvesting (traditionally women’s work) (De Lano, 2020), demonstrating what has been identified as a tendency to relegate natural space as well as women and colonized peoples to places of lesser importance in colonial paradigms of space and planning (Harvey, 2007, Cronin, 1996).
urban citizens to the social and relational processes involved in growing, harvesting and preparing local foods. Relating to land and food in the City is therefore a way to re-frame how we understand belonging as well as city space itself.

Refuting the idea that land is simply a backdrop to anthropological life and asserting the overall need to “restore-\(y\)” land has been expressed by Indigenous scholars of place as well (Tuck et al., 2014, p.146). Perceptions of land and natural space are constructed over time in the identity formation of cities as an ongoing process that impacts how urban futures are imagined (Wall, 2017). The colonial relationship has created a situation where one partner in the relationship is asked to sacrifice heritage and identity in exchange for place, a reality also faced by immigrant communities as they navigate belonging and cultural identity in Edmonton. Layered histories of different people can inform space in cities as understood through Indigenous futurities which do not require or imply the erasure of other histories (Tuck et al., 2014, Wall, 2017). Settler colonial structures do necessitate a kind of erasure, because they are based upon ideas of separation from the land and assimilation (Tuck et al., 2014). Rather than erasing previous or simultaneous histories and worldviews, embracing complexities and layered stories of place can help to overcome colonial binaries (Wall, 2017) such as those that privilege civilization over nature, garden produce over foraged foods and European over non-European cuisines and cultures.

Although sparse, literature on urban foraging asserts the importance of this practice for diverse urban citizens (including Immigrant and Indigenous populations) as well as its potential to re-imagine urban sustainability and our relationships to natural spaces (McClain et al., 2014, Poe et al., 2013). Amin (2002) urges cities to consider the value of place in fostering intercultural exchange. The role of diversity is seen as being a key contributing factor to vibrant communities, and collaborative projects and programs such as ECI’s urban agricultural project can create a greater sense of ownership and belonging in the neighbourhood, whereby strangers build community while not sacrificing their diverse identities. Community gardens and urban greenspaces have been identified as important informal third spaces that can facilitate connection to place for new immigrants, alleviating social isolation and enabling placemaking (placekeeping) that encompasses diverse and alternate cultural expressions (Dolley, 2020, Eizenberg 2012). Gardens (and I would add forests) enable immigrant gardeners to relate to local space and natural processes, while simultaneously affirming belonging based on landscapes and experiences in their countries of origin, by way of relational space attachment (Eizenberg, 2011, Rishbeth and Birch, 2020).
Relational attachment to space and time in the practices of embodied gardening and foraging and recipe creation (especially the ideas of simultaneous and layered places and times) and their importance for both community building and placemaking/placekeeping can be linked to the work of Suzanne Hall (2012). Hall believes that embodied practice and everyday ordinary life are key to understanding how people develop skills needed to cope with rapid urban change and move toward sustainable, if ever-changing, futures. Hall examines feelings of belonging and dislocation among immigrant populations and often overlapping local and global identities. She argues for a new conceptualization of the local, one that is relational (links to diverse cultures, allegiances and places), layered, complex and often contradictory. A garden or greenspace, in this sense, is not only a physical place but also creates space for cultural exchange (Eizenberg, 2012), while recipes create layered interactions with space and time by simultaneously linking their creators and users to local places and current time where food is produced (seasonal foods and growing seasons can represent different conceptions of time), as well as to other places and times, such as countries of origin and childhood memories, virtual and textual communities where recipes are shared, and imagined futures (Eizenberg, 2012). Gardens, forests and recipes, in this way, allow citizens to hold multicentered and complex types of belonging (Lippard, 1997), rather than having to give up identity for place in settler-colonial conceptions of space and belonging, as described by Tuck et. al (2014).

Placemaking/placekeeping and the building of urban futures can also benefit from creative, multivocal, narrative and relational understandings of space that include connections to other times and places, as well as to landscapes rather than solely built forms (Riesto, 2018). Alternate narratives can deepen understandings of urban spaces as centers of our experiences of the world, through the interaction of environmental and cultural processes (Riesto, 2018). Jacobs (1992) believed that diversity in cities creates the unique and strange that people seek (this is why people often travel). It creates something for everyone, but this diversity can only be created by everyone, not top down planning. Therefore, input from diverse publics is needed in order to shape diverse spaces. Greenspace has been identified specifically with reference to the City of Edmonton River Valley as a more authentic setting for placemaking/placekeeping, based on the layered histories of the valley as opposed to more generic placemaking in alleyways or parking lots in dense downtown spaces (Wall, 2017). Such generic spaces could be described as “stripped of the old gods and spirits of place” (Shields, 1999, p.147), a homogenizing process that allows for commodification rather than seeing the practices of daily life bring about the ultimate, if ephemeral and always shifting, significance of place (Harvey, 2012). In this study,
recipes based on greenspaces function as alternate narratives that link land, culture and people in multifaceted ways through everyday food practices. Recipes incorporate and celebrate unbounded and layered spatial and temporal identities, both of the citizens that inhabit Edmonton, and the City itself. In this same sense, embodied gardening/foraging can support community building and belonging based on “becoming with” including building relationships with other people, as well as the more-than-human world. Not only is belonging cultivated in the building of such relationships, but the interpretation of space in cities shifts, as people re-connect to nature and food production in urban space (Granzow and Shields, 2020).

Recipes, then, can by their creation and dissemination inform greater inclusion into city life and spaces, as well as more diverse and multivocal placemaking through re-storying the use of greenspace in ways that can present alternatives to the status quo, combining the visions of diversity and sustainability. Diversity and urban agriculture (and green futures more broadly) have not, thus far, been married in the Edmonton City Plan, but rather exist as distinct planning and policy silos as mentioned in the History of Urban Agriculture section above. Riesto (2018) would resist such siloing in planning, and rather suggest increasing interdisciplinarity and fielding a holistic consideration of cities that includes landscape and the many stories and perspectives that it encompasses. Riesto thus echoes many of the afore-mentioned scholars, who forefront the importance of diverse stories and voices in city planning, use and identity formation. The inclusion of diverse voices in planning, especially through examining diverse everyday experiences in and uses of public space represents a way to break through homogenizing space into differential or use space where we can see the novel, shifting, and carnivalesque spaces that our unique City has to offer (Shields, 1999, 1989). Shields describes the power of such novel spatializations to move us toward more equitable cities in which we live as more complete (real) people and follow an “ethics of adventure” and a “politics of difference” (ibid. p.183). This, too, is the power of urban agriculture, expressed in the ever-shifting form of recipe.

**Study Format:**

This study examines recipes as alternate narratives that link land, culture and people in multifaceted ways and can thus incorporate and celebrate unbounded and layered spatial and temporal identities, both of the citizens that inhabit Edmonton, and the City itself. With that in mind, this thesis is organized into four Chapters. This introduction is Chapter one, followed by Chapter two, which is a deeper analysis of diversity and belonging in greenspace use and how this impacts urban futures. This section analyzes
data gathered by English for Community Integration during embodied practice in urban agriculture as well as interviews conducted with individuals involved in urban agricultural organizations or practices in Edmonton. Next, in Chapter three, the multivocal recipe book is presented. This chapter synthesizes and disseminates our analytical findings alongside our embodied process and journeys in greenspace, highlighting our stories and the many spatial connections that the recipe creation process revealed. Finally, in Chapter 4, a conclusion ties together the sections on analysis and embodied experience/recipes, directly answers the research questions and presents recommendations for future policy and research.\(^8\)

\(^8\) As per the ethics application and consent forms, participants and the materials produced by them (photographs, recipes) are identified in the recipe book, but pseudonyms are used when referring to or quoting ECI participants and interview participants in the thesis and article portion of this study.
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The Magic of PUF: Culturally Diverse Urban Agricultural Imaginaries

Introduction:

A grandmother in Tehran perfects a recipe that her great-granddaughter will reference in years to come. A father rises early in Goa to gather food for the family in the surrounding jungle. A young girl’s moccasin-clad feet skip along a forest path on her family’s River Lot where she collects saskatoon berries. Urban agriculture in Edmonton can conjure up many images, from rooftop gardens to farmer’s market stalls, but perhaps is not so readily associated with the preceding descriptions. However, all of these stories are linked to agriculture in the City, and each provides a different narrative which connects gardens to place, belonging and participation in the City. By examining diverse community-led projects in urban agriculture, we gain an understanding of the complex and multilayered identities and stories of the City that include the specificities of local time and space, as well as other temporal and spatial connections (Riesto, 2018). We can see the garden and the gardeners, but also begin to understand the social and ecological connections between them, and the multicentered relationships they hold across global and local space and through time (Hall, 2012). In this way urban agriculture holds possibilities for creating urban spaces that are more equitable and inclusive as well as arguably more interesting.

Previous research on urban agriculture has cautioned that there is potential for urban agriculture to reinforce inequalities in cities, including those based on race and class (Tornaghi, 2016, Maurer, 2021, McClintock et al. 2021). At the same time, a tremendous sense of hope and ambition surrounds gardens as sites for community-led placemaking/placekeeping, and the making visible of cultural expressions other than those which are dominant within a city’s more formal and planned spaces (Eizenberg, 2012). In Edmonton, Alberta, the City developed a Food Strategy called Fresh in 2012\(^9\) which aimed to scale up urban agriculture (City of Edmonton, 2012). Edmonton, the most northerly large city in Canada, currently has one of the highest immigration rates (IRCC, 2019) as well as the second largest urban Indigenous population in Canada (University of Alberta, 2021). The Fresh food strategy makes mention of the importance of representing the diversity of cultures in Edmonton in the food we can buy, cook

and eat, but does not reference cultural diversity in urban agricultural practice specifically. Fresh has been linked with The Edmonton City Plan (2020)\textsuperscript{10}, just released this past year. The City Plan, Like Fresh, does not reference cultural diversity and inclusion in sections referring to urban agriculture. There is no mention in sections on urban agriculture in either report of immigrant or Indigenous stakeholders or agriculturalists, other than one section in Fresh that suggests immigrant group associations should participate in festivals and events to showcase food in public places.

The City Plan and Fresh in Edmonton overlook the value of co-creating place at a grassroots level and rather include immigrant citizens as an afterthought or spectacle at previously planned events in already designed spaces.\textsuperscript{11} With respect to engagement, Fresh states that the key question will not be “who, but rather how and when” (City of Edmonton, 2012. pp. 61). This assumption and assertion that the City knows ahead of time who precisely should be engaged with respect to the food strategy points to the orchestration of space by planners according to dominant discourses (Zieleniec, 2018), and the belief that conceived or dominant planned space takes precedence over lived space (Lefebvre in Fraser, 2015). Although engagement for Fresh was broad in scope, it has neither foregrounded nor actioned a concern for cultural diversity (City of Edmonton, 2012).

This present study argues, as does previous research (Tornaghi, 2016, Maurer, 2021, McClintock et al. 2021), that who is included in the shaping of urban agricultural space is of paramount importance. The Fresh strategy states that it will be key to link food systems to governance through City plans and policy (City of Edmonton, 2012, p.14-15, 74-80). While this statement was made in 2012, a study in 2020 (completed by the author) on Métis urban plant harvesting found that City policy seemed not only to not have integrated Indigenous foodways into policy, but seemed largely unaware of the existence of such foodways in the City (De Lano, 2020). This study found that City policy in fact discouraged some culturally important food and medicine harvesting practices on public land (De Lano 2020). In a similar vein, previous research has documented a general lack of access to urban greenspace for immigrant citizens, detrimental to both physical and emotional well-being (Hordyk, Hanley, & Richard, 2015, Kabisch & Haase, 2014, Pincetl & Gearin, 2005). Food insecurity characterized by a lack of quality or culturally relevant food sources is common among immigrant communities and includes the difficulty of

\textsuperscript{10} https://www.edmonton.ca/city_government/city_vision_and_strategic_plan/city-plan

\textsuperscript{11} Indigenous rightsholders are not mentioned, with respect to food systems and urban agriculture, in either document.
having to build new “food literacy and culinary capital” (Girard & Sercia, 2013, pp. 33). Given that connection (or lack thereof) to greenspace and food systems in cities involves complex cultural elements such as relationships to land, food, and culinary traditions, citizen and community inclusion in urban agriculture goes beyond mere access to these spaces. Rather, real inclusion necessitates the capacity and opportunity to define and shape space through lived experience in culturally relevant ways that can constitute a sense of ownership and belonging.

Developing belonging in the City is one of the main goals of English for Community Integration (ECI). ECI is a language and community building program for immigrant women and children run by the Multicultural Family Resource Society (MFRS). MFRS is a not-for-profit organization that provides participant led programming for immigrant and refugee families in Edmonton. I have been the instructor and curriculum designer of this course since its inception in 2012, as well as being a Métis woman with ancestral and present ties to the River Valley space in Edmonton through kinship and foraging practices. As part of ECI summer programming in 2020, our class participated in trips to the Kinnaird/Rat Creek Ravine (Part of Edmonton’s River Valley Trail System) to forage for berries and other plants, as well as in an urban agricultural project at Prairie Urban Farm (PUF), located on the University of Alberta’s South Campus. In this study, we refer to both foraging and gardening as urban agriculture, and in fact see recipe creation as an extension of these activities and therefore as a part of urban agricultural practice in its own right. As a group we documented and reflected upon these experiences and places, ultimately creating a recipe book to be disseminated to the wider community in order to raise the profile, and underscore the importance of diversity in urban agriculture. Dominant space in the City (Zieleniec, 2018), as represented by Fresh and the City Plan, does not readily permit diverse cultural communities to shape the design and planning of urban agricultural space. By participating in this community-led project and reflecting on our experiences as a group, we were able to create an increased sense of belonging for ourselves individually, and as a group. As part of this process, we generated new and collective knowledge and explored our own perspectives on, and interpretations of, urban agriculture. This project, then, represents a step, if small in scale, toward creating alternate visions for the future of urban agriculture in Edmonton, and for the City more broadly, through lived experience and embodied practice in space (Lefebvre, 1996, Carolan, 2016).

The following two questions guided this research:

How can participation in urban agriculture/foraging and the creation of place-based recipes support feelings of belonging for a group of immigrant women, and myself, a Métis woman in Edmonton?

How can such citizen participation facilitate the re-imagining of communities, urban agriculture and greenspaces in Edmonton towards a more inclusive and sustainable future?

The idea to create a community recipe book preceded this study and came from ECI participants themselves. The impetus for the book was two-fold; to increase a sense of belonging, agency and well-being for ECI participants and to build upon participants’ own expressed interest in sharing recipes with each other. When we decided to undertake this project as a Community Based Participatory Research (CBPR) study, it added a concern for reflecting more deeply on these experiences and sharing them in the community. CBPR is a methodology that directly involves participants/co-researchers in research activities from the impetus of the study and inspiration of the research questions, through to dissemination of results (Hacker, 2013). Reflection on our experiences in urban agriculture specifically, and how this can re-shape how we see and experience the City overall, lent itself to a Lefebvreian analysis of the right to the city (Lefebvre, 1996). This analysis sits within an emerging literature calling for more attention to alternative forms of urban agriculture that exist alongside, and at times question or contest, dominant models of urban agriculture (Tornaghi, 2017, McClintock, 2020, Maurer, 2021).

The overall aim of diversifying the storying and practice of urban agriculture lays at the heart of this project. Making space for alternate urban agricultural imaginaries (Granzow, 2020) and narratives of place can deepen our understanding of these spaces and their possibilities. Although exploratory and small in scale, this project investigates an urban agricultural project that is shaped by a group of people with multicentered identities that link to diverse cultures, allegiances, times and places (Hall, 2012). We are a small group of immigrant and Métis women currently living in Edmonton, but we also carry with us the stories and experiences of a father in Goa, a grandmother in Tehran and a young girl picking saskatoons in the forest. In making these connections, experiences and knowledges visible through reflection on urban agricultural practice and recipe creation, we hope to include ourselves as more active participants in understanding and shaping space and the future of the City in which we live.
Project Context: Rat Creek and PUF, the Magic Garden

English for Community Integration (ECI) urban agricultural programming began in the Rat Creek Ravine in 2018. This Ravine is a key community space within the neighbourhood where ECI classes generally take place, and in which I also have lived since moving to Edmonton as an adult. Although I grew up in rural Alberta, I have ancestral ties to River Lot 28\textsuperscript{13}, one lot over from where the Ravine space and my current neighbourhood now sit. As part of this project, we picked berries on the land where some of my Métis ancestors likely engaged in this same culinary and cultural practice many generations ago (Snyder, 2017). ECI students were very interested in sharing recipes and cooking in the Community League space close to the Ravine and as a group we decided to gather berries and to try to make jelly. The first attempt at making jelly fell short of success and saw me frantically calling my mother to find out why the many jars of crimson chokecherry syrup had not thickened. Failed jelly aside, a sense of excitement had solidified among participants. The second attempt at jelly was a great success and, enrolled in a Covid-19 adapted online version of the course, participants began to ask in May 2020 about the many community gardens they saw popping up around the City. The decision was made to try to include interested ECI students not only in more berry foraging trips to the Ravine, but also in Prairie Urban Farm (PUF), a community food security and garden project located on the University of Alberta’s South Campus.\textsuperscript{14} At PUF participants can share space, learn about growing food, and build community.

As a group, we found the PUF garden to be a very welcoming space, allowing us to experiment with different activities and gardening methods, and for our children to roam about fairly freely. While we were given some direction by a group of volunteers that acted as mentors at PUF, we were able to use the space in the ways that we felt comfortable doing so. The physical layout of the garden with labyrinthine paths, some open grass space, fruit trees, berry bushes, flowers scattered throughout, and a pond with a walking path very nearby made the space inviting to ourselves and our children. Many participants expressed being drawn in by the informality and freedom they felt in the space, describing PUF as a ‘magic garden’. We often walked around the garden space, and participants would tell stories

\textsuperscript{13} Métis River Lots were a form of land use and ownership that developed as the Fur Trading period was winding down in Edmonton and many, primarily Métis families, moved outside of the Fort to farm. The arrangement of these lots created long strips of land with access to the river to enable not only agriculture but also foraging and trapping. They also facilitated strong kinship ties and community life, with houses often built close to each other. These lots shaped the original urban form in Edmonton, and their influence is still visible in the shape of some of the City’s neighbourhoods (Thompson, 2020).

\textsuperscript{14} http://www.prairieurbanfarm.ca
about similar or different plants from their home countries and how they could be used as food and remedies, or of previous experiences in greenspaces, especially in childhood. The time always seemed to fly by as we conversed while weeding and planting, sometimes singing, entertaining the friendly cat that resided in the nearby dairy barn (part of the agricultural research facilities at the University), or watching the children run along the paths with rainbow streamers and iridescent bubbles floating in the wind behind them. We all felt delighted to find such an idyllic space in the middle of the City, and our sense of community grew as we worked, conversed, played and experimented together each week.

**Literature Review:**

“It’s nice to be kids in the dirt”  
Safia, (ECI participant)

From the perspective of a child, there is really nothing as magical as playing in the dirt; pressing our feet into the mud and feeling its moist malleability or using our hands to create whatever we imagine or desire from this mouldable medium. My own child is now beyond the age of playing in the dirt, but one of her favourite stories features an unlikely hero who saves the whole world with a tiny fistful of mud. This tale is one creation story told by some Nehiyo and Anishinabe storytellers (Johnson, 1976). The story holds that after a great flood Muskrat is able to collect mud from deep down under the water, a task that even the strongest of swimmers fail to do before Muskrat bravely attempts the feat. The mud is placed on the back of the turtle, forming what is now North America, or Turtle Island. The humblest of swimmers lays the groundwork for building the world anew, which makes Muskrat not only the namesake of the Rat Creek Ravine where English for Community Integration’s urban agricultural project began, but also a good example of a Lefebvrian-style protagonist.

According to Lefebvre (1996, 2004), those most humble, that is, most marginalized by dominant systems have the ability to spur change based on the spatial dimensions of their everyday lived experiences. By virtue of appropriating urban space, grassroots movements of everyday citizens can, by the uses they ascribe onto space, question the primacy of state and economic organization and planning in shaping cities (Lefebvre, 1996). Gardens and greenspaces, being formed mostly of dirt and plants and less of built infrastructure, and in a sense being created anew at yearly or seasonal intervals, represent malleable spaces where many opportunities for citizen input and design exist and can be enacted in
space. When such spaces are governed in ways that allow for participant input and freedom, they invite multi-uses and users, facilitate the manifestation of non-dominant cultural expressions, and allow for gardeners to develop multilayered understandings of city space.

Marcuse (2009) describes Lefebvre’s *right to the city* as a movement of sectors of day-to-day life that are: “not motivated by profit but rely on solidarity, humanity, the flexing of muscles and the development of creative impulses, for their own sake” (pp.195). Shiva describes such practices as “real humanity” (2020, 3:04) and examining agricultural practices and knowledges specifically, she observes that they have often been undervalued because they are seen as being traditional or the realm of so-called women’s work, occurring as everyday practices outside of the formal economy (Shiva, 2010). Shiva (2020) (also Carolan, 2011) have thus emphasized the importance of studying everyday, embodied practices outside of both the formal economy and dominant cultural representations, such as gardening, foraging and cooking; things we can do with our hands and our bodies. Real humanity is thus akin to Lefebvre’s lived experience, which holds potential to contest urban alienation. For Lefebvre, alienation is a dehumanization; a fragmentation of humans and of the city into parts and a denying of the relationships between them (Fraser, 2015). The primacy of planned spaces over lived spaces in the city means that alienation is omnipresent in urban life, creating a kind of anxiety in urban dwellers that can also lead to spontaneous acts to counter such experiences of alienation (Ibid). This current study focused on interactions in lived space, growing food/creating recipes in order to uncover such spontaneous moments of de-alienation or *real humanity* in the city. The study of embodied experience; physical, sensual and relational interactions (Kwan et al., 2020) prioritizes the relationships within and between bodies and places. Lefebvre, in his posthumously published work *Rhythmanalysis*, expressed the potential for grounding analysis in lived and corporal experience. Such a grounding disalienates analysis from dominant or conceptualized spatial philosophies and allows for alternate and shifting types of knowledge (Fraser, 2015).

The ECI recipe book (see Chapter Three) and the places, people and processes it describes “activate[d] the community of users, produce[d] alternative knowledge and offer[d] alternative experiences of space” (Eizenberg, 2012, pp. 770). In this sense it can be seen to represent an “actually existing commons” (Eizenberg, 2012) in that the existence of communication and cooperation among diverse users of garden, forest, and kitchen space created non-elitist, non-profit-motivated, and inclusive spaces. Tornaghi (2016) has called on researchers, communities and city planners to explore alternatives
to dominant and increasingly city-led models of urban agriculture, even if they are small in scale, as they enact the value of creating or co-creating place and thereby foster intercultural exchange and more inclusive participation in everyday community life (Amin, 2002). Eizenberg (2012) investigated different types of community gardens in New York, including informal and community-led spaces (lived spaces) as well as those whose organization was rigid and hierarchically structured (conceived spaces), finding that when users did not share in shaping space, they were less likely to feel welcome in the spaces. Immigrant and racial minority groups specifically felt greater belonging in gardens where they were able to informally govern and shape space according to their own cultural values and expressions. When gardens are not governed by communities, they rather enact dominant cultural expressions in space, which can alienate those who are not seen to belong to the dominant culture of the city (Maurer, 2021, McClintock 2021, Eizenberg, 2012).

Informal and community-led gardens, on the other hand, as spaces of participation in everyday community life, can increase the possibility for the community (or communities) to collaborate and create uses of space on their own terms, thus functioning as carriers of non-dominant culture beyond the realm of rational planning and dominant cultural expressions (Lefebvre, 1991 in Eizenberg, 2012). Community gardeners are generally not trained in urban planning or landscape design, but rather shape spaces based on their own histories, childhood experiences, cultural values and expressions, culinary traditions, and social relations. As community spaces as well as visual spaces, community-led gardens can therefore serve as educators of culture to the wider community, disseminating information about generally silenced cultures within urban space (Eizenberg, 2012).

Recognizing and celebrating diversity and local knowledge has been identified as an integral part of community building, facilitated through safe and welcoming places for diverse cultures to meet (Atili and Sandercock, 2007). Collaborative projects and programs such as ECI’s urban agricultural project can create a greater sense of ownership and belonging in the neighbourhood, whereby strangers build community while not sacrificing their diverse identities. Diversity can instead become the catalyst for solidarities (Massey, 1994). Uses of space that facilitate community building can include “encounter, connection, play and learning, as well as difference, surprise and novelty” (Purcell, 2014, p.149). These are all meaningful interactions occurring in day-to-day life that can help to overcome separation and fragmentation in cities (Marcuse, 2009). In expressing their cultures collectively and publicly, diverse gardeners sharing a common space are able to develop belonging and place attachment to current lived
spaces. When enacting cultural practices and memories in a garden, gardeners are also able to simultaneously affirm belonging based on landscapes and experiences in their countries of origin, by way of relational space attachment (Eizenberg, 2012, Rishbeth and Birch, 2020). This type of multi-level belonging based on multi-centered identities (Lippard, 1997) aids in creating liveable and inclusive communities in a globalized world (Hall, 2012). The capability to experience multi-centered belonging can be said to break down spatializations based on local or global identities, or simplistic ideas of those who belong in a local space and community and those who belong in other spaces. Relational understandings of space in urban agricultural settings also include connections to land and plants, rather than solely to built forms (Riesto, 2018), which encourages more diverse and multivocal placemaking through re-storying the use of greenspace in cities (Riesto, 2018).

Gardens have been described as spaces for re-imagining not only place, but place-based research. Granzow and Jones (2020) find value in thinking about gardening as epistemology and suggest that gardening can be interpreted as a craft (Jones et al., 2021: 915-916), or philosophy whereby diverse gardeners create possibilities to shape convergences of community, place and culture based on the complexity of the everyday experiences of diverse participants. In gardens and forests as food gathering spaces, we can grasp a new conceptualization of the city, one that is relational (links to diverse cultures, allegiances and places), layered, complex and often contradictory (Dolley, 2020, Hall, 2012). Gardens and forests are presented in the current project as spaces of engagement with place and community; not as solutions to social and ecological problems but as spaces to negotiate values and visions of the future City. ECI’s recipe book, the culmination of our experiences in these spaces of engagement, documents and disseminates our values and visions for the City. Urban agriculture and recipe, in this sense, function both as epistemology and methodology.

**Methodology:**

In order to give voice to participant experiences and perspectives, this study adopts a Community Based Participatory Research (CBPR) approach whereby co-researchers (ECI students and myself) jointly designed and carried out research activities from the impetus of the study and inspiration of the research questions, through to dissemination of results (Hacker, 2013). This study employed an asset-based approach to CBPR, a departure from deficit orientation which tends to focus on problems or
negative aspects of communities that might seem to necessitate professional or top-down solutions (Lightfoot et al., 2014, Morgan & Ziglio, 2007).

Recipe creation was used specifically in this project based on ECI participants’ interest in this format. Recipe as a genre also aligns well with the CBPR methodology of the current study, questioning the superiority of professional work and academic knowledge to domestic work and traditional knowledge (Kowalchuk, 2017). The recipe book itself is a form of research and represents our right to research and to use modalities of research that resonate with our own experiences and values (Appudurai, 2006). The use of recipes allowed us to (re)produce knowledge about local food sources, as well as cultural knowledge carried in recipes from countries of origin. By using this format to produce, reflect upon, and disseminate data and findings, we define inquiry on our own terms and champion our own knowledges and modalities, beyond the realm of academic research methods. In so doing, we also hope to reach a wider and more diverse public.

Methods:

This project involved embodied practice in greenspace and a simultaneous iterative reflection process thereon. The project involved ten participants and myself. Participants were chosen from the existing ECI class, as the study follows the experiences of this program specifically. Two of the eleven participants joined the ECI program and this study after it began, having found out about the program through friends or by chance (seeing us at Prairie Urban Farm) and expressing interest in joining. All of the ECI participants were born outside of Canada (except myself). Participants have been living in Canada for varying amounts of time and have different immigration statuses and countries of origin. All participants are women and have children and/or grandchildren. There is considerable diversity amongst this group in terms of age as well as country of origin. The participants come from Colombia, the Dominican Republic, Germany, India, Iran, Mexico, Peru, Somalia, Spain and Venezuela and I am from Edmonton and of Métis ancestry.

I received ethics approval and ECI participants and myself began the research process in August 2020 with an orientation to the spaces to be explored (PUF and Rat Creek). Participants were invited to share information about their relationship to green spaces, gardening and foraging in their home countries, why they had chosen to participate in this study, what interest they had in greenspaces in Edmonton,
and what their relationship to food and nature was like in the City. During subsequent visits to PUF and the Rat Creek in August and September 2020, participants carried out gardening and foraging activities and I took field notes on some of the interesting reflections and stories that were shared while harvesting. From October to December 2020, we carried out weekly zoom reflection sessions and began to create recipes based on the harvested produce. The reflection sessions were guided mostly by open-ended discussion questions based on senses, in order to highlight the actual embodied, lived experiences in space such as: how did you feel in the garden/forest? What did you see, smell, taste?

Following the general sensory reflections, in two specific reflection sessions participants discussed one or more recipes that they had prepared with the garden/forest produce and how it made them feel about: 1. Edmonton, 2. food, 3. self, 4. home country, 5. past and future. The first three questions were guided by the research questions, while the second two emerged as themes during field note taking and the earlier zoom sessions. As we transitioned from garden/foraging produce to supermarket produce in the Winter months, participants were invited to compare these during two reflection sessions. In a subsequent session, participants were asked to choose two or more of their favourite photos taken during the gardening and foraging experiences, and to discuss why they chose each photo and how it made them feel about the same five topics listed above. Photo reflection was used to help to recall the embodied experiences and because ECI students had been very interested in taking and sharing photos prior to the study. Photovoice was also chosen because it allows for discussion that is less orchestrated, as participant-produced images direct discussion, rather than specific questions posed by a moderator. Participants’ experiences and opinions are thus prioritised (Nykiforuk et al., 2011. 104, Nowell et al., 2006. 31, Mertens, 2020). Finally, I compiled notes from the general discussions, recipe discussions and photo-based discussion by listening back to recordings of the zoom sessions and coding for themes. These themes were checked with participants to see if they captured what was discussed in the zoom meet-ups or if they wished to modify or change any of them. Following the coding discussion, participants spoke about how to organize recipes for the making of the recipe book, and ingredient-based organization was chosen\(^\text{15}\) in order to reflect the experiences we had in different spaces and highlight the process itself as our stories in greenspace.

\(^{15}\) The ingredient and place based organization of the book includes chapters on: 1. garden vegetables, 2. garden greens, 3. flowers and herbs, 4. garden fruit, and 5. forest fruit.
From November 2020 to June 2021, I also carried out eight semi-structured interviews with people working in other urban agricultural projects in the City that involved immigrant or Métis participants or perspectives, in order to learn more about their experiences (see Interview Protocol, Appendix B). Interview participants were asked to discuss their projects and if/how they feel that urban agricultural spaces in Edmonton are shaped by immigrant and Métis participants and perspectives. Participants were also invited to share a recipe that uses ingredients that they can harvest here in the City and to discuss why they chose the recipe. This aspect of the interviews allowed for the original research form and dissemination method chosen by ECI participants (recipes) to shape at least a part of these interviews that were conducted by me individually. Additionally, it was a way to include interview participants in the embodied/practice-based methodology of the study, having them reflect on ingredients harvested personally and locally, and on recipes that have meaning for them. These interviews were carried out over Zoom, recorded, transcribed and coded for themes. The interviews were coded after the ECI participant data had been group coded (by myself and ECI participants), in order to forefront ECI data/voices, in keeping with the CBPR methodology of the study. ECI group codes were referenced when coding interview data, and some new themes emerged as well. All sets of data: field notes on embodied practice in greenspace, ECI reflection, photos, recipes and coded interviews were used to answer the research questions as well as to create content for the recipe book.

Hall (2012) finds rigor in the nuanced and detailed description of embodied experiences in urban space. Our analysis of urban agricultural practice and recipes draws from this alternative idea about rigor. We see rigor not as the complete telling of all aspects of a phenomenon, but the detailed analysis of connection to food, greenspace and community by a group of people in a specific spatial context. The recipe book as a process was a way to draw together many iterative phases and sets of data in order to deeply examine embodied experience. As a method it was a way to triangulate the various data sets into a final product that showcases the research process to academic and non-academic audiences, as our reflections and journeys in space populate the book’s pages. The book is akin to performing a study, a synthesis of our transformative journey and a material representation of the process of praxis. The research process itself, as well as the dissemination of the results-as-recipes, involved the inclusion of often-silenced voices, key in the analysis of transformative studies, such as women, immigrant communities, Indigenous people, ethnic minorities, and non-English speakers (Wallerstein and Duran, 2008).
As per the ethics application and consent forms, participants and the materials produced by them (photographs, recipes) are identified in the recipe book (Chapter 3), but pseudonyms are used when referring to or quoting ECI participants and interview participants in the thesis and article portion of this study (Chapters 1, 2 and 4).

What we found: From Longing to Multicentered Belonging, or the Magic of PUF

Connecting to Space:

Marco immigrated to Edmonton from Macau more than 10 years ago. He describes the feeling of longing to connect to greenspace that many immigrants experience.

   As immigrants, you just see that as a river you saw when you’re on the bus or transportation, you don’t know that you can actually access it...I don’t think there’s quite a physical barrier, but it’s just like the psychological barriers, like oh am I supposed to be doing that, like am I going to be locked out? Like if I show up, they’re not the only person of colour over there and how they feel about that.
   (Marco, interview participant)

The above quote describes passing by (rather than inhabiting) greenspace in the City and longing to connect to and access the River Valley, viewed at a physical and psychological distance from the window of a bus. When reflecting on our first group trip to the Rat Creek an ECI participant, having arrived late and thus being alone on the trail, described feeling a similar uncertainty about venturing into the space. Upon seeing another member of ECI in the Ravine, however, and noting that this participant was interacting with the natural surroundings by picking berries from a tree located off of the main trail area, her perspective completely changed.

   “It was a long journey, you were halfway down the trail and I thought to turn back. Then I saw Roshan picking berries and it was so lovely. She was climbing into the forest. It was a beautiful sight”
   (Safia, ECI participant).

Seeing another participant harvesting berries (interacting with and using the space) created a deeper sense of relationship to space by way of connection to the more-than-human world. By appropriating space for its value of gathering food, the interaction in space became more meaningful, or in Safia’s
words more “beautiful”, tying participants to the land and space in a relational sense through enacting life processes in public space.

Another ECI participant explained that the trees were now more “valuable”, as they provided food rather than seeing the more-than-human world as solely a backdrop for human experience (Carolan, 2011, Abramovich et al., 2019). This interaction was described by the participant as decreasing her perception of the space as foreign.

“[There is] a sense of recognition, not as foreign, and more respect for those trees, that they have something special to offer you. Before they were just trees that belong on a path, but now they are good trees. They are giving something that has more value” (Ximena, ECI participant).

The process of picking berries in the Ravine heightened participants’ awareness of, and sense of connection to space, creating a fuller sense of belonging based on reflexive participation in space. When asked if berry picking changed how participants felt about the City of Edmonton, Ana explained:

“Now when I walk, it’s impossible not to notice the different berries. We notice things, we pay attention, we see, smell, we listen to some sounds, when we pay attention, we are connected to the environment” (Ana, ECI participant).

Connecting in Space:

Far from feeling, as Marco described from the train window, that one will be “locked out” of greenspace, through the embodied and sensual experience of harvesting berries and vegetables many participants expressed feelings of belonging in, and connection to, greenspace. While picking the “valuable” berries and meeting the “good trees” were certainly key aspects in the development of belonging in space, coming together with other users of space was also of paramount importance to the experience. Safia felt more secure in entering the space seeing Roshan picking berries. Ximena explained that had it not been for the ECI program, she may not have become involved in urban agriculture at all:

I felt privileged to be invited...I’m so glad I heard about it because I would have never known, I was curious about what it was. Well, I can’t say never, it wasn’t my plan. I didn’t know there was access to work there, to touch things. (Ximena, ECI participant)
Having not been involved in gardening previously, for Aina a big part of the experience was about building connections with other people. Many ECI participants emphasized building community across differences in the gathering spaces that PUF and the Rat Creek provided as a key part of the magic experienced in such spaces (Atili and Sandercock, 2007, Massey, 1994, Amin, 2002). When attempting to choose pictures that were particularly meaningful to her, Ana rather described the entire experience of being in greenspace, and building community there, as magical:

“I like any pictures about the garden because for me it’s a magical place. I never could have imagined that I would face this nature and meet people [that are] so special.” (Ana, ECI participant)

Safia reflected on the fact that combining a community program (English classes) with greenspace, was a particularly interesting and effective way to build community and work together.

“If I had to sum it up I would say: divided by borders, united by food. Everyone has such wonderful recipes and they all are food loving people, community loving people. Where would you really find a Mexican mingling with an Indian, Indian with person from Iran and Spain and everything, like it’s just bringing together people and that’s the most beautiful aspect of the project... How wonderful and strange it is to combine English and farm, where else would we all meet and work together, from Iran, India, Brazil and Mexico.” (Safia, ECI participant)

**Redefining Space:**

Sophie, who is herself Métis and works at the Métis Nation of Alberta (MNA), spoke about her organization’s community garden; a space to grow and harvest traditional wild and cultivated plants as a key part of reclaiming a sense of cultural identity and belonging in the City. Sophie explained that because of colonial practices of racism and the historic swindling of Métis lands through the scrip system implemented by the Canadian Government, many Métis had grown up removed from all or most aspects of their culture. Sophie felt that the garden space facilitated cultural learning for Métis people as well as the sharing of Métis culture with the wider community in Edmonton. This cultural sharing raises public awareness and understanding of Métis culture and history, and of the fact that land-based practices remain important to urban Métis communities. The garden showcases traditional plants that grow wild and/or are not found in most gardens in Edmonton and features a large planter in the shape of a Red River Cart, a visible symbol of the Métis Nation. Sophie’s hope is that this symbol, and the
garden as a whole, will draw attention to Métis culture, food and land use in the City, past, present and future.

“Obviously, off the bat, one of the huge points of relevance [of the garden] is the tie to Métis culture and traditional foraging or food harvesting. So, one of my, probably my favorite part of the community garden at the MNA is we have these raised beds that are tiered at different levels. And they're in the shape of a Red River Cart wheel, so there's like a little circle plot in the center and then there's the little so-called wheel-spoke kind of things all around that center point. And so I think things like that, when people see it at the MNA property, would really encourage them to be like: ‘Oh that's an interesting shape. What is that?’ To ask more questions and learn more about Métis culture...There's just such a history here that I think community gardens help connect the dots on”. (Sophie, Interview Participant)

Many ECI participants were very surprised to learn that wild berries and other foods could be gathered in City greenspaces. Aina was especially amazed by this, stating:

“It’s unbelievable! How we can pick food in a Park for free! That’s surreal to pick up real edible food right there in the middle of a park, available to anyone.” (Aina, ECI participant).

Students compared different types of knowledge on wild food sources. Safia noted that when looking up information about wild berries on Google, the indication always seemed to be that they were poisonous. I have personally had similar results from Internet searches about chokecherries, for example, that have been eaten by generations of people in my family and that I eat almost daily on walks through the Ravine in late summer and early fall. Safia explained the interplay of different knowledge systems best:

“I wanted to add...going in person versus reading Google, like reading and actually going. There is misinformation, scary information. But for those who have always lived in the wild and picked [berries], they have been there, done that. I think they know a lot more.” (Safia, ECI participant)

Not only did the reflection on berry picking reveal how different types of knowledge can shape space in different ways, the spatial experience itself led both to reflection on dominant and alternate/embodied knowledge sources, and the sharing and co-creation of knowledge. Ximena explained that she too had always been told that “you can’t just grab and eat those berries” (Ximena, ECI participant), but in picking and examining different types of berries, she began to develop new sensory knowledge about them. She then shared this knowledge with the group:
“I realized they were not all the same textures. The elderberries were sticky on your hands. I remember the touch; how they felt.” (Ximena, ECI participant).

Roshan mentioned feeling ashamed that she had been surrounded by all of these edible berries in Edmonton and had not been aware of them. She explained that her perspective changed immediately following the berry picking and reflection session, and she began to pick berries often while walking through greenspace. She lightheartedly referred to this change in perspective:

“Everyone was walking their dogs, and I was like a crazy woman filling her pockets with berries”. (Roshan, ECI participant).

This description shows contrasting visions of greenspace; most people are using the space as a backdrop for leisure (dominant cultural expression), while Roshan gathers food (alternate cultural expression and use). Participants expressed awareness that the knowledge of, and appreciation for, wild foods was not widespread in Edmonton, with some suggesting that the group should do something about this. Roshan set up a presentation on berries in the daycare where she worked, and as a group we agreed that including foraging stories and wild plants in the recipe book project would be one way to disseminate information about foraging and its connections to diverse cultures and histories in Edmonton.

Mary, an interview participant from the Chinese community in Edmonton, described cultural connection to place through foraging goji berries that grow in a Ravine space close to the Rat Creek.

“When we were young, when we first immigrated here, you could actually find goji berries where the Shaw Conference Center is... we would go when the berries were ripe...You can still find goji berry bushes there and you can actually pick the berries from there.” (Mary, interview participant)

Mary also spoke about the sometimes overuse of food as a representation of tokenistic multiculturalism whereby westernizations of the cuisines of other cultures, or a very standard and small sampling of “authentic” cuisines are available to showcase cultural diversity in the City. She explained that, in her opinion, food and culture, and the public representation thereof, should be shaped by the cultural groups to which they belong, and not according to Western tastes.
“There’s so much you can learn [through food] because there’s history around that, there’s people’s life events that happened around food there. You know, from food, you can actually learn so much about the history, the world events, people’s lives. You know, so I’ve always been very bothered by the fact people say, ‘yeah, no more food and dance’. I understand what they mean is when we do food and dance we always, you know, just present just the most popular ones which might not be in our own culture, the food that we normally eat. It’s just, it’s a Western perception of food and culture in the different cultures.” (Mary, Interview participant).

Mary’s comment underscores the fact that participation in gardens and greenspace by culturally diverse groups of people can enable alternate representations of culture in city space, moving beyond the token participation in food culture that she mentioned, and that is also encouraged by the City Plan (2020) which calls on cultural communities to showcase traditional foods at festivals and events, but does not go out of its way to encourage participation in urban agricultural pursuits and spaces more widely.

**Agents in space:**

The possibilities that our experiences in urban agriculture created to include ourselves and our aspirations in the re-imagining of urban agriculture and the City itself were perhaps the most magical and meaningful part of this process for ECI participants. When asked to reflect on her experiences at PUF and the Rat Creek, Carolina responded in this way:

“It feels important, the work we do as volunteers. It’s very important [to] share together, do a job together. It’s very beautiful to share with the children.” (Carolina, ECI participant).

Carolina speaks to the feeling of agency created through collective work and experience in the public space of an urban garden or a forest, and also the importance of sharing this with future generations. At PUF there was a special emphasis on leaving gardening decisions up to groups and individuals; a recognition that gardeners would learn from each other and that different methods and uses would create a vibrant space. ECI participants spoke of the freedom they experienced in the PUF space and lauded its informality. Safia, for example, arrived at PUF on a bit of a whim, having looked up community gardens on the Internet and deciding to visit each one with her daughter. She ended up joining the project and remaining with it to the present day, stating that she was drawn in by the informal way that
she saw us moving about the space; taking a break to visit a nearby pond and pick raspberries with the children, walking and talking as a group.

“*When I came and saw you all roaming around aimlessly and then back to farming and doing a great job. It reminded me of back home. You have done a wonderful job collecting people and organizing in this way.*” (Safia, ECI participant).

Experimenting in and moving about urban agricultural space, we developed multicentered and multilayered understandings of identity and relationship to place. Steven, a kind of freelance urban agriculturalist and Master Gardener, explained that some cultural narratives related to plants and foods are excluded in the City based on who is telling the stories, while others may be naturally excluded (pun intended), based on climatic conditions that mean plants from similar climates grow best here in Edmonton.

“If you take a look at, you know, past lists of heritage trees in Edmonton, very few of them are native to Edmonton. And I think that's interesting. Part of that might have to do with who's telling the stories, right? Like are we collecting our Indigenous stories about specific trees, or about specific species in general. And if we were, like just society as a whole, more aware of those stories, we would have more of those native plants on these lists. So a lot of the trees that end up on the list, end up being from Europe or end up being from eastern North America. And so they end up being I guess like classically told by white settlers who have brought these plants over from Europe and or you know brought them with them as kind of settlers have moved West across the continent... And so, there's kind of some, you know, climates that you can kind of draw from that make up the plants in your area, and so, you know, we don't have, like I haven't come across any, I don't know stories from like more subtropical or tropical locations. And so you know we have our, you know our European plants we've got our North American plants we've got some Asian plants. But we don't have a lot of Southeast Asian plants, African plants, South American plants and so, from kind of a cultural perspective maybe those stories are kind of excluded.”
(Steven, interview participant)

While this is undoubtedly often true, the experience of ECI participants was that cultural processes mix with the natural environment in very complex ways through embodied practice (Riesto, 2018), meaning that “natural exclusions” based on climatic conditions do not necessarily have to occur. For example, when picking and tasting highbush cranberries in the Ravine, students almost immediately enacted previous cultural and sensory experiences and memories to liken the flavour of the berries to that of tamarind. A wealth of ideas about how to incorporate this berry into cuisine were then suggested by
participants, drawing from traditional tamarind recipes from Venezuela and India. The tamarind plant will not grow (outdoors) here in Edmonton, but cultural uses of the plant can still be storied and enacted through the highbush cranberry and the memory and experiences of harvesters. Likening the berry to a familiar sense (linked to a familiar place) drew participants into the process of embodied belonging, as did the novelty/curiosity of learning about something they had never encountered up to that point (Rishbeth and Birch, 2020). Similarly, previous ECI students likened the harvesting of chokecherries in the Ravine to picking coffee berries in El Salvador. While the tastes and culinary uses are not comparable, the feeling of pulling the clusters of berries off the plant with their fingers reminded participants of this similar task carried out in their country of origin years before. Participants connected to their pasts and countries of origin, and also to the present and to Edmonton.

**Conclusion: Urban Agriculture “of this place”**

The importance of this study is found in the interplay between exploration and belonging. In finding spaces within the City to “play in the dirt”, that is, carrying out and reflecting upon embodied experiences in the Rat Creek and at Prairie Urban Farm, English for Community Integration participants both increased their own sense of belonging in the City and built agency as citizens capable of making visible alternate urban agricultural ideas and practices, and revisioning futures in Edmonton. Specifically, we examined our own alternate perspectives with respect to two interrelated research questions: 1. How can participation in urban agriculture and the creation of place-based recipes increase feelings of belonging for a group of immigrant and Métis women in Edmonton? and 2. How can such citizen participation facilitate the re-imagining of urban agriculture in Edmonton towards a more inclusive and sustainable future?

With respect to the first question, we found that participation in this urban agricultural project facilitated belonging in space for participants in three key ways. 1. It created relationships to the natural environment based on carrying out life processes in greenspace. 2. Embodied experience in urban agriculture facilitated community and relationship building across differences, and knowledge sharing amongst participants. 3. Multicentered belonging (Hall, 2012) was fostered in garden and forest spaces and through recipe creation, as participants experienced novelty and nostalgia when interacting in greenspace. They were able to connect to past experiences while also imagining futures for their children, simultaneously connecting to experiences and places in their home countries and to local
space, thereby fostering the creation of multicentered identities where belonging need not be confined to a certain space or time (Lippaird, 1997).

Granzow (2020) suggests alternate urban agricultural imaginaries as a future research pathway, seeing urban agriculture as a medium that can facilitate many diverse visions of urban futures. These alternate imaginaries represent many social and ecological benefits not always captured when viewing urban agriculture strictly through the lens of sustainability and food security (Ibid). Considering the second research question, the findings of this project represent one such alternate urban agricultural imaginary and present new perspectives and values with respect to urban space and sustainable urban futures. This vision or imaginary is highly relational, houses non-dominant cultural values and representations, need not necessarily include cultivation, and is magically realist, or captures the everyday magic of the City. In formulating this imaginary from our data, we answer question two of this study, which inquired into the potential of our participation in, and re-imagining of, urban agriculture to build a more inclusive and sustainable future.

The potential of urban agriculture for representing non-dominant cultures in space (Eizenberg, 2011) constitutes a key element of our imaginary, as does the reconceptualization of urban agriculture itself to include elements that may not be traditionally understood as urban agricultural practice. In this project, we included foraging for wild plants as well as the development of recipes as part of a wider understanding of urban agriculture. Including wild food sources, many of which form part of traditional food systems for diverse cultural groups in Edmonton constitutes one type of non-dominant cultural representation in space. Positioning recipes as part of agricultural practice is both representative of how we view urban agriculture as a holistic process that connects to our daily lives and our familial and cultural ties, but also is a way to make non-dominant cultures more visible publicly and in a more enduring sense. Non-dominant representations in space tend to be found in fleeting moments of everyday practice (Granzow, 2020). Disseminating our experiences and perspectives to the wider community through place-based recipes helps to make our vision less ephemeral.

I synthesize the overarching imaginary of urban agriculture that emerged from our data as one of everyday magic (magic being a term brought up both by ECI and Interview participants). I liken this
imaginary to the literary genre of magic realism\cite{16}, a genre that slips magic into stories without much explanation, in order to highlight the fact that magic materializes in the spaces of everyday life. Magic Realism can also be linked to relational and conceived spaces (Lefebvre, 1996) because it is a political genre that draws attention to dominating forces that stifle the rights of everyday people and processes (Bogdanovic, 2019). Finally, some of the most prominent authors of Magic Realism\cite{17} trace intergenerational stories of kinship, a theme referenced by participants in this study as we discussed food production, harvesting and especially recipe creation. Participants found magic in everyday life through urban agricultural practice in many ways, expressing the magic of the everyday as feeling human and building human connection in an often alienating urban and globalized world. Magical urban agricultural moments are those that dis-alienate urban space; those in which lived space overcomes the dominance of conceived space (Lefebvre, 1991). Magic is found in real humanity (Shiva, 2020); in being involved in life processes in public space. Participants found magic in washing produce and picking berries, tasks that are hard corporeal work, but also connect us to self, environment/space, other places, each other and past and future generations. Taking part in embodied work in public space involves us in inhabiting and shaping space, rather than conceptualizing urban space as an empty container or a blank slate, as planners tend to do (Zieleniec, 2018).

ECI participants, by way of “getting our hands dirty” in urban agricultural spaces, unearthed and shared stories, knowledges, plants and recipes that represent a small part of the great diversity and complexity that exists within urban agriculture in Edmonton. This project neither documents nor downplays the importance of each of the various types of urban agricultural practices within cities and in Edmonton specifically. It rather calls attention to the importance of studying those practices that exist alongside more dominant understandings and uses of urban agricultural space (Tornaghi, 2017), in the interest of creating more equitable urban futures. Such futures encompass multilayered understandings of the City, and include diverse citizens in the process of imagining urban spaces that are shaped not only through official planning and the built environment, but also through the uses that citizens ascribe onto space (Lefebvre, 1991) and the interactions of diverse cultures and the natural environment (Riesto, 2018). Steven referred to such storying and use of greenspace in a discussion about ECI participants comparing highbush cranberry in Edmonton to tamarind in their various countries of origin, saying:

\footnote{16} Riesto (2018) also linked spatial analysis, specifically landscape biography, to literary analysis, using heteroglossia to describe the multilayered and multidisciplinary approach to understanding space.  
\footnote{17} For example Gabriel García Márquez and Isabel Allende.
What I love about this is, I mean, so I think the tamarind example is perfect, right? You have this sort of rich cultural background intersecting with this local environment which creates new opportunities and new possibilities...then, you end up with something that, it’s of this place right? Like it is! How amazing is that? (Steven, Interview Participant)

ECI and our *magically realist* brand of urban agriculture ties Edmonton to a generations-old recipe in Tehran, a father and a jungle in Goa, and a young girl wearing moccasins and picking berries by the river. All of these layered stories and connections in time and space, made visible through gardening, foraging and recipe creation, help to shape the spaces of urban agriculture in the City, and the composition of alternate cultural values, practices and future possibilities that are both “of this place” (Ibid) and deeply magical.
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Ch. 3

Recipe Book:

Rat Routes and Reasons to Gather: Culturally Diverse Culinary Journeys in Edmonton’s Wild and Natural Spaces

Introduction:

Simple and humble as a handful of dirt, complex and unexpected as perfectly whipped eggs mixed with flowers and front-yard shrubbery, this is, above all, a storybook. It is an anthology of our everyday journeys in green and wild spaces in Edmonton. The recipes provided here are the culmination of a year (in some ways generations) of urban gardening and foraging in the City; of experiencing and reflecting upon the land that we inhabit and all of the places to which we trace our individual and collective belonging.

In this book, we highlight some of the beautiful, healthful, and versatile foods that can be cultivated, as well as those that grow wild, right here in the City. We invite you to engage with our recipes-as-stories, offering a window into who and where we are, and to diverse perspectives on green city spaces where planning, projects, policies and histories do not always include the voices of women, mothers, newcomers, people of colour, and Indigenous people. In the making of this book, we viscerally connected to and reflected on local food systems, land and one another, in ways that are both deeply joyful and at times difficult. We wish to encourage, beyond these pages, the sharing of other stories and recipes that open our minds to the possibilities of belonging, as people who are both similar and different, to the land on which we live; our common ground.

The metaphor of a handful of dirt is not fortuitous. We are inspired by the tale of the Muskrat, namesake of the Rat Creek/Kinnaird Ravine that offered us its abundance of berries in the heart of the City. The Muskrat (as is told in some versions of a Nehiyo and Anishinabe creation story), though not the strongest of swimmers, dove deep down in the water after a great flood to clutch in his tiny paw a whisper of soil. In so doing, Muskrat made it possible for the whole world to be created anew atop the shell of a great turtle. Just as this world is said to have begun with a humble gift in unlikely hands, we think that the stories and recipes of our year of urban farming and foraging will help for(a)ge a
preliminary path toward a re-imagined and more inclusive city that celebrates its unique culinary and natural identity, as well as its rich diversity of ingredients, experiences, knowledge systems and communities. Keep this book close to hand and heart as you traverse alleyways and river valley trails, streetcars, funiculars, and footbridges, ribbons, promenades and flats in the City. Scribble your own lists of meaningful plants, places, people and histories, and learn as much as you can about others who grew and harvested plants and produce, and continue to do so, here in Edmonton. Try out these recipes as a way to honour the existence and importance of the experiences and perspectives of others. These are stories meant to occupy space not only on a kitchen shelf, but in our shared and vibrant City.

*Full recipe book in separate document*
Conclusion: Muskrat Manifesto for Intercultural and Magical Urban Futures

English for Community Integration participants often chose the term magic when speaking about their experiences in urban agriculture in Edmonton. Guided by the reflexive activity of recipe creation, magic (also expressed as wonder, beauty and the surreal) was used to describe everyday life processes in public space that allowed us to relationally connect to the natural environment, to each other, to past and future moments and generations and to local and global places. Finding nature in the middle of the City for many of us was magic, as was learning about, and from, each other and harvesting food right from trees growing wild in the River Valley. Examining urban agriculture from a community based and spatially focused lens, this research zooms in on this type of everyday magic to manifest a kind of magically realist (borrowing the literary term) imaginary of urban agriculture. This imaginary articulates what we want urban agriculture to do/represent for us and for our City in the future. Beyond goals of food security and environmental sustainability, and in an often alienating urban and globalized world, we found magic in everyday life through urban agricultural practice in a multitude of ways that deepened feelings of connection, humanity and agency.

As a researcher approaching this study, I was inclined toward seeking a problem, even though the study was framed as asset-based from the very beginning. In reviewing the literature, I found many sources that focused on deficit; exclusions from urban agriculture and other spaces in the city, and the critique thereof. The actual research process, however, was both joyful and relational. We created closer relationships with each other and with the places we inhabited while reveling in new discoveries (forest paths that had seemed forbidding, berries we didn’t know we could eat or how to prepare, beautiful bright yellow spiders and curly purple kale, songs in languages we had never heard before) as well as the sharing of old memories and intergenerational knowledge (pansies blanketing the forest floor in Iran, a meticulously perfected pie crust recipe that has been cradling Edmonton-harvested saskatoons for generations, an urban island garden in Colombia reached by boat, the fascinating history of goji berries in the Edmonton River Valley, the many uses for squash flowers, pumpkin leaves and all manner of wild plants). All of these relationships and the sharing of stories and knowledge increased a sense of agency among participants. Participants expressed feeling more connected to place and the value of the work of growing, harvesting and preparing food. Passing these knowledges on to children, as well as the need
to share knowledge with the wider community, including ideas related to non-monetary or informal exchanging of produce and raising awareness of the uses and value of wild plants, was also deemed important by participants.

Compiling stories, photos and recipes for the recipe book reminded me that both Community Based Participatory Research as well as the Lefebvrian theoretical grounding of this study emphasize the perspectives of those who truly inhabit the city. Lefebvre (1996) critiqued rational planning and the lack of creativity or experimentation in visioning the city, saying that only not very interesting people, those who see futures are static and unimaginative, escape utopian thinking. He believed that knowledge should be grounded in utopia, and suggested the idea of imagination investing itself in the appropriation of time and space within the city; space where “all audacities can be permissed” (p.118), and where the fragmented and ever-changing city is cut up and put back together again in constant flux. The process of inhabiting the city and conceiving of time and space in flux as well as the imaginative use of space were well represented in the praxis of creating our recipe book and the subsequent expression of the magical urban agricultural imaginary.

Imaginative use and appropriation of space occurred as we expanded the scope of urban agriculture through our project to include foraging and forest spaces, as well as the production and preparation of place based recipes as an extension of urban agricultural practice, rather than a separate activity to be carried out in the privacy of individual homes and divorced from the processes of growing and gathering food in the City. The recipe book was written from the perspective of “we” to highlight its community based creation, and was separated by ingredient type and where these ingredients would be found, (garden or forest spaces in the City) to emphasize this connection to overall urban agricultural practice. The chapter featuring forest fruit begins with a jelly recipe, a twist on the original chokecherry jelly that inspired us to pursue this research project, and ends with a tea recipe called “Cherry-Berry Tamarind Tease” which is a nod to the spatial and temporal flux expressed through recipes which simultaneously connected us to present-day Edmonton and to other times and places. The similar taste, as described by ECI participants, of highbush cranberries and tamarind, as well as the sensuous similarity of picking chokecherries and coffee berries, transported us through space while also connecting us to the City.

Recipes were likewise conduits through time, having been passed down by mothers and grandmothers, and serving as blueprints for our children, whose pictures populate the pages of the recipe book alongside our own.
The fact that the city is ever-changing and in flux is easy to grasp in the carrying out of gardening and foraging, where seasons and natural rhythms dictate the ingredients we may include in our recipes. The “Rat Creek Rise and Shine” omelette features flowers only available in early Spring. Likewise, we rushed out in the particularly hot July weather to gather saskatoons for pie; they were ripe one week and dried up the next. “Sopa Andina” warmed us specifically when the cool autumn mornings began. Informality and freedom were highlighted by participants as important to our practice as well; we were free to linger or to wander in space, to interpret the space as we saw fit in the moment. Sometimes we placed pigweed in the compost, sometimes someone took it home for dinner. We planted beans in rows one week, and in circles the next. We took long, unplanned walks to the pond and discovered chamomile for tea in the cracks of the paved walking path and raspberries that delighted the children more than any planned activities ever had. Thinking about the ever-changing and evolving understandings of both urban natural spaces and the City itself, as well as the wealth of knowledge housed in individuals, communities, land and plants in Edmonton (of which our project but scratches the surface) we also included blank pages in our recipe book to represent the constant revisioning and rebirth experienced in cities, the natural world, and recipes themselves. These pages also symbolize the many stories and experiences in urban agricultural practice yet to be heard in Edmonton; stories which potentiate more inclusive futures.

The future that we imagine for Edmonton, based on our experiences and reflections throughout this study, is relational. Our findings emphasized connections, built in this process, to one another and to natural places in the City, as well as kinship ties and traditional knowledges that were strengthened and re-visited in these spaces. In terms of understanding urban natural spaces as relational rather than pristine, the identification of foraging and forests as part of urban agricultural practice and space is a key component of the future we envision. One ECI participant, reflecting on the forested space in the Rat Creek said: “It seems familiar, but we have lost the connection” (Roshan, ECI participant). She was speaking about the connection to, and knowledge of, the natural world, which urbanization and colonial spatializations have distanced us from. We envision a future where space is defined through many perspectives and we are thus able to see beyond binaries such as those that link civilization with the cultivation of certain plants, and wild food with primitivism or backwardness, or that imagine forests as pristine and untouchable spaces. My previous research with the Métis Nation of Alberta (De Lano, 2020), found that urban park policies in Edmonton and other cities in Alberta that aim to protect pristine
natural spaces in cities often preclude cultural practices relating to touching and gathering wild plants and foods. For ECI the magic of such spaces was often literally in the touching. One ECI participant described learning to differentiate edible berries through touching the stems and later seeing trees bearing such fruit as “good trees” (Ximena, ECI participant); trees that offer us food and thus relational belonging. There is also the afore-mentioned example of the ECI participant who developed multcentered belonging through the sensation of plucking chokecherries from a bush. Two interview participants also argued for the importance of representing diverse cultures in space not through touch, but visually through gardening in the City. Sophie mentioned the large Red River Cartwheel in the Métis Nation of Alberta Garden, and Mary suggested the planting of peonies (important in Chinese culture) in City park spaces and public gardens.

We also see a future that allows for other non-dominant cultural representations in public spaces, facilitated through informality and the freedom to define space based on the uses that diverse participants ascribe onto it. Specifically, we propose the process of place-based recipe creation as a part of urban agricultural practice, making room for everyday processes outside of the dominant economic and cultural organization of society that often obscure such practices as outdated, strictly private, or as women’s work (Shiva, 2010). Using recipes to story and analyze urban agriculture places historical and spatial interpretation in the intimate context of the everyday, which makes it both more magical (comprehending relationality to one another and to natural places, as well as to other places and times) and more real (deeply connected to life processes in the here and now), as it makes visible and audible diverse and layered stories. Recipe as an urban agricultural process overturns the limited inclusion of culturally diverse experiences in urban agriculture as outlined in City of Edmonton policies, Plans and Food Strategy. While the City (2012, 2020) sees inclusion as the availability of culturally diverse foods at festivals and events, recipes as urban agricultural process create space for culturally diverse gardeners and foragers to define space and values in the City through eating a landscape (Salmón, 2012) from start to finish. That is, to be involved from the ground up, defining space and belonging through embodied practice that begins with growing and foraging and ends with recipe creation.

The use of recipe as a methodological tool strengthened analytical rigor and allowed participant voices and perspectives to emerge more strongly in this study. As a dissemination modality it carries these perspectives beyond the academic sphere. While community based research attempts to champion community voices, these are sometimes drowned out by academic methods or priorities (Klodawsky et
Recipe is a genre that has historically been associated with alternate knowledge and commoning (Kowalchuk, 2018). Using recipes allowed for the orientation of knowledge production and dissemination to be more in line with the actual experiences and expressed preferences of participants who suggested creating and sharing recipes in the first place. The book in this way reaches out beyond the space of research, which can often represent a conceptual space, to actual lived experience (Lefebvre, 1991). One of the main contributions of our research can be said to be the blank pages at the end of our recipe book; the fact that our data represents one possible, of innumerable, urban agricultural imaginaries that the many diverse individuals and communities in Edmonton could envision. It should be noted, in fact, that the imaginary I present here is itself a synthesis of some, but not all of the themes that our data and process produced; it does not capture all of our stories and perspectives. With that said, we do feel that our research provides the following specific insights on shaping, using and valuing green spaces in the City toward more inclusive futures.

We suggest that engagement, programing, funding and research itself should reach out to more than just the usual suspects and beyond the generally established confines of urban agriculture. This can apply to researchers, City governance and non-for-profits involved in promoting urban agriculture. While urban agriculture has been increasingly linked to ecological concerns and somewhat niche and trendy markets (Maurer, 2020) and new food movements often championed by young white and middle class new farmers (Calo, 2018) (our “usual suspects”), ECI participants overwhelmingly linked urban agricultural experience to kinship ties and cultural continuity, and while valuing fresh and local produce, felt that farmer’s markets were too commercialized and expensive. Recipes, gardening and foraging, while connecting participants to kinship and culture, also enabled us to build community across difference, sharing culturally specific knowledge and demonstrating an eagerness to learn new methods, ingredients and recipes. New ideas, new farmers and new food movements do not represent then, an opposing force to our urban agricultural imaginary, rather care must be taken to ensure that they do not overshadow or alienate other urban agriculturalists, foodways and knowledges. Moving beyond the confines of what can be defined as urban agriculture also potentiates greater inclusion. Research focusing on foraging has been identified as sparse to date (Poe et al., 2013) and highlighting foraging and wild foods in our study brings attention to the fact that such practices have been excluded from planning in the City. This exclusion upholds damaging colonial narratives that erase Indigenous foodways (and those of other cultural groups that have historically foraged in the City or in their historical
homelands), discourages cultural practices and disconnects all of us from relational understanding of the natural world.

One of the chapters in our recipe book is called “Pretty Things”. While representations of urban agriculture need not always be pretty, our findings point to the need to make alternate representations visible in order to facilitate belonging and enact inclusion. While visually diverse cities are more interesting and unique overall, visually representing diversity in space can serve as an invitation to interact with city spaces (counteracting the feeling that the River Valley, for example, is a place to be viewed only from a distance through the window of a bus if you are a newcomer). It can also serve to underscore non-dominant cultures and stories, such as the Red River Cart planter that represents Métis culture and foodways to urban Métis people seeking to re-connect to these, and to the larger community in Edmonton who may be unfamiliar with them. Our recipe book, which will be made available to the wider community and will be featured at various community events including a Mid-Autumn Festival in Chinatown and the Parkdale-Cromdale Community League’s Harvest Festival, is itself a visual representation of diversity in greenspace. Pairing urban agricultural programs with other community programs, such as festivals and events (or in our case English lessons) is a way to augment funding for and to create space for greater and more diverse participation in urban agriculture as well. Many ECI students and interview participants highlighted the fact that community programming and community-based organization helped participants feel more welcome in, and to exert more agency over shaping, urban agriculture.

While visual representations of diversity are important, our findings underscored the importance of informality and freedom in using and designing urban agricultural spaces as well. This means that stakeholders should be cautious to avoid overt planning of visual cultural representations at the expense of keeping urban agricultural spaces experimental and informal; not so defined that we remove all the magic or ability to mould such spaces into that which users envision, desire or need. This research points to the importance of open spaces in cities that allow for diverse participants to relate to one another and to natural space on their own terms. We do not want to take away the openness of such spaces that allow us to travel back and forward in time and across the globe while carrying out the life processes of growing, harvesting and preparing food on our own terms. The malleability of urban agricultural spaces, being free for the most part from built structures, facilitates belonging that can be multicentered, where diverse pasts need not be overwritten and where futures can be imagined across difference. Spatial and
urban scholars should not overlook the value of open or informal spaces as places where publics can help to shape urban form and imaginaries. This is what Granzow and Jones (2020) would describe as the potential for gardens to serve as epistemology. The muskrat and the gardener find magic in malleable spaces, they can build a whole world from dirt and imagination, but neither can shape or leave their mark on cement. As the City becomes more interested in scaling-up urban agriculture, it will be important to remember that in increasingly formalized and planned spaces, the layered meanings and uses of such spaces can be hidden under the pavement or behind the fences. While scaling up, attention should be given to diverse perspectives and practices, digging down to ensure urban agricultural spaces do not become spaces of alienation and monoculture.

It is important to mention that there were some aspects of this study that could be adjusted, added or augmented in future research. The many different models of urban agriculture that exist in Edmonton are not examined in this study, which rather focuses on the specific experience of ECI. The findings of this study could be built upon by examining embodied practice, and perhaps also recipe creation, that take place within other types of urban agricultural projects, and comparing these to the ECI project which is an informal and community based model of urban agriculture. Additionally, all interviews and ECI classroom reflections were carried out over Zoom due to Covid-19 related restrictions. Because this study emphasized embodied experience and community building, we would have liked to have been physically together for interviews and reflections. It is possible, as well, that some of the magic and joy felt during embodied experiences in outdoor space were amplified by the isolation that we all felt during the year that we carried out the study, being unable to access many other shared spaces. We were limited in terms of group preparation of recipes due to the Pandemic as well. Generally, we use the kitchen space at the community league to prepare recipes together in the ECI program, conversing and learning as we cook. These kitchen interactions were not included in this study, as we were only able to gather once to prepare recipes for the book, and this gathering happened after data had been collected and coded. Having more time to reflect on and analyze individual recipes as a group would have added depth to this study, especially because one of the key findings is that recipe itself represents an important aspect of our conception/imaginary of urban agriculture.

While this study offers the above suggestions and pathways for future research to academics, City governance, and organizations involved in urban agriculture, this study is really for our mothers, fathers and grandparents. It represents them here in the City, whether or not they are now or have ever been in
Edmonton. They and their diverse experiences and knowledges are represented in us, and we pay them the respect they deserve as the often faceless carriers of non-dominant culture and real humanity. They are all the layers of malleable clay that sustain and shift the urban form and imaginaries; layers that guide us, the would-be muskrat heroes, into the depths of reflection to grasp the soil that can build cities that feel like home. Finally, this research is for our children; that they may know and understand our work and worth and carry it on proudly and visibly in a future City that gives credit (and space) where both are due. Thus is our muskrat manifesto and our right to the City.
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Appendix A: Research Participants

Research Participants:

ECI participants:

1. “Ayan” African woman, 40+, immigrated to Canada 20+ years ago, ECI staff (child-minder)
2. “Roshan” Middle Eastern woman, 60+, immigrated to Canada 20+ years ago, Joined ECI just for summer/recipe programming
3. “Leticia” Latin American woman, 30+, immigrated to Canada 10+ years ago, former ECI student, current ECI staff (child-minder)
4. “Ximena” Latin American woman, 30+, immigrated to Canada 10+ years ago, joined ECI just for summer/recipe program
5. “Isabela” Latin American woman, 40+, immigrated to Canada 10+ years ago, ECI student
6. “Carolina” Latin American woman, 60+, immigrated to Canada less than 5 years ago, ECI student
7. “Ana” Latin American woman, 30+, living in Canada less than 1 year, ECI student
8. “Safia” Indian Student, 30+, living in Canada 5+ years, joined ECI at the farm
9. “Francisca” Latin American Student, 30+, living in Canada 10+ years, ECI student
10. “Lilli” European Student, 30+, living in Canada 10+ years, ECI student
11. “Aina” European Student, 40+, living in Canada 10+ years, joined ECI just for summer/recipe program

Interview participants:

1. “Marco” Community League board member, former community league garden coordinator
2. “Sheryl” University Urban Farm Coordinator
3. “Mary” Community Food Security Program Coordinator at an immigrant-led organization that serves new immigrant and refugee communities
4. “Heather” Urban Farm Coordinator
5. “Cindy” Education Director of an Urban Farm
6. “Mary” Chair of Chinese Community Organization
7. "Steven" Master Gardener and Freelance Urban Agriculturalist
8. "Sophie" Community Engagement and policy analyst at a Métis organization
Appendix B: Interview Script

Interview Script: De Lano Thesis: Recipes, Placemaking and Immigrant Well-being

1. Could you introduce yourself and tell me a bit about the organization that you work for and your role within the organization?

   - Does this organization work specifically with immigrant populations?
   - In what capacity?

2. Can you speak about your perspectives on immigrant inclusion and belonging in the City?

   - Can immigrant communities and their experiences shape the use and design of city spaces?
   - In what ways?

3. What is your organization’s connection to urban agriculture?

   - Are you involved in programming with and/or at community gardens or foraging initiatives in other green spaces?
   - Does your programming relate to food security and or food sovereignty for immigrant populations? Please explain.
   - What are the benefits that you feel that urban agricultural initiatives provide with respect to food security/food sovereignty?

4. How has the Covid-19 crisis affected your programming and/or your participants?

   - Have you observed changes related to participant isolation and well-being?
   - Has there been an increased focus on urban agriculture? Why?

5. Do you feel that urban agriculture is accessible/ relevant to immigrant populations?

   - Are there non-food related benefits to participant involvement in urban agriculture?
-Do you think there are benefits to well-being and community belonging for participants involved in urban agricultural initiatives?
-Do participants benefit from connecting to urban land and greenspace while participating in urban agricultural initiatives?
-How might urban agricultural initiative be more inclusive to immigrant participants?

6. Do you think that the involvement of your organization and/or participants has an effect on urban agriculture?

- In what ways do you think your involvement can or does create change?
- Are there changes you would like to see in urban agricultural spaces? Please explain.

7. Do you have a favourite recipe that is made from food harvested from a community garden or natural space within the city?

- Where did you get this recipe from?
- Why is it your favourite?