Naming Place in Kanyen'kéha: A Study Using the O'nonna
Three-Sided Model

by

Rebekah R. Ingram

A thesis submitted to the Faculty of Graduate and Postdoctoral
Affairs in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Applied Linguistics and Discourse Studies

Carleton University

Ottawa, Ontario

© 2020, Rebekah R. Ingram

Abstract

Human interactions with place are the stuff of life and aspects of place such as landscape and environment have shaped human activity since activity could be considered “human”. Why and how we choose to name place, as well as which places are named or nameless provides insight into many of the different aspects of life, from knowledge of resources of the area, navigational information, and knowledge of significant events in the vicinity (Afable and Beeler, 1996, Stewart, 1975) to the movement of people across a landscape, their value systems, and even spirituality. Furthermore, recent work by Levinson, Burenhult, Mark and others demonstrates that the division of landscape is not universal, but rather is shaped by linguistic and cultural practices. Some place names encode these differing views of the delineation of landscape.

This dissertation argues that place names lie at the intersection of landscape, language and culture and outlines a new interdisciplinary philosophical framework and methodology for their study which draws from the fields of linguistics, geography and anthropology for their examination. Together with members of the Kanyen’kehá:ka, this framework and methodology, called the *O’nonna* Three-Sided Model, are used to explore the relationship of the Kanyen’kehá:ka to their landscape. In analyzing the meaning of the lexical semantics of Kanyen’kéha place names, patterns emerge which provide insight into Kanyen’kehá:ka geography and culture. In the discussion, I demonstrate how these patterns can be viewed in different ways demonstrating why the three components of language, landscape and culture are vital to form a holistic picture of the way that people name place. Patterns also emerge in the grammar of place names and I show how close examination of these patterns, and the linguistic mechanisms used to describe place, may lead to surprising conclusions that may not have been obvious at first glance. Finally, I show how the dual components of meaning and grammar of place names provide insight into cognition, linguistic relativity and the universality of the human experience.

Keywords: place names, Kanyen’kéha, Mohawk, ethnophysiology

Acknowledgments

First and foremost, I wish to thank my family: my husband, Thohahènte and my daughter, Elizabeth, without whom the past five years would not have been possible. I have been told that we should be working for the future generations, and so this dissertation is for Elizabeth and my nieces. But it is only with Thohahènte's help that I have been able to do this, and therefore, I regard this as the cooperative work of our family. This is also true of those who have welcomed us and treated us as a part of their family. To all of these people, I cannot adequately express my thanks or my appreciation and can only say *nyá:wen'kówa* and *konnorónhkhwa*. I also wish to thank our friends and extended family, who have supported us in so many different ways throughout this process. We are so grateful, and we love you.

I am truly grateful to my supervisors, Dr. Erik Anonby, Dr. Fraser Taylor and Dr. Kahente Horn-Miller for their insights, and patience with me as I navigated this process. I am also grateful to Starla Myers and David Newhouse for their discussions regarding culture and ethics, and to Loran Thompson and Kahentinetha Horn who have shared their knowledge and wisdom so openly with me. Thank you also to my social media friends for all of your support and insight, and for keeping me honest through this process, even though I like raisins.

Finally, I wish to thank Ohkwáho and his wife, who are essentially responsible for this entire project. Without their guidance, their willingness to take a chance on a random outsider, and their goulash, this journey simply would not have happened. I hope that you know that this work has changed my life completely. For that, I will always be grateful.

Table of Contents

Abstract.....	2
Acknowledgments.....	3
Table of Contents.....	4
Figures.....	9
Tables	10
Conventions used in this dissertation.....	11
Linguistic Notations and Glossing	12
Other Abbreviations and Symbols	14
Chapter 1: Introduction and Background	14
1.1 Introduction.....	14
1.2 How we name place.	17
1.3 Why do we not know what some places mean?	20
1.4 How we have studied place naming in the past.	21
1.4.1 The English Place Name Society and its methodology	26
1.5 Issues with current methods and methodologies.	30
1.6 Philosophical Framework: The <i>O'nonna</i> Three-Sided Model	35
Chapter 2: Introduction to the Rotinonhseshá:ka and Kanyen'kehá:ka	41
2.1 The Rotinonhseshá:ka	41
2.2 Geography and Physical Environment of the Rotinonhseshá:ka Homeland	43
2.3 Rotinonhseshá:ka Water Travel and National Territory Boundaries.....	47
2.4 Rotinonhseshá:ka and Colonial History	49
2.5 Rotinonhseshá:ka Languages	51
2.5.1 Phonology	52
2.5.2 Morphology and Syntax.....	53
2.6 The Kanyen'kehá:ka	56
2.6.1 Geography	56
2.6.2 Language.....	59
2.7 Kanyen'kéha Place Name Studies	67
2.8 Research Questions.....	72
2.9 Hypothesis.....	74
Chapter 3.....	75

3.1 Defining the Kanyen'kéha Naming Stratum.....	75
3.2 Archival Research Methodology	77
3.2.1 Types of Sources	77
3.2.3 Documentation Used for this Study	79
3.2.4 Identifying Place Name Origin	80
3.2.5 The Kanyen'kéha Place Name Database	84
3.3 Data Refinement	85
3.4 Kanyen'kéha Natural Features List.....	90
3.5 Indigenous Knowledge and Ethics.....	90
3.6 Field Work with Linguistic Consultants.	96
3.6.1 Consultants	96
3.6.2 Field Methods.....	98
Chapter 4.....	106
4.1 Orthographical Analysis.	107
4.1.1 French	108
4.1.2 Dutch	112
4.1.3 English.....	114
4.2 Orthographic Patterns.....	117
<i>A'nowarake</i>	120
<i>Atstenke</i>	120
Chapter 5.....	121
<i>Ahskwake</i>	122
<i>Akwesashne</i>	123
<i>A'nowarake</i>	124
<i>Astenhroken</i>	124
<i>Astenhrowanen</i>	125
<i>Atstenke</i>	125
🔍 <i>Itskarakon</i>	126
<i>Kahenta</i>	127
<i>Kahnawà:ke</i>	127
<i>Kahnawatakta</i>	129
<i>Kahnawerote</i>	129

<i>Kahnawatake</i>	130
<i>Kahnekatoton</i>	131
<i>Kahyonhatatye</i>	132
<i>Kana'tsyakowa</i>	132
<i>Kana'tsyóhare</i>	133
<i>Kanata</i>	134
<i>Kanatahkhwa</i>	134
<i>Kanawa'tstakera's</i>	135
<i>Kanen'tote</i>	135
<i>Kanenhstakayenne</i>	136
<i>Kanonhwaro'hare</i>	138
<i>Kanyatarahontsi</i>	138
<i>Kanyatarake</i>	139
<i>Kanyatarakowa</i>	139
<i>Kanyatarekaront</i>	140
<i>Kanyatarakwaronte'</i>	140
<i>Kanyatarosseres</i>	141
<i>Kanyen'kehá:karononitati</i>	144
<i>Kawehnehske</i>	144
<i>Kawehniyo</i>	144
<i>Kawehno:ke</i>	145
<i>Kawehnote</i>	145
<i>Kawehnowanenne</i>	146
<i>Kentsenkowahne</i>	147
<i>Kohserake</i>	147
<i>Nikahnawate</i>	148
<i>Nikahyonhakowa</i>	149
<i>Nikentsyake</i>	149
<i>Nikentsenkowa</i>	150
<i>Ohrarho</i>	150
<i>Ohskentonon</i>	151
<i>Ohyonhke/Ohyonhyoke</i>	152
<i>Ohnawe'take</i>	153

<i>Ohswewe</i>	155
<i>Okwahohake</i>	156
<i>Onyatarakwekon</i>	156
<i>Onyatariyo</i>	157
<i>Oswegatchie</i>	158
<i>Oserake</i>	159
<i>Osharhe'on</i>	160
<i>Rock Rogeo</i>	160
<i>Skahentowa</i>	161
<i>Skahentowanen</i>	162
<i>Skanatihson'</i>	163
<i>Skanawe</i>	163
<i>Skanawehs</i>	164
<i>Skanen'tati</i>	164
<i>Skanyatariyo</i>	165
<i>Skanyatarowanen</i>	165
<i>Tekahentyento</i>	166
<i>Tatyehronon</i>	167
<i>Tewasenta</i>	167
<i>Tawinehne</i>	168
<i>Tekahsoken</i>	169
<i>Tekanyataroken</i>	169
<i>Tekaswen'karorens</i>	171
<i>Tekyatonyatari:kon</i>	172
<i>Teya'hon:wa'hkwat</i>	173
<i>Teyohahoken</i>	174
<i>Teyoken</i>	174
<i>Teyonontahowa</i>	175
<i>Teyonontoken</i>	176
<i>Teyohyonhoken</i>	177
<i>Tekahrarho</i>	178
<i>Tkahnawate</i>	179
<i>Tkanen'tahowa</i>	180

<i>Tkahwistaniyonte</i>	180
<i>Tonhnyata</i>	181
<i>Tyohnawatase</i>	182
<i>Tyohsahronati</i>	182
<i>Tsi kanyatarehske</i>	183
<i>Tsi kanyonwareskowa</i>	183
<i>Tsi kanyataro'kte'</i>	184
<i>Tsi kanatayen</i>	185
<i>Tsi owehnokwaronte'</i>	185
<i>Tsi tewatehne'tarenyes</i>	186
Chapter 6.....	187
6.1 Initial Observations	187
6.2 Semantic Analysis.....	188
6.2.1 Repeated Names	188
6.2.2 Nominal Roots	189
6.2.3 Verbal Roots	191
6.2.4 Location-Related Parts of Speech.....	192
6.2.5 Other Parts of Speech.....	193
6.2.6 Patterns within Names	195
6.2.7 Discussion on Semantics.....	198
6.3 Answering the Research Questions	210
6.4 Discourse as a Place Name Category	211
6.5 Grammatical Analysis and Universality.....	214
6.2 Remaining Issues	219
Chapter 7. Conclusion and Future directions	220
Appendix A. New York State Watersheds and Major Bodies of Water	224
Appendix B. Geographic Area under study.....	228
Appendix C. Kanyen'kéha Morphological Template (from Mithun, 2000).	229
Appendix D. Meme on the Pronunciation of <i>Ohsweken</i>	229
References	230

Figures

Figure 1: Kwakwala'wakw place names as documented by Boas are descriptive of the locations of food stuffs and materials (1934, p. 11).....	25
Figure 2. Delineation of landscape lies at the intersection of language, culture and physical environment.....	36
Figure 3. Disciplines necessary to Place Name Studies	37
Figure 4. <i>O'nonna</i> Three-Sided Philosophical Framework for Place Name Studies.	38
Figure 5. The Physiographic Provinces of New York state. (Adapted from NYS Department of Transportation, 1995/2013)	44
Figure 6. The Hiawatha Belt serves as a mnemonic device for both the agreement of the Nations as well as geographic location. Image public domain.	46
Figure 7. The Hiawatha belt serves as a spatial metaphor for the position of the Six Nations. (Basemap © Mapbox, 2019; Hiawatha Belt via Onondaga Nation, 2018).	47
Figure 8. New York State historical marker for "Deep Spring" in Manlius, NY. Via MTBradley [Public domain].	49
Figure 9. Iroquoian Language Family Tree.....	52
Figure 10. Four possible structure types for nominals according to Michelson (1973)...	62
Figure 11. Screen shot of Kanyen'kéha Place Names Database.....	85
Figure 12. Groupings of forms of <i>Kohserake</i>	86
Figure 13. Groupings of names with similar morphology.	86
Figure 14. Attestations of the name <i>Kohserake</i>	89
Figure 15. The <i>Kaswentha</i> , courtesy Onondaga Nation (onondaganation.org).....	93
Figure 16. Part of the custom physical map created for field work.	104
Figure 17. Consonants of late 16th c. French from Morin (2009).	110
Figure 18. Vowels (left) and nasalized vowels (right) of late 16th c. French from Morin (2009).	110
Figure 19. "Transitory" phonemic inventory of French vowels from the end of the 17th century to the middle of the 20th century from Morin (2009).	111
Figure 20. The consonant inventory of Modern-day Standard French.	111
Figure 21. Oral vowels of Modern-day Standard French.....	111
Figure 22. Nasalized vowels of Modern-day Standard French.	112
Figure 23. Consonant inventory of Standard Modern Dutch following Booij (1999), p. 7.	113
Figure 24. Vowel inventory and diphthongs of Standard Modern Dutch following Booij (1999), p. 5 and p. 6, respectively.....	113
Figure 25. Early Modern English consonant inventory around 1700 via Schlüter (2017) p. 31 and Ingram.	114
Figure 26. Early Modern English vowel inventory around 1700 via Schlüter (2017), p. 31.	115

Figure 27. Modern Standard American English consonant inventory following Hayes (2009), p. 21.	116
Figure 28. Modern Standard American English vowel and diphthong inventory following Hayes (2009), p. 22.	116
Figure 29. "Council Rock," possibly the source of the referent name, from Halsey (1901).	126
Figure 30. Kanonhwarohare' may refer to the practice of scalping, a form of trophy-taking, depicted here.	138
Figure 31. Several locations and possible referents of <i>Kanyaterosseras</i>	142
Figure 32. Possible area of the name <i>Kanyaterosseras</i>	143
Figure 33. The modern-day name Kawehno:ke.	145
Figure 34. One location of <i>Ohskentonton</i>	151
Figure 35. Stained glass window at the Royal Chapel in Oshwe:ken showing the original name of the village as "New Oswego". Photo Ingram (2016).	156
Figure 36. The entry for "Tawasentha" from Bruyas (1863), p. 27.	167
Figure 37. One location of Skahentowanen.	202
Figure 38. Another location of Skahentowanen.	203
Figure 39. Overall geographic area under study. (c) Rebekah R. Ingram	228
Figure 40. Kanyen'kehá:ka and Onyota'a:ka Trails within geographic boundaries of this study. (c) Rebekah R. Ingram	228

Tables

Table 1. George R. Stewart's "Evolved" Place Name Categories.	28
Table 2. George R. Stewart's "Bestowed" Place Name Categories.	28
Table 3. Reflexes of Proto-Northern-Iroquoian *r.	53
Table 4. Kanyen'kéha near minimal pairs.	54
Table 5. Kanyen'kéha Consonant Inventory.	59
Table 6. Kanyen'kéha Vowel Inventory.	60
Table 7. Epenthetic Vowels in Kanyen'kéha.	61
Table 8. A non-Onödowá'ga: documentation of a Onödowá'ga: place name.	82
Table 9. Orthographic variants of the suffix -(á:)ke [(á:)ge] in historical documents from Ingram, Anonby and Taylor (2019).	117
Table 10. Orthographic variants of the root -oken [ógǽ] in historical documents from Ingram, Anonby and Taylor (2019).	117
Table 11. Orthographic representations of <i>Kahnawà:ke</i>	118
Table 12. Absence of "h" in orthographic representations of Astenhroken.	119
Table 13. [h] in onset position in Kanyen'kéha place names.	119
Table 14. <i>a-</i> represented as "o" in the initial vowel of a place name.	120
Table 15. Repeated Kanyen'kéha Names.	188

Table 16. All nominal roots used in Kanyen'kéha place names.....	189
Table 17. All verbal roots used in Kanyen'kéha place names.....	191
Table 18. Use of locative suffixes in place names.	193
Table 19. Elements following the nominal root <i>-nyatar-</i>	196
Table 20. Elements following the nominal root <i>-wehno-</i>	196
Table 21. Elements following the nominal root <i>-hyonh-</i>	197
Table 22. Elements co-occurring with the verbal root <i>-at-/t-/ot-</i>	197
Table 23. Elements co-occurring with the verbal root <i>-oken-</i>	197
Table 24. Semantic Basis of Kanyen'kéha place names.....	205
Table 25. Possible Navigational Kanyen'kéha place names.	208
Table 26. Generic + Specific structure in Kanyen'kéha place names.	216
Table 27. Generic + Specific structures utilizing the locative suffix.	218

Conventions used in this dissertation

This dissertation centres around the place naming conventions of a group of Indigenous Nations that have historically been called by several different names: in English they are often called “The Iroquois League,” the “Five Nations”, which became the “Six Nations” in the early 1700s, the “Haudenosaunee Confederacy” and even simply “the Iroquois”. The literature within Indigenous and Iroquoian Studies often refer to this group as the “Haudenosaunee”, and this name is often used by individuals within the Nations themselves. The present-day Haudenosaunee Confederacy includes the Kanyen'kehá:ka (Mohawk), the Onyotá'a:ka (Oneida; Oneida Nation of the Thames, 2016), the Onoñda'géga' (Onondaga; Eberhard, Simons & Fennig, 2019), the Gayogohó:nq' (Cayuga; *ibid*) the Onödowá'ga: (Seneca; *ibid*), and the Skarù-rę? (Tuscarora; Montgomery Hill, p.c.); the Skarù-rę? were not an original member of the Confederacy, having moved from what is today part of North Carolina to come under the protection of the Confederacy sometime between 1714 and 1722 (Tuscarora Nation, 2019). the term “Haudenosaunee” comes from the Onoñda'géga' language, one of the six member Nations. However, this dissertation focusses on a different member Nation, the Kanyen'kehá:ka, known in English as the Mohawk people. Therefore, here I use their term for themselves, Kanyen'kehá:ka, their term for the language, Kanyen'kéha, and their term for the Confederacy, Rotinonhseshá:ka, which has the same referent as “Haudenosaunee”.

A recorded orthographic convention of a place name in the historical record (i.e., a place name which is written down within a historical document) is given in quotation marks (“...”) which indicate the orthographic and spelling conventions of that particular name within that document. This is known as the **Name Form**.

Interpretations of place names are given in single quotes (‘...’).

Present-day Kanyen’kéha place names and phrases are given in *italics*. The consonant [j] is symbolized by the letter "y" at Six Nations and Tyendinaga, but by the letter "i" at Akwesashne, Kahnawà:ke, Kanehsatà:ke and Wáhta (Government of Ontario, 2004).

Although my work took place with Kanyen’kéha speakers from Akwesashne and Kahnawà:ke, my own training in Kanyen’kéha orthography was in the Six Nations system. In order to ensure my own accuracy in the language, I therefore use the Six Nations orthographic system in this dissertation which represents [j] as “y”.

Written representations of Kanyen’kéha place names are given within quotations.

Present-day place names are given in their standardized conventions (according to either the United States Geological Survey (USGS) database, or the Canadian Geographical Names database) in plain type.

Linguistic Notations and Glossing

I utilized Leipzig glossing rules (see <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf>) for glossing in this dissertation with the following modifications:

Because Kanyen’kéha is a polysynthetic language very dissimilar to English, I diverge from these rules by using the term “root”, given in small caps (ROOT) which I define as either verbal in nature (VROOT) or nominal (NROOT).

Epenthetic segments are isolated and are not assigned to a preceding or following morpheme.

A hyphen (-) is used to indicate breaks between morphemes.

[	]	phonetic transcription following International Phonetic Alphabet (International Phonetic Association, 1999)
/	/	phonemic Transcription
-		morphemic boundaries
*		reconstructed (historical) phonemic form

Ø	null or non-overt affix
1	first person
3	third person
AN	animate
AOR	aorist
AUG	augmentative
C	consonant
CAUS	causative
CISLOC	cislocative
DAT	dative
DIM	diminutive
DISTR	distributive
DU	dual
EPEN	epenthesis
EXLOC	external locative
F	feminine
HAB	habitual
HAB.PAST	habitual past
INAN	inanimate
INLOC	internal locative
IT	iterative
M	masculine
(n.)	nominal
NPFX	nominal prefix
NSFX	nominal suffix
NROOT	nominal root
PARTF	partitive (Laboratoire de Linguistique Formelle, 2015)
POPUL	populative (Chafe, 1967, p. 4)
POSS	possessive
RPST	remote past
S	singular
SRFLX	semireflexive
STAT	stative
SUB	subordinative
(v.)	verbal
V	vowel
VROOT	verbal root

The symbol ">" indicates that a person-number affix expresses agent-like and patient-like arguments of a transitive verb simultaneously; in the glossing, the first gloss is the agent-like argument and the second gloss is the patient-like argument. > indicates direction of transitivity.

Other Abbreviations and Symbols

Q precedes the name(s) or morphemic unit in instances where an interpretation is uncertain.

Sp. species

Chapter 1: Introduction and Background

1.1 Introduction

“To be at all— to exist in any way —is to be somewhere, and to be somewhere is to be in some kind of place. Place is as requisite as the air we breathe, the ground on which we stand, the bodies we have” (Casey, 2013). We are born into place and our lives are filled with it. From the time that we take our first breath, everyday life consists of place: our movements throughout the day (or night) are subsumed by what happens where. A child may go to school to study, and this school may be in their home, or thousands of miles from their home. A sudden feeling of sickness may necessitate a visit to a hospital. Someone washes the dishes in the kitchen sink on a Thursday evening. We leave one place to go to another to gather resources, to exchange ideas, to visit family. The mundane tasks of life may cause people to take place for granted, but movements to, or occupation of a place may create or resolve conflicts. We stay in a place because of some connection to it or because we have no other choice. We leave a place because of some connection to it or because we have no other choice. Human interactions with place are the stuff of life.

Aspects of place such as landscape and environment have shaped human activity since activity could be considered “human”. One example is the determination of habitation placement, reflected in O’Driscoll (2017) which argues that Irish hillforts of the iron age “were deliberately positioned in the most prominent parts of their respective regions, reflecting an innate knowledge of the local landscape and implying prominence was a key characteristic that influenced the location of a site” (p. 73). Another example is the kind of sustenance available and the techniques used for its collection. A reporter for the New York Times, Craig S. Smith, documented one extreme case of food gathering in his March 18, 2017 “The Daily 360” video which followed Inuit

hunters Tiisi Qisiq and Adami Alaku. The two men harvested blue mussels from ice caves which are accessible for only two weeks out of the year for approximately two hours a day—because the rest of the time these caves are under water. Landscape even shapes language, as evidenced by the whistle register of languages like Guanche and Sylbo, Mazatec, Kusdili, Béarnese, and dozens of others. Meyer (2015) writes extensively about these whistled languages and notes “the importance of mountainous areas but also...a key association between whistled speech and dense tropical forest environments” (p. 31).

Clearly land influences life through human interactions with it, an experience that has given rise to the human act of distinguishing one place from another place in the overall larger concept of what we may call “space,” “the environment,” or “the landscape”. Our need to share information about a specific location (a place) within that space, to disseminate the knowledge of our environment, has led to different methods of doing so. These include practices such as creating models of space with pebbles and sand, driftwood, corn kernels, hand shape, on birchbark, hide, paper, and most recently, digitally. The Indigenous peoples of Australia utilize songs to encode and document the travel routes of the continent together with Indigenous concepts of identity, relationships, law, and Creation (Jakelin Troy, p.c.). Pualani Louis (2011) describes Indigenous Hawai’ian cartographies as “interactive presentations of place as ‘experienced space’. They situate mapping in the landscape and encode spatial knowledge into bodily memory via repetitive recitations and other habitual performances” in a “multisensory approach” (p. 168). These activities and actions are all social mediators of place. Language is also a mediator of place in which the sociality of humans appears in different ways: the semantics of landscape delineation are arbitrarily arrived upon by mutual social agreement; social occurrences in place (whether they be based upon sustenance, materials, identity, history, religion, etc.) can be the basis for distinguishing one place from another, and place-related information is distributed socially through any of the methods previously mentioned. Yet another of these methods is place naming, a means of transmitting important information—often

Indigenous Knowledge—which can then be passed intergenerationally. The sociality of humans bleeds into any study in which we are involved (which is to say most studies). A study of place through the medium of language is no different.

Such a study requires a philosophical framework and methodology which can account for these complex and interactive components—in other words, that account for so many aspects of our social nature. Therefore, the purpose of this dissertation is two-fold. The first is to outline a framework and methodology which attempts to account for human interaction with landscape and with each other, which occurs not only during the process of place naming, but also in the transmission of those names, and in the subsequent understanding of those names by both the namers and others. The second purpose is to use this framework and methodology to explore the relationship of a group of people, the Kanyen'kehá:ka, to the landscape—spaces important enough to be designated by them as “a place” out of the whole of that landscape, and important enough to warrant an exchange of information about them. This information was exchanged through the medium of language and subsequently became markers of place not just to the Kanyen'kehá:ka, but to non-Kanyen'kehá:ka. The information passed to future generations, and to those of us who use and have used the names without recognizing their implication and value. I am not Kanyen'kehá:ka. I have no claim to their language, culture, identity or their understandings of place and, as I outline in later chapters, I can only make observations on this topic based upon my engagement with language speakers and cultural practitioners. But perhaps this work can serve to outline a new way to tell the story of a people and their relationship with place.

I begin by exploring the phenomenon of place naming, how place naming has been studied, and finally outlining some of the issues commonly encountered by those studying place naming. In Chapter 2, I introduce a new philosophical framework for the study of place names which attempts to account for some of these issues in a holistic way. The remainder of the dissertation explores the practical application of the framework and a methodology (introduced in Chapter 4) to the place names of the

Kanyen'kehá:ka (see "Conventions", above). A general background on the Rotinohseshá:ka, the Kanyen'kehá:ka and their languages is given in Chapter 3 together with a brief outline of the environment and landscape of their traditional territories, as well as some relevant history. These will allow the reader to understand the current state of affairs of Kanyen'kéha place names as well as prepare the reader for the analysis offered throughout later chapters. Chapter 4 outlines a methodology for the study of historical Indigenous place names. Chapter 5 is divided into two sections. The first section deals with the analysis of the written forms of the names as well as some observations of the grammar of the names. The second part of the chapter is the morphological analysis of each of the names encountered. Chapter 6 analyses the names from Chapter 5 for semantic and grammatical patterns, and begins to answer research questions asked in this dissertation, namely, "What are the morphological elements that create Kanyen'kéha place names?", "How do the Kanyen'kehá:ka name place?" and "How do the Kanyen'kehá:ka understand their landscape?" The answers to these questions lay out a new path of exploration which is outlined in Chapter 7 and which proposes new ways of thinking about, and communicating, concepts of space, as well as the importance of preserving these unique understandings.

1.2 How we name place.

Place naming is a form of semiosis or signing process: a name is a symbol which conveys spatial information through language and may be transferred in several modes of language, including oral language, gestural language (Devereaux, 2017), writing, etc. Language itself is a use of signs, a system of symbols that express thought, and the intertwining of the systems of place and language presents a challenge of entanglement. De Saussure's idea of the "linguistic sign" outlines the psychological phenomenon which unites a concept, such as the abstract concept encoded in the English word "cow" with the form of that word in the English language as stored in the mental sound structure, vocabulary and grammar of an English speaker, i.e., "the natural representation of the word as a fact of potential language, outside any actual use of it in speaking" (Saussure, 1966, p. 66). It can then be rendered into physical speech, where it will differ in form

from the mental entity because of the implications of speech production, conjugation, and other forms of “real world” usage. This mental form is connected within the mind to a referent, a meaning, and what Frege (1892/1952) calls a sense. A referent is the real-life value of the abstract concept “cow”, in other words, an actual living, breathing cow, perhaps chewing its cud in a field in Ontario. The meaning of the form of “cow” could be said to be its dictionary definition, i.e., “a fully-grown female animal of a domesticated breed of ox, kept to produce milk or beef” (Oxford University Press, 2019). Finally, the sense of a linguistic form could be said to be a person’s own subjective psychological associations with a particular linguistic form. Perhaps a person was at one point chased by cows and therefore that form now brings to mind the incident; the form “cow” will have a negative connotation for that person, whereas a different person, perhaps one who visited the cows in a neighbour’s field as a child, will have different psychological associations with the form. Frege (1892/1952) gives the example of the proper name “Aristotle”: “In the case of an actual proper name such as 'Aristotle' opinions as to the sense may differ. It might, for instance, be taken to be the following: the pupil of Plato and teacher of Alexander the Great. Anybody who does this will attach another sense to the sentence ‘Aristotle was born in Stagira’ than will a man who takes as the sense of the name: the teacher of Alexander the Great who was born in Stagira” (p. 37). The referent “Aristotle” is the same to two separate people, but the senses, or the associations of the same referent will differ from person to person.

The same can be said for place names: place names take a linguistic form¹ and that form has a meaning (the literal meaning of the each linguistic term), a referent (the “real-life” location that that name refers to) and a sense (whatever additional information and/or associations an individual attributes to that name). Each of these linguistic forms generally follows the sound patterns and grammar of the language of the place namer(s), although names that do not follow these patterns have reason for not doing so. However, although language itself is arbitrary, place naming is not; we

¹ While place names undoubtedly have a mental form related to the phonology, morphology and syntax of the language in which it is used, for the purposes of this dissertation, the linguistic form is a physical form of the name, i.e., spoken, signed, written, etc.

impart names to distinguish Place A from Place B and many times a place name specifies **how** Place A is distinguished from Place B. Radding & Western (2010) write, “Names are bestowed in order to have a specific meaning that we wish to associate with the referent. The form is willed, not arbitrary; the name is transparent through societal associations” (p. 395). Over time, as a place name is passed from person to person and from generation to generation, the original meaning and sense of a name may become secondary to other senses of the place: “The functional role that place names play in our everyday lives makes them both more relevant than a monument, but paradoxically more prone to being forgotten as repositories for historical memory because inevitably the original cultural significance recedes into the background in favor of the lived experience of the place” (Metro-Roland, 2014, p. 79). The lived experience, the continued and reinvented sense of the place takes precedence over the literal meaning of the name.

Linguistically, this process appears very similar to grammaticalization. An original meaning may become socially irrelevant; for example, Oxford is literally “oxen ford” (University of Nottingham, 2019), but very few people (if any) still make use of oxen for transportation or, for that matter, have any reason to ford the River Thames. Instead, this place is often associated with the University of Oxford, the “oldest university in the English-speaking world” (University of Oxford, 2019). Thus, the name has become semantically bleached from its literal meaning (“oxen ford”) to a sense of place, i.e., “the place where the oldest university in the English-speaking world is located”. The original meaning, while still somewhat obvious, has become opaque, and the sign, the place name, has become a cognitive representation of a geographic location. Other place names, such as Winchester in Hampshire County in the United Kingdom demonstrate that it is not necessary to understand the meaning of a place name, or even the language of naming, in order to utilize a place name. Winchester was originally documented by Ptolemy as *Venta Belgarum* or “marketplace of the Belgae” (Johnson, 2019). Following the Battle of Hastings, the Saxons called the town *Venta Caester* (ibid) with the element *caester* probably borrowed into the Brythonic languages from Latin

castra, or 'camp' (Stewart, 1975, p. 225); in English, it came to mean "a city; an old fortification; a Roman site" (University of Nottingham, 2019). This name eventually evolved into "Wintancaester" and finally, to its modern-day name, Winchester (Johnson, 2019). The sign *Venta Caester* has been transmitted over a thousand years through language, whether mutually intelligible or not, from Latin, Anglo-Saxon (or simply Saxon), Middle English and Early Modern English to the modern day. The original name, although modified to conform more closely to non-Latin sound and grammatical patterns, still preserves the meaning, even if the language has changed around it. The fact that a name has a sense along with a meaning is the reason that many place names, or elements of place names, are borrowed from other languages and why we find names such as Syracuse, Rome and Ithaca in the middle of New York state or Paris in southwestern Ontario, far from their origins. It is also why so many Indigenous names continue to be utilized in North America when their original meanings, or even their naming language, is no longer recognized.

1.3 Why do we not know what some places mean?

As outlined in Section 1.1, previously established place names may continue to be used even by those who have no knowledge of the naming language or meaning. George R. Stewart attributes this phenomenon to the fact that "the giving of new names is an act of labor" (1975, p. 53) and it is simply easier to use previously established names than it is to create new ones. Multiple sociocultural groups using multiple languages may occupy or make use of a single geographic location simultaneously. In such a situation, place namers may name a common space in one of several ways: for example, both groups may create a name with the same meaning in their respective separate languages, or one group may create a name with other groups subsequently borrowing and utilizing that name. There may also be waves of place name use over time, with different sociolinguistic groups utilizing the same space at different time periods. These waves of use are reflected in place naming strata—layers of place names given by a specific group of people with a specific language which created patterns as speakers of different languages interacted with each other and the land. Place naming

strata are each made up of that specific group's naming conventions—the way that that group of people name place, whether for cultural activities, significant past occurrences, spiritual reasons, etc. Such is the case with Winchester, as outlined in 1.2, above, and also for place names throughout North America.

Herein lies one of the central problems in place naming studies: when a place name is borrowed from one language into another, from one stratum into another, or when it is grammaticalized from a literal meaning to a sense, much of the information inherent to that place name is semantically bleached, or entirely lost. This is rather unfortunate, since, as Jett (2001) states, “Placenames reveal how particular cultures perceive and classify their environments: what they see as significant—economically, religiously, and so forth—about how they differentiate particular places from space in general. ...[P]lacenames may also convey important information concerning cultural beliefs and values, folklore, ethnography, economics, and history. Placenames also function as mnemonic devices that may facilitate communication, travel, resource-finding, and mythological memory, and as such are highly charged linguistic symbols” (Jett, p.c.). Waterman (1922) points out that many North American place names originate from North American Indigenous languages and that Indigenous place names are “likely to persist even through migrations and conquests, when the spoken language shifts and one tongue is replaced by another” (p. 176). This means that important information regarding aspects of life, language and culture, remain embedded within Indigenous place names.

1.4 How we have studied place naming in the past.

Because so many different aspects are involved in place naming—sociocultural, historical, linguistic, environmental, etc., there have been many different approaches to the study of place names. Perhaps unsurprisingly, these approaches have also varied by time and geographic location. The earliest studies on North American Indigenous place naming were part of larger general texts on the customs and ways of life of Indigenous peoples, such as Heckewelder's *History, manners, and customs of the Indian nations who once inhabited Pennsylvania and the neighbouring states* (1881), and Ruttenber's

History of the Indian tribes of Hudson's River (1872). Those who undertook early place name research sometimes had little or no formal training in philology, or in linguistics (which would not exist as a specific discipline until the 1920s) or were philologists who were unfamiliar with the structures of North American Indigenous languages. Due to their morphological complexity and richness of affixation, languages such as Kanyen'kéha were sometimes documented similarly to Latin or Greek, which is the case of Bruyas' *Radices verborum Iroquaeorum* (1863). Word lists and grammars produced by early colonists, travelers, and missionaries provided some knowledge of regional Indigenous languages which were used as references for place name studies, but, as Afable and Beeler (1996) state, they "depended to a large extent upon local [non-Indigenous] tradition and folklore for their explanations of a name's meanings" (p. 188). This sometimes resulted in inaccurate translations and "numerous highly conjectural and often fanciful etymologies, many of which have been copied over and over again in succeeding publications" (ibid). Furthermore, familiarity with one Indigenous language or language family did not necessarily mean a familiarity with other languages which may have historically been used within the geographical area. The unintended effect of this narrow geographical focus, coupled with some researchers' limited exposure to Indigenous peoples and languages, was the "shoehorning" of names into the wrong language or language family, i.e., forcing a morphological analysis to fit a preconceived language family and/or meaning, whether the evidence supported that or not. Many names in New England and other parts of Northeastern North America were assumed to be of Algonquian origin simply because that was the dominant Indigenous language family of the area (Kincade & Powell, 1976). Such is the case Schoolcraft's *Report on Aboriginal names and the geographical terminology of New York* (1845) upon which William M. Beauchamp, a researcher of the Onoñda'géga language, would later comment, "While H. R. Schoolcraft is an authority...on many points it is now conceded that in eastern matters he was often fanciful. Mr. Tooker said: 'Schoolcraft attempted the translation of many Algonquin names in the east, but, by employing Chippewa elementary roots or syllables, with which he was familiar, he failed in nearly every

instance....His erroneous translations are still quoted and are very persistent.’ His most conspicuous failure was in Iroquois names...” (Beauchamp, 1907, p. 16). Schoolcraft also coined at least one name, which he presented as Indigenous: his name for the headwaters of the Mississippi River, Lake Itasca, is a melding of the *-itas* of Latin *veritas* (‘truth’) and the *ca-* of Latin *caput* (‘head’) (Bright, 2004). There are also documented instances of created place names, some of which were designed to sound as though they may have been derived from local Indigenous languages; one example is Kenora, formed from the first two letters each of “Keewatin”, “Norman” and “Rat Portage” (Scott, 1997).

Ruttenber’s *Indian geographical names* (which focuses on the Mohawk River Valley, Hudson River and Delaware River Valley) overlaps the territories of two related languages (Mahican, and Lenape, both of the Algonquian language family) and one unrelated language (Kanyen’kéha). Ruttenber’s Algonquian place name analyses appear to be morphologically accurate, but his unfamiliarity with the Iroquoian languages causes problems such as the case of the name “Tyoshoke”, which he vaguely derives from Lenape without seeming to consider that “tyo” (*teyo-*) and “ke” (*-ke*) represent a common Kanyen’kéha prefix and suffix, respectively (p. 65). Other cursory interpretations of Kanyen’kéha place names rely on various secondary sources with no morphological breakdown; these issues render his overall analysis problematic. This is also precisely why studies that are confined to areas within administrative boundaries (such as “the province of Ontario” or “the state of New York”) or a very large geographic area (“place names of the United States”) should be approached with caution. Areal or imposed boundaries may intersect several languages, or language families.

Despite these issues, important contributions were made to the understanding of Indigenous place names, such as Trumbull’s *The composition of indian geographical names, illustrated from the Algonkin languages* (1870) and Ganong’s *A monograph of the place-nomenclature of the province of New Brunswick* (1896).

In the 20th century, contributions from two fields of academic study, linguistics and anthropology, had major implications for place naming studies. First, Sapir’s *Language*

(1921) outlined the basis of linguistic typology, which allowed for greater precision in the interpretation of agglutinative and polysynthetic languages, of which many North American Indigenous languages are representatives. At the same time, Franz Boas was outlining the tenets of ethnography, which would become one of the many tools used in the field of anthropology including the subfield of linguistic anthropology (Hicks, 2013). Ethnographic studies of place names such as Waterman (1922) and Boas (1934) demonstrated that Indigenous place names are not simply a reflection of language, but also of culture: many names contain environmental knowledge and describe cultural practices which take place on a landscape, such as places plentiful in food staples or materials used in tools. This is evident in Boas' (1934) *Place names of the Kwakiutl*² which provides examples of landscape terms and environmental-cultural knowledge: place names such as *t!ōxʷt8!â*, 'swell inside' (p. 11) and *L!EK'!EXLĀLA*, 'breakers at rear end' (ibid) are given to denote concepts of ocean swell and wind direction since the Kwakwaka'wakw, located on the coast of British Columbia, make extensive use of water transportation. Kwak'waka place names also contain references to different animal and plant species of importance to the Kwakwaka'wakw together with their location at different points in those species' life cycles, and even warnings against potential hazards, such as *dō'yadē*, 'having poisonous clams':

² The term Kwakwaka'wakw has subsumed the term "Kwakiutl" as used by Boas (First Voices, 2018); the language used by the Kwakwaka'wakw is known as Kwak'waka (ibid).

salmon, *dzā'wadē'* having olachen, *mēlā'dē'* having sockeye salmon; *sā'dzadē'* having spring salmon; *t'ō'badē'* having trout; — *mēdā'dē'* having horse clams; *g'ā'wēgadē'* having clams; *k!wā'dzadē'* having mussels; *āmda'dē'* having sea eggs; *k!ē'nwēdzadē'* having spider crabs; *wa'yadē'* having herring spawn; also *dō'yadē'* having poisonous clams. For fruits we have: *sē'ldzadē'* having blueberries; *ts!ē'nadē'* having elder berries; *nēgwā'dē'* having salal berries; *q!wa'lā'dē'* having salmon berry shoots; *t!ē'lyadē'* having Viburnum berries; *hā'myadē'* having berry picking. For trees we find for instance *dē'wadē'* having yellow cedar; *dē'nyadē'* having cedar bark.

With the ending — *as* place of, we have: *k!wāts!aa's* place of mussels on rock; *g'ā'g'i'lāa's* place where one tries to get grizzly bears; *k!ō'lodas* porpoise place; *xū'mdas* land otter place; *lō'gwēdzas* halibut fishing beach place; *ts!ā'gas* mountain goat place; *hā'nxwē-las* place for fishing humpback salmon.

Figure 1: Kwakwaka'wakw place names as documented by Boas are descriptive of the locations of food stuffs and materials (1934, p. 11).

Furthermore, a purely linguistic study of place names is mainly valuable only in regard to the meaning of individual locations in isolation from other places. However, these individual names can be compiled and analysed to show overall patterns of naming thus shedding light on a sociolinguistic group's naming convention (see Section 1.3).

According to Thornton (1997), Waterman (1922) was the first to attempt any sort of typology of place names, although Ganong (1896), Whitbeck (1911) and Martin (1939) had also done some early work of place name classification.

Coupling ethnographic techniques with new understandings of the nature of language, Boas and his students (Kroeber, Barrett, Harrington and Waterman, amongst others) achieved a greater depth of linguistic analysis in their studies of Kwakwaka'wakw, Tewa, Yurok and other West-coast place names. These studies, juxtaposed against earlier place name studies which did not have access to the same techniques or theories, also illustrate how linguistic theory and techniques advanced place name studies, and the valuable contributions of anthropology/ethnographic techniques to the emerging field.

1.4.1 The English Place Name Society and its methodology

As this combined linguistic-anthropological work on Indigenous place names was being introduced and refined in North America, an interest in place names was also developing in Europe. The English Place Name Society (EPNS) was founded in 1923 concurrent with the establishment of the Survey of English Place-Names, an ongoing research project which aims “to examine the origins and development of all English place-names” (University of Nottingham, 2017). Scholars at the EPNS established a methodology which traces a present-day place name backwards through time, noting the often numerous forms of a place name, or different names used for the same location (see Winchester in 1.1). A corpus is created using the place name data compiled from historical maps, deeds, travel documents, census records, etc., together with an approximate time period of documentation and a probable origin language which in Britain includes varieties of Celtic languages as well as Anglo-Saxon, Middle English, Early Modern English, and Modern English. The place name is then analyzed morphologically and semantically. These various place names, their meanings, and even the individual forms and morphemes from the multiple origin languages add to the understanding of the history and landscape of Britain. Pinpointing a probable language of origin outlines patterns showing where waves of Romans, Angles, Vikings, Saxons, Normans and others had settled, what they had named, and (in many cases) why they had named. Language patterns from each wave of settlement, were layered over each other as each group of people renamed and documented the name, or utilized the old name, often changing the name to conform to the language of the new namers, or simply to make the name easier to say.

Each of these layers comprises its own naming stratum (see Section 1.2) and depending upon the movement and location of the namers, these may take up vast stretches of land (for example, the American English naming stratum which arguably consists of all of the names located within the administrative boundaries of the United States) or a relatively smaller geographic area (for example, the Pennsylvania Dutch naming convention of Lancaster County, Pennsylvania). Strata may therefore be

considered what I call macrostrata (layers, or a large area of layers that have been named by what may be considered a dominant language family), or what I call microstrata (layers of smaller areas, or layers that have been named by what may be considered minority languages). Since macrostrata are comprised of such a large geographic area, microstrata may be contained within them, and they may also overlap with each other. While the macrostrata may be responsible for the renaming of places, those that are not renamed become part of a substratum. Substrata are apparent in the course of tracing the history of a name, such as Winchester as described in Section 1.2, above. Documenting the changes in a place name has also helped researchers to understand language contact and language change. The establishment of the English Place Name Society led to the Place Name Society's *Introduction to the survey of English place-names* and *The chief elements used in English place-names* published together in 1924, the eventual publication of Ekwall's *Oxford dictionary of English place names* (1960), and further work on English place naming by Dr. Margaret Gelling (1978, 1984).

In North America, this work would influence George R. Stewart, a typonymist and professor of English at the University of California, Berkeley, who produced two books on place naming. In *Names on the land* (1945), Stewart examines the naming of North America (focusing on the names of the United States) by following the historical timeline from initial European exploration of the continent onwards, only briefly discussing the pre-contact period in the first chapter. His second book, *Names on the globe* (1975), incorporates place name data from other parts of the world and discusses what he perceives as a gap in place name studies. The English Place Name Society had several different ways of classifying and analyzing place names which included classification by territory (which creates some issues as outlined in this section), chronology, language of origin, or physical feature (i.e., towns, fields, rivers, etc.); regarding this approach and analysis, Stewart wrote, "Although convenient, useful, and even to be called essential, these methods of classification of place-names fail to grapple with the actual *giving* of place names," or what he would describe as the motivation of the namer (1975, p. 86). In other words, Stewart felt that the etymological aspects of place names were well-

studied, but that there was not enough discussion on why people name the way that they do, i.e., as a territorial marker (as with Oneida, NY), or for a physical feature of significance (for example, the Rocky Mountains). One of the goals of *Names on the Globe* was, therefore, to develop his own typology of that could apply globally to place names.

In *Names on the globe*, Stewart identifies two naming methods: “Evolved” names are those that “originated at a primitive level to identify features probably of significance to local inhabitants,” i.e., physical or environmental features of significance, while the term “Bestowed” indicates “a conscious act of naming” (Randall, 2001, p. 6). “Evolved” name classes include three categories of names as outlined in Table 1, below.

Table 1. George R. Stewart’s “Evolved” Place Name Categories.

Category	Definition	Example
Descriptive	Describes some permanent or semi-permanent aspect of a feature.	Red River (Stewart, 1975)
Associative	Identify a feature by an aspect with which it is associated.	Mill River (Stewart, 1975)
Incident	Identifies a place by a particular event that occurred there.	Council Bluffs (Stewart, 1975)

Of the bestowed types, Stewart posits 10 different categories of place names, as in Table 2, below, with the “Political” category as a possible addition; “Incident” place names may be either “Evolved” or “Bestowed” and therefore are also listed here. Examples are given from Canada and the US.

Table 2. George R. Stewart’s “Bestowed” Place Name Categories.

Category	Definition	Example
Associative	The named feature takes its name from that of another, associative feature.	The state of Connecticut takes its name from the Connecticut River. (Martin, 1939).
Commemorative	The feature is named in honour of someone.	Victoria, British Columbia was named for Queen Victoria. (Rayburn, 2001)
Commendatory	The feature is named to praise someone or something.	Pennsylvania is named in praise of William Penn, its founder. (Rayburn, 2001)

Descriptive	The name describes the feature.	Cobalt (Rayburn, 2001)
Folk-etymological	A type of backformation based on the misinterpretation of unfamiliar phonemes from the original naming language and their subsequent reinterpretation into a recognizable form in a secondary, or newer form of a language.	Saint-Louis-du-Ha! Ha!, Quebec. “Haha” is an archaic term for the particular crescent-shaped lakes such as Lac-Témiscouata, located just East of the town. As this term faded out of use, the name was reanalyzed as the onomatopoeia for laughter. (Rayburn, 2001).
Incident	Based upon a historically recorded incident.	Battle Creek (Stewart, 1975)
Manufactured	Two or more names are put together to create a new name.	Kenora, ON formed from K eewatin (the original postal designation of the Northern part of Lake of the Woods), N orman (a second post office designation of the Northern part of Lake of the Woods, named for a person) and R at Portage (the Northern part of Lake of the Woods) (Rayburn, 2001).
Mistake	Names that have been repeatedly misunderstood over time, leading to their current form.	Cambridge, UK (originally meaning “bridge over the River Granta”). (University of Nottingham, 2019)
Possessive	The feature indicates an entity’s control over it.	Smiths Falls
Shift names	The name of one feature is taken from another.	The town of Niagara Falls is named for the falls of the same name.
Political	The use of one place name in lieu of another for political reasons, or the renaming of a place for the purpose of attempting to “rewrite” or “overwrite” history, or to evoke different emotions for political reasons.	Oka (a name of Algonquin origin, as opposed to Kanehsatá:ke, the Kanyen’kéha name for the same location)
Migrational	A name given in nostalgia for an original homeland.	A name given in nostalgia for an original homeland. Example: Various names in

		Nova Scotia that originate in Scotland, such as Inverness, Dartmouth, New Glasgow, and the name of Nova Scotia itself, meaning “New Scotland”.
--	--	--

Additionally, each of the categories put forth by Stewart may be comprised of several subcategories, which are not listed here for the sake of brevity.

1.5 Issues with current methods and methodologies.

The main issues with place name methodologies presented so far have been linguistic in nature, and many of these problems have been mitigated with advancements in linguistic theory and field techniques. Stewart’s study, however, begins to highlight other problems within place naming studies not related to language. In creating the typologies in Tables 1 and 2, Stewart seems to have not recognized the contributions of Waterman, Ganong, and others who had already created place name typologies for some Indigenous place names. He does, however, make note of J. P. Harrington’s (1916) “The ethnogeography of the Tewa Indians,” which outlines concepts and terms regarding cosmology, meteorology, time, and geography. Harrington briefly touches upon the subjects of Tewa naming conventions in the introduction to a comprehensive section on Tewa place names, which Stewart called “one of the most detailed and authoritative of all studies of Indian place names” (1945, p. 445). Rather oddly, Stewart seems to have not recognized the implications of Harrington’s work for his own: Harrington was a well-known ethnographer (Stirling, 1963) and spent much of his free time in the field with his informants (ibid). Thus, “The ethnogeography of the Tewa Indians” was highly informed by the Tewa themselves. Stewart’s methodology, on the other hand, does not mention ethnological methods nor any informants or collaborators. This presents less of a problem for *Names on the land* since Stewart was a speaker of American English examining the macrostratum of the American English naming convention, but creates issues for *Names on the globe* which examines place names from other parts of the world and other languages, including non-American Englishes. Stewart perceives this as a linguistic issue, rather than one of worldview,

saying “As languages exist by the dozens and scores over the face of the earth, so also do the variations of place-name grammars...Languages of the agglutinating type, such as Turkish and Eskimo, tend to pile one qualifier upon another. Even more difficult are the languages which incorporate verbs or whole sentences into their place names” (1975, p. 33). In fact, Stewart readily acknowledges differences even between British English and North America English place names and outlines these differences extensively in *Names on the land*. Therefore, while he intended this typology to apply globally (i.e., the title of the book *Names on the globe* and his use of place name examples from Ancient Greece and the Bible), he uses English translations and assumptions that other sociolinguistic worldviews are identical to the English-speaking worldview to make the non-English data fit an English-language version of a “universal convention”; he has not attempted to grasp the “point of view”, or the vision of the world of non-English speakers (or even non-American-English speakers) through ethnography or linguistic consultation, as per the work of Boas outlined above. Therefore, although Stewart intended for his work to apply to all languages and cultures globally, it could instead be considered a survey of the names of the world from an American English perspective.

Place naming studies require a more in-depth anthropological perspective of the specific sociolinguistics of the naming group: this was one of the major contributions of anthropologists like Boas to place-naming studies. The work of anthropologists like Boas and Harrington also demonstrated that working directly with members of the cultural community in question, what would today be considered an aspect of ethnography, is a necessity, since the goal is “to grasp the [individuals]’s point of view, his relation to life, to realise *his* vision of *his* world” (Malinowski, 1922) including aspects of culture which affect place naming conventions. In many cases, place names make specific reference to cultural practices which cannot be understood by those not familiar with an associated history, set of values, and worldview. Anthropological study in regard to the culture in question is necessary in order to understand values which may influence, or even be encoded within place naming conventions, including political structures, spirituality, or historical narratives.

Culture influences not only naming patterns, but what is eligible to receive a name. Waterman (1922) outlines the stark differences in the division of landscape and in cultural naming practices when he states, “A special name will often be given to a rock no larger than a kitchen table while, on the other hand, what we consider the large and important features of a region's geography often have no names at all. Mountain ranges are nameless; there are no names for bays; in the case of one tribe, the Yurok of northern California, the rivers have no proper names of their own; and islands are nameless, almost without exception” (p. 178). He goes on to add, “The Yurok once gave me 12 place names on the slopes of a mountain” (ibid).

Since Stewart considers only the American macrostratum, he does not consider (whether intentionally or unintentionally) that Indigenous place names formulate their own naming conventions, and that each constitutes a microstratum. The few examples he takes from North American Indigenous languages are used to illustrate categories derived from an English-language worldview, instead of considering that these names may have their own distinct naming patterns. One example is the name *Oraibi*, a Hopi town in Arizona which moved locations at one point in the 19th century. Stewart uses this name to illustrate the “Relative Descriptives” category in that the new location was, according to Stewart, named *New Oraibi*. But a search of the United States Geological Survey’s Geographic Names Information System (geonames.usgs.gov) lists no “New Oraibi,” and it cannot be found on Google Maps. Whiteley (1992) indicates that “New Oraibi” actually has its own Hopi name, *Kykotsmovi* (p. 54) and this name is used on Google Maps (Google Maps, 2019). Like *Oraibi*, the information contained within Indigenous place names (which is discussed further in Section 3.5) may lend further evidence of naming categories as outlined by Stewart or may demonstrate entirely new naming categories. For example, many of the names documented in Boas’ *Geographic Place names of the Kwakiutl* (1934) appear to be based upon navigational knowledge of waterways; Afable and Beeler (1996) indicate that navigability appears to be a naming category in other Indigenous naming conventions, yet this category is not mentioned in either *Names on the land* or *Names on the globe*. Similarly, work by Basso (1984) and

Jett (2001) outlines their own analyses of place name categories and includes concepts such as navigability into or out of a canyon, and places which are named for cultural activities which are no longer practiced at that location. Such research demonstrates the still-emergent nature of place names studies, as well as the fact that further comparative work is required from within language families, between unrelated languages and in Indigenous languages before researchers could confidently call a place name typology “universal”.

Stewart’s attempts at establishing a universal typology, juxtaposed with Boas’, Waterman’s and Basso’s deeply enriched ethnographical studies, demonstrate that knowledge of a culture is necessary in addition to knowledge of linguistics when studying place names, and this can be achieved through an ethnographic approach. However, differences in environment, landscape conceptualization and landscape delineation should also be considered, since terms for physical features, in which descriptive names are often rooted, depend on the environment and the physical features themselves. These terms, called **generic**s in English Place Name Society parlance, vary from location to location by necessity; there is simply no need for a word for “sea ice” in a tropical environment the same way that there is no need for a word for “palm tree” in the Arctic. Concepts which would seem rather exotic in English make perfect sense in the context of a specific environment or geographical location. One example is the generic landscape term *karu*, shared by the Australian Indigenous languages Pitjantjatjara and Yankunytjatjara, which refers to “mostly dry depressions in the ground which sometimes contain water” (Bromhead, 2011a, p. 446). The area where Pitjantjatjara and Yankunytjatjara are spoken is in roughly in the centre of Australia, a desert environment which receives little rainfall (Bickerton, 2016). So, while the term *karu* may be translated as a *creek* in English, this word lacks the inherent understanding of the reality of life in the desert: “Terms for potential sources of water, such as *karu*, in some Australian Aboriginal languages reflect cultures in which water is a scarce resource. Moreover, words of this kind are related to water gathering practices, such as digging in the earth to uncover ground water” (Bromhead, 2011a, p. 446). It is,

perhaps, this recognition that there is a difference in perception of geographies that gives rise to the borrowing of landscape terms from one language to another: languages which arose within a specific geographic area inherently conceptualize territory and landforms which may be unfamiliar or even alien to those from outside that geographical area. For example, words such as *bayou* and *muskeg* were borrowed into English from Choctaw (West, 1954) and Ojibwe (Lee, Seo & Lee, 2015) perhaps because the first English speakers in the area were unfamiliar with the features, and it was easier to refer to them in by their non-English terms than to describe them in English and French. Such variation occurs even in Indo-European languages: the word *creek* is understood in England as an inlet stream flowing from the ocean inland, while in North America it is simply understood as a small stream (Bromhead, 2011b).

Furthermore, Burenhult and Levinson (2008) demonstrate that landscape features which appear to be identical to English landscape features vary across languages and may be delineated in ways that are not immediately obvious to those not familiar with a landscape. Levinson's (2008) work on the ontology of place in Papua New Guinea demonstrates that the Yélî language has no word equivalent to the English concept of *river*. Rather, different sections of the waterway are named according to the type of water (fresh water or saltwater) and its overall location in relation to the mountainside or the ocean. Similarly, Maracle notes that the word for 'lake' in Kanyen'kéha, *kanyatare* "is used in reference to a large body of water, such as a lake, a sea, or an ocean. However, it may also be used in reference to a wide part of a river, where it appears to be more like a lake because of its width and the distance of its opposite shore" (Maracle, 2001, p. 127). Examples such as these fall under the field of *ethnophysiography* which "studies how people conceptualize things in the landscape, especially entity types such as hills, rivers, and vegetation assemblages. Ethnophysiography aims to document in detail the terms in a language that refer to the landscape and its parts" (Mark & Turk, 2017, n.p.). Since naming practices are often rooted in the description of the physical environment, ethnophysiographical

descriptions may appear within place names and therefore, ethnophysiography is an aspect of naming which cannot be overlooked.

The information presented in this Section serves to demonstrate that the EPNS methodology was intended to study place names located within Great Britain, and therefore, it cannot necessarily be applied to other cultures, even those are situated in a geographical location in which the English language is used for communication. Similarly, because of the implications of ethnophysiography, the methodology cannot be applied to other landscapes, again, even those are situated in a geographical location in which the English language is used for communication. However, the modern-day study of place names can provide insight into a variety of linguistic, cultural and cognitive phenomena, when using a philosophical framework and methodology which takes these issues into account.

1.6 Philosophical Framework: The *O'nonna* Three-Sided Model

In his 1997 review of anthropological studies on place naming, Thomas F. Thornton states that place names “intersect three fundamental domains of cultural analysis: language, thought, and the environment” (1997, p. 209). He goes on to point out that cultural practices are situated within the environment itself and it is the job of language as a subjective product of people to describe that environment and those practices. Place names play a role in this connection as they “tell us something not only about the structure and content of the physical environment itself but also how people perceive, conceptualize, classify and utilize the environment” (p. 209). As outlined in the literature review in Chapter 1, some place name studies focussed on one aspect of place naming or confined themselves to one field of study, i.e., language (linguistics), culture (anthropology), or place (geography). In the case of Boas and his students, the addition of ethnography greatly enriched the results of their studies by adding aspects of culture

to their analysis. However, place names represent the intersection of three components or fields which should all be taken into account within a place naming study: Language, Culture, and the Physical Environment (“landscape”). This intersection is represented in Figure 2, taken from Ingram (2018).

The relationship between language, culture, and thought, and the extent of the influence of each of them upon the others is a topic that has been debated for over a century (see Leavitt’s 2006 overview). Such questions can also be considered within

Figure 2. Delineation of landscape lies at the intersection of language, culture and physical environment.

place naming, especially given that ethnophysiographical views are likely to be embodied within place names that are descriptive of landscape features and the environment. There is also the question of universality regarding what is named (i.e., physical or environmental features) as well as how they are named, both semantically (in terms of meaning) and

grammatically (how the names are used within language).

As outlined above in the explanation on ethnophysiography, clearly language encodes the landscape. In addition, Boas notes that “[g]eographical terminology does not depend solely upon cultural interests, but is also influenced by linguistic structures” (1934, p. 14); both the “geographical terminology” and place names should follow the phonological and grammatical rules of a language, and those that do not are likely to eventually undergo change to do so (as in the case of Winchester in Section 1.1). Finally, Burenhult and Levinson (2008) note in their cross-linguistic observations of landscape that “[p]erceptual salience sometimes seems to play only a minor role, while cultural and ecological preoccupations (e.g., subsistence pattern, symbolic significance, human affordance and hindrance) seem to have more profound influences” (p. 138), thus outlining cultural impact on place naming. Those undertaking place name studies must

be prepared to examine how language, culture and landscape influence one another, and as such, methodologies for the study of place naming must account for all three of these aspects. As can be seen from the summary of previous studies, the absence of one of these elements is likely to produce an incomplete analysis leading to a flawed naming typology; furthermore, this revised methodology should be transdisciplinary in nature in order to account for the elements outlined in Figure 3, which draw from these three separate fields:

Figure 3. Disciplines necessary to Place Name Studies

For this study, I have integrated these aspects to form a philosophical framework that Ateronhiata:kon Francis Boots (see Section 3.6.1) has named *O'nonna*, the Kanyen'kéha term for white ash splints which are used to make ash baskets, a staple of the Rotinohseshá:ka culture. In 2019, I began using the framework as in Figure 2 as a model to explain how an alteration in, or loss of landscape led to language endangerment. Horn-Miller and Ingram (in press) outlines how the Emerald Ash Borer beetle causes a loss of language through the inability to collect white ash trees, leading to the inability to create ash splints, and thus, the inability to create ash baskets. When I told Ateronhiata:kon about this model and explained the outcome on the ash trees, he suggested that I call the model after the white ash splints. I am honoured that a person

with such depth of knowledge of history, language and culture would suggest a name for this model, and it is named according to his most appropriate suggestion. The *O'nonna* framework is given in Figure 4, below.

Figure 4. *O'nonna* Three-Sided Philosophical Framework for Place Name Studies.

The framework, which I developed together with the methodology outlined in Chapter 2 for the study of place names, is overlaid onto the methodology. As will be seen, my own methodology has some similarities to the English Place Name Society Methodology, but also significant differences in that it is much broader in scope and more flexible; because of the addition of culture and language, it can be applied outside of the context from which it was originally conceived (i.e., the English language of North America) and more easily account for differing place naming conventions.

It is through language, and in particular, through semantics, that place names describe the importance of a location as determined by cultural, social, environmental and other values. Descriptive place names also encode ethnophysiological understandings of landscape through semantics. As such, it is the semantics of names, their meanings and the components of meaning, that may reveal patterns of salience

regarding which concepts are denoted by the names. A researcher can then infer what is important to place namers through an analysis of these patterns; for example, many instances of the concept of “fish” in a place name may lead to the conclusion that fish were an important source of food, or were culturally important to the naming group. In addition, semantic patterns can be compared and contrasted cross-linguistically to determine if semantic naming patterns show salience between different naming groups, if there are semantic concepts that are not used at all, and to answer other related questions, including, “Are there some landscape elements that are more likely to be named than others?” or “Are there some components of landscape elements that are not named?” Research into place names can, in this way, help us to understand the overarching theme of how humans conceptualize space and place through language.

Grammatical mechanisms, or how place names are constructed within a given language, may also reveal insights into human cognition; like semantic patterns, there may be patterns in what types of grammatical categories are used in place names. For example, English utilizes nouns and adjectives, such as in the names “Deep River” or “Lake Placid” to create the generic + specific grammatical pattern outlined above. Again, comparing and contrasting grammatical patterns cross-linguistically may lead to a better understanding of human cognition in general. If all humans use a specific semantic concept to denote space even within the diversity of global environments and sociocultural values, it may relate to the overall human experience. Likewise, if all humans utilize a certain naming pattern even given the diversity of language typologies, this may reflect a universal pattern not just of language, but of the way we, as humans, see and think about our world.

Nested within these ideas lies the hypothesis of Linguistic Relativity (often called the “Sapir/Whorf Hypothesis” (Lucy, 2015)) which asks, essentially, “How much does the language a person speaks influence how they think?” The hypothesis theorizes a spectrum from a weak influence (i.e., language does not influence thought, or influences it very little) to a strong influence (in other words, language shapes every aspect of cognition, also known as linguistic determinism). However, other factors, such as

culture, may also influence cognition (see, for example, Miyamoto, 2013). The hypothesis has specific implications for the study of place names in terms of both the grammatical and semantic constraints of the language. If the same semantic concepts and linguistic patterns are expressed cross-linguistically despite differences in grammar and semantics, I would hypothesize that language does not have a strong influence upon place naming, and rather that something else (spatial perceptions, for example), does; likewise, if semantic concepts and linguistic patterns are completely dissimilar, and seem to be used exclusively within a single language, I would hypothesize that language structure and semantics likely does play a role in place naming.

In preparation for this study, I began with two major research questions that were then subdivided into smaller questions which will be outlined in more detail in Section 2.8. Because naming conventions are based upon the semantics of place names, the first research question is, “What do the place names under study mean?” As I show in Section 2.8, in the context of the language studied here, Kanyen’kéha, much of the semantic content of the language lies in nominal and verbal roots, and this is where I direct much of my attention. A second research question also relates to roots, but also speaks to a naming convention built upon the semantics of these roots: “Given the meaning of these roots, do these place names appear to fit into previously-theorized place naming categories, or do they represent new categories?” Since grammar also represents a constraint on place names, another question to be asked is, “Are there any grammatical patterns in the place names that can be discerned?” The answers to these questions help to piece together the major question asked in this dissertation, “How is place named in Kanyen’kéha?”

The remainder of the dissertation outlines the application of the *O’nonna* Place Name Framework and Methodology in the examination of the place names of Kanyen’kéha, a language of the Northern Iroquoian branch of the Iroquoian language family. As will be outlined in Section 2.7, some of these names have been surveyed in the past, but, to date, no comprehensive or large-scale study has been undertaken. Chapter 2 also provides a general introduction to the geographical, historical and

linguistic background of the Kanyen'kehá:ka and the landscape and physical geography of their traditional territory. As will be seen in Chapter 2, circumstances of colonization, language shift from North American Indigenous languages to colonial languages such as English and French, and the displacement of the Rotinonhseshá:ka from their traditional homelands should be considered and accommodated within the methodology in order to accurately study Kanyen'kéha place names.

Chapter 2: Introduction to the Rotinonhseshá:ka and Kanyen'kehá:ka

This chapter offers some basic background on the components outlined in the philosophical framework introduced in Chapter 1, namely, an introduction to the landscape, some important cultural aspects and the language of the Kanyen'kehá:ka and the larger socio-political group to which they belong, the Rotinonhseshá:ka.

2.1 The Rotinonhseshá:ka

As outlined in the “Conventions” section on page 1, the Kanyen'kehá:ka are one of six present-day members of a union of individual Peoples known as the Rotinonhseshá:ka, Haudenosaunee, Iroquois Confederacy, Six Nations of the Iroquois, or simply the Six Nations. Established prior to European arrival in North America, the Rotinonhseshá:ka is comprised of the *Kanyen'kehá:ka* (Mohawk), the *Onyota'a:ka* (Oneida; Oneida Nation of the Thames, 2016), the *Onoñda'géga'* (Onondaga; Eberhard, Simons & Fennig, 2019), the *Gayogghó:nq'* (Cayuga; ibid) the *Onödowá'ga:* (Seneca; ibid), and the *Skarù·rę?* (Tuscarora, Montgomery Hill, p.c); the *Skarù·rę?* were not an original member of the Iroquois Confederacy, having moved from what is today part of North Carolina to come under the protection of the Confederacy sometime between 1714 and 1722 (Tuscarora Nation, 2019). The Rotinonhseshá:ka have been “[u]nited for hundreds of years by traditions, beliefs and cultural values” (Onondaga Nation, 2018) as well as a common language family (Iroquoian), matrilineality (the tracing of one's familial lineage through the mother's bloodline), and agricultural practices including companion planting of maize, beans and squash (Hart, 2008). Because of the nature of this historical, political and cultural union as well as the close proximity of the Peoples to

one another, it is important to understand the Kayen'kehá:ka not only as an individual entity, but also within the context of the Rotinonhseshá:ka. Many cultural elements overlap between member entities; some of these elements may no longer be practiced but have been historically documented. Therefore, in order to be both respectful and informed as to some of the cultural aspects which might potentially appear in place names, it was important to me to engage with this documentation in order to supplement work directly with the place namers (in this case, members of the Kayen'kehá:ka, see Section 3.5). I do not consider this to be a substitute to immersion within the culture; in other words, I bring an outsider perspective to the work of documenting and understanding Kanyen'kéha place names while the Kanyen'kehá:ka themselves provide an inside perspective. However, being well-informed of cultural aspects makes discussion of the names and possible naming convention with those who hold the insider perspective more efficient as they potentially do not need to provide a lengthy explanation of a cultural component.

The Rotinonhseshá:ka are one of the best-known and most robustly studied Indigenous groups in North America, and academic material on Rotinonhseshá:ka history, culture, cosmology and politics is extensive; however, sources originating from outside the Rotinonhseshá:ka should be viewed within the context and limitations of the “researcher-subject” framework in which they were originally conducted. Furthermore, while there is value in an outsider perspective of a people and their cultural traditions, an informed perspective also includes Rotinonhseshá:ka views of themselves. Hill (2017) specifies that “Due to the limitations of translating between languages that are based within very different world views, as well as the frequent biases of the European-speaking interpreters, the texts produced through these translations produced many shortcomings. Even later translations...cannot make up for the concepts that exist in one culture but not in the other” (p. 16). Comprehensive general overviews from non-Indigenous sources include Hale's *The Iroquois book of rites* (1883/1989), Beauchamp's *A History of the New York Iroquois* (1905), *The Iroquois* (Snow, 1996), and Fenton's *The Great Law and the Longhouse: A Political History of the*

Iroquois Confederacy (1998). Morgan worked closely with the Onödowá'ga: to produce the ethnography *League of the Ho-dé-no-sau-nee or Iroquois* (1851). Studies by Rotinonhseshá:ka researchers include the work of Arthur C. Parker (Onödowá'ga), J. N. B. Hewitt (Skarù-rę?), and most recently *Kayanerenkó:wa: The Great Law of Peace* (2018) by Kayanesenh Paul Williams (Kanyen'kehá:ka) and *The Clay We are Made Of* (2017) by Susan M. Hill (Kanyen'kehá:ka). For the purposes of this dissertation, part of the entry for each individual Kanyen'kéha place name includes relevant historical, political, cultural and/or spiritual information since all of these concepts are interrelated and should not be separated from each other or considered in isolation (see Chapter 5).

2.2 Geography and Physical Environment of the Rotinonhseshá:ka Homeland

The traditional territory of each of the Rotinonhseshá:ka is situated in what is today known as New York State in the northeastern part of the United States. The state is bordered on the north by Lake Ontario, Lake Erie, and the Canadian provinces of Ontario and Quebec, on the East by the states of Vermont, Massachusetts and Connecticut, Long Island (part of New York State) and Long Island Sound (part of the Atlantic Ocean), to the South by the Atlantic Ocean and the states of New Jersey and Pennsylvania, and to the west by the state of Pennsylvania. The area of the state is comprised of approximately 75,983km²/47,213.79 square miles (New York State Department of Health, 2006). The landscape of New York has been described as “unparalleled in its rich variety and beauty. The mountains, valleys and rivers as well as the beaches, towns and cities of New York have been a subject of interest to artists, photographers, historians, and scientists alike for hundreds of years” (New York State Museum, 2019). The ancient and complex geological history of this region has created a unique physical environment that has been divided into eleven different geological regions (or “provinces”), as outlined in the map given below as Figure 5.

Figure 5. The Physiographic Provinces of New York state. (Adapted from NYS Department of Transportation, 1995/2013)

There are several areas of significant elevation above sea level: these include four mountainous areas (the Adirondack Mountains, the Hudson Highlands and Manhattan Prong, the Taconic Mountains, and the Catskill Mountains), and two plateaus (the Allegheny Plateau and the Tug Hill Plateau) (NYS Department of Transportation, 2013). The Adirondack Mountains (Region 1a, 1b and 1c in Figure 7) cover approximately 200 km² (Isachsen, Landing, Lauber & Rogers, 2000) and the highest point in the state, Mt. Marcy is located in this area at 5,379 feet above sea level (Tarr, 1902, p. 14). The Hudson Highlands (4) and Manhattan Prong (4c) comprise an area of low mountains and hills in southeastern New York in the vicinity of the Hudson River, with the Taconic Mountains (5) on the eastern side of the Hudson running along the border between New York state, Massachusetts and Connecticut. The Catskill Mountains (3) are actually the highest points of the Allegheny Plateau (2) which makes up much of the southern

half of the state, and both are part of the Appalachian mountain chain (ibid). Finally, the Tug Hill Plateau (6) is known for its extensive forests and lake effect snowstorms due to its proximity to Lake Ontario and 2,000-foot elevation (Nature Conservancy, 2019).

These varying elevations create 17 different watersheds throughout the state (NYS Department of Environmental Conservation, 2018), and are detailed in Appendix A. The creeks and rivers which form these watersheds, or drainage basins, have carved their way through many of the elevated regions, creating distinctive landscape features such as the gorges found in and around Ithaca, “the Noses” where the Mohawk River “breaks through mountain barriers in a deep, rocky ravine” (French, 1860, p. 22), and Niagara Falls. Prior to roads and railways, water was “the most easy means of communication between distant portions of the State...The most important lines of early inland navigation were, first, N. from Albany, through the Hudson to Fort Edward, thence a portage to Fort Ann, and thence by Wood Creek to Lake Champlain; and, second, w. from Albany, by way of the Mohawk, Wood Creek, Oneida Lake, and Oswego River, to Lake Ontario. Upon the latter route were portages at several of the rifts of the Mohawk, from the Mohawk to Wood Creek, and at Oswego Falls” (ibid, pp. 22-23).

Other natural features of the state include iron and lead deposits, limestone, red sandstone, gypsum, clay, and slate (ibid, p. 26). French (1860) notes that the streams and rivers of the St. Lawrence Lowlands are “usually very dark, being colored with iron and the vegetation of swamps” (p. 21) and that St. Lawrence and Jefferson counties (two of the northernmost counties of the state, where these streams are located) are rich in iron and lead deposits (p. 21). A number of caves and caverns as well as “kettle hole” formations have been formed in the erosion of limestone through water flow in Albany, Schoharie and Jefferson counties, (Tarr, 1902, p. 131). Tarr (ibid) notes that these caves and caverns are also related to an abundance of springs, with French noting the salt springs near Onondaga, medicinal springs of Saratoga, and the springs of the western part of the state which emit nitrogen and methane (p. 26). As will be shown in Chapters 5 and 6, many of these physiographical elements have been encoded into the Rotinohseshá:ka place names of the region.

The original five members of the Rotinohseshá:ka are represented on the Hiawatha wampum belt (Onondaga Nation, 2019), a set of strings of beads made from whelk and quahog (clam) shells and arranged in pattern which serves as a mnemonic device for the agreement made to form Rotinohseshá:ka (Onondaga Nation, 2018). The belt not only encodes each Nation's agreement to adhere to the Kayanerenkó:wa (translated by Kayanesenh Paul Williams as "The Good Message of Peace, Power and Righteousness" (2018, p. 1)), and can understood as symbolic of the Longhouse, the traditional structure found within Rotinohseshá:ka villages which housed its members (Horn-Miller, p.c.). The longhouse also creates a spatial metaphor, and this is reflected in the Hiawatha belt (ibid): each square represents the geographical location of the nations from East to West or vice versa, connected by a white line representing peace (Onondaga Nation, 2018).

Figure 6. The Hiawatha Belt serves as a mnemonic device for both the agreement of the Nations as well as geographic location. Image public domain.

The Kanyen'kehá:ka are considered the "Keepers of the Eastern Door" and the Onödowá'ga the "Keepers of the Western Door" (ibid). The Onoñda'gega', located at the Central Fire or "capital" of the Rotinohseshá:ka, are represented by the White Tree of Peace, one of the national symbols of the Rotinohseshá:ka. Figure 7, below,

demonstrates the spatial metaphor using a New York state map overlaid with the figures of the Hiawatha belt.

Figure 7. The Hiawatha belt serves as a spatial metaphor for the position of the Six Nations. (Basemap © Mapbox, 2019; Hiawatha Belt via Onondaga Nation, 2018).

2.3 Rotinohseshá:ka Water Travel and National Territory Boundaries

Several major bodies of water lie within Rotinohseshá:ka territory. Billy Two Rivers, Kanyen'kehá:ka from Kahnawà:ke, describes the importance of the waterways in the KahnawakeTV episode "Seigneurie of Sault St. Louis Land Grievance": "Our people used the water systems around them. They settled by the water for many reasons. The Mohawk River...would take you to Ohsweken, or how it's now known as 'Lake Erie'...which leads back to the St. Lawrence. Our people lived inside the circle of rivers. We used them to travel to our lands" (KahnawakeTV, 2012). While also making use of overland runners as messengers between villages in close proximity to each other as well as utilizing other known footpaths (Wallace, 1965), the Rotinohseshá:ka, like other Indigenous Nations, held extensive knowledge of, and made use of these waterways.

Halsey (1901), following Morgan (1851), points out that Tioga Point (modern-day Athens, Pennsylvania, located just south of the New York state border) marks the conjunction of the Susquehanna, Unadilla and Chemung Rivers, all rivers within Rotinonhseshá:ka territory, and was a “great central point of meeting” (Halsey, 1901, p. 30). The importance of waterways to the Rotinonhseshá:ka is demonstrated in a letter from Indian Agent William Johnson to Lord Hillsborough in 1768, who writes of the insistence by “the Indians” on a treaty boundary line which they wished to be “carried to Canada Creek, where it falls into Wood Creek, which last mentioned Water emptys into Oneida Lake”, explaining that “Their Towns & Settlements are therefore secured to their satisfaction by Extending the Line to the Waters which discharge themselves into Lake Ontario” (O’Callaghan, 1850, p. 532). In fact, Rotinonhseshá:ka water travel was recorded as far away as Kaskaskia (near modern-day Peoria, Illinois) on the Mississippi River (Parkman and Levin, 1983, over 1000 kilometers from the western-most Rotinonhseshá:ka nation (Google Maps, 2019a).

It is also probable that the waterways also helped delineate “jurisdiction” and (terms more appropriate to the ideas of territorial boundaries rather than “land possession” and areal or administrative borders) colonial maps often assign possession to waterways, as is the case with a 1759 map by Pfister which labels the Mohawk River as the “Mohawks River” (Pfister, 1759) and Sauthier and Fadden’s 1776 map, which labels the western branch of the Delaware River as “Mohawks Branch of the Delaware”. Although a colonial convention, these labels help to establish a general sense of overall delineation of individual Rotinonhseshá:ka Nations.

There were also specific landmarks that marked Nation jurisdiction (Beauchamp, 1907). This may present a problem in that some of the landmarks mentioned in historical texts have been removed or altered by settlement and/or industrialization; however, others still exist in the present day. Skenandoah (English name John Skenandoah), an Onyota’a:ka man who outlined some Rotinonhseshá:ka geography in several letters published in the *American Whig Review* in 1847, mentions many of these; for example, he states that the boundary between the Onoñda’géga and Onyota’a:ka

Figure 8. New York State historical marker for "Deep Spring" in Manlius, NY. Via MTBradley [Public domain].

was "Deep Spring" at what is today called Manlius, New York. Although a New York state historical marker exists on Route 173 in Manlius with the name "Deep Spring", the whereabouts of the spring itself are unknown. However, Skenandoah gives other geographical information that includes major physical features, such as rivers, which can help to determine more specific, if imprecise, boundaries between Rotinohseshá:ka members. These will not be explored here since the focus is on one particular Nation, the Kanyen'kehá:ka; the delineation of their territory is outlined in 2.6.1.

2.4 Rotinohseshá:ka and Colonial History

In 1534, Cartier made contact with the Laurentian people, a group of Iroquoians related to the Rotinohseshá:ka, during his voyage up the St. Lawrence River, the first European documentation of an encounter between Europeans and Iroquoians (Snow, 1996). European trade goods began to trickle into the interior of northeastern North America via the St. Lawrence River and Chesapeake Bay, but direct contact between Rotinohseshá:ka and Europeans did not occur until Champlain engaged in armed conflict with them in order to solidify his relationship with the Algonquian Nations in 1609 (Hackett Fischer, 2008). In the same year, Henry Hudson sailed up the river now bearing his name on behalf of the Dutch East India Company, paving the way for the establishment of the colonies of New Amsterdam and Fort Orange in 1623-24 (Jacobs, 2009). According to Hill (2013), the Dutch and Rotinohseshá:ka entered into a Treaty relationship in 1613, called in Kanyen'kéha *Tekani Teyothata'tye Kaswenta* and known in English as the Two Row Wampum, which guided trade, political and personal relations between the two groups. The Mohawk River provided a direct route between

Rotinonhseshá:ka territory and the settlements along the Hudson River, and from the Hudson River to New Amsterdam (present-day New York City) on the Atlantic Coast. Harmen Meynderts van den Bogaert visited Kanyen'kehá:ka territory in the winter of 1634-5 (Snow, Gehrig and Starna, 1996) which marked a beginning to a constant stream of travelers to and from Rotinonhseshá:ka territory. These travelers included not only Dutch colonists, but French clergy and traders as well, as evidenced by the documented presence of Jesuit Isaac Jogues in 1642 and Pierre Esprit Radisson in 1651, both in Kanyen'kehá:ka territory. An Onoñda'géga' parlay with the French at Montréal led to LeMoyne's journey to Onoñda'géga' territory in 1654 (ibid) and the establishment of the St. Marie Among the Iroquois mission at Onontá:ke (outside of modern-day Syracuse, NY) in 1655 (Metz, 1995).

In 1664, the colonies of the New Netherlands were ceded to the British, and the Two Row Wampum was extended to the British in the form of the Covenant Chain (Snow, 1996). A treaty was also struck with the French in 1665, after which "mission villages" and trading posts were established to enable freer trade and, as the French hoped, easier conversion to Christianity (Parmenter, 2010). Kahnawà:ke was the first of these, followed by Kanehsatá:ke, established in 1717, on condition that the Mohawks left Montréal (Tiohtià:ke) (ibid). The Rotinonhseshá:ka maintained the practice of moving villages every 10-20 years for better access to natural resources and to allow agricultural areas to replenish themselves (ibid). Oswegtchie and Akwesashne were both a result of this practice, with some people relocating in response to an increase in population, for better access to trade, or to better hunting (Parmenter, 2010). These villages also provided the French, who helped to establish these dual-purpose villages, a buffer zone from the English (ibid).

Refugees fleeing ongoing conflict in Europe were sent to the then-Province of New York and, in the case of the Palatine Germans, resettled in the vicinity of the Kanyen'kehá:ka around 1708 (Cobb, 2006). Conflict between France and England over the control of North America came to a head in what could be considered the backyard of the Kanyen'kehá:ka on September 8, 1755 at the Battle of Lake George which pitted

not only the French and English against each other, but also Kanyen'kehá:ka allied with the French via the mission at Kahnawà:ke against Kanyen'kehá:ka allied with the British (Berleth, 2009). This marked the beginning of the French and Indian War, also known as the Seven Years' War in North America, which culminated in the Battle of the Plains of Abraham of Quebec and finally, the Treaty of Paris in 1763, in which France ceded "Canada and all its dependencies" to the British (Government of Canada, 2019). Parmenter (2007) emphasizes that, although Rotinohseshá:ka participated "in colonial North American campaigns from 1676 to 1760, the Iroquois developed an ethic of mutual nonaggression between warriors allied to competing colonial armies" (p. 40). However, a little over a decade after the close of the French and Indian War, during the American Revolutionary War which began in 1775, four of the Six Nations of the Rotinohseshá:ka, including the Kanyen'kehá:ka, sided with the British (Berleth, 2009, p. 242). At the close of the war, the Sullivan-Clinton military campaign effectively destroyed all British-allied Rotinohseshá:ka villages and fields in order to subdue those Nations, forcing many Rotinohseshá:ka to resettle in British Canada (ibid). Kahnawà:ke served as a sort of muster point, and many Rotinohseshá:ka departed from Kahnawà:ke for Akwesashne, Kehntè:ke (Tyendinaga) or the Grand River Valley (Okwáho, p.c.).

These events provide the backdrop, and often the motivation, for the exchange of spatial information in many different formats: orally, as Kanyen'kéha, English, French, Dutch, German, etc., and inserted into letters and journals in the aforementioned languages as "words" and as place names on maps.

2.5 Rotinohseshá:ka Languages

The languages spoken by the Rotinohseshá:ka are, as previously mentioned, part of the Iroquoian language family which comprises two branches and several subbranches. The Northern Branch of this family includes Wendat (and its modern-day descendant, Wyandotte), all five original Rotinohseshá:ka languages (see 2.1.1), Skarù·rẹ?, and several Iroquoian languages which are today dormant and known only through historical documentation, including Nottoway, Susquehannock, and Laurentian

(Julian, 2010). The Erie language is known to have been Iroquoian, but no known documentation exists (ibid). The southern branch of this family consists solely of the Tsalagi (Cherokee) language.

The Iroquoian language family tree is presented in Figure 9, below, based on Julian (2010).

Figure 9. Iroquoian Language Family Tree.

2.5.1 Phonology

One of the most striking features of the Rotinonhseshá:ka languages is their lack of bilabial consonants. Some present-day varieties of these languages exhibit *p/b* and *m* (Bonvillain, 1973), but this may be a case of a sound change accelerated by English, French or Dutch influence, rather than language-internal sound change; this argument becomes more robust when considering that neither the phonemic inventory of Proto-Iroquoian nor that of Proto-Northern-Iroquoian contains bilabials (Julian, 2010), but Tsalagi (Cherokee) does: an *m* which appears to have developed from *w* + V (ibid). Another relevant and interesting phonological issue is that of an alveolar phoneme that

has been represented in various ways in the literature due a lack of consensus as to its full nature. According to Woodbury (1981), this phoneme, represented here as *r is reconstructed in Proto-Northern-Iroquoian with the following reflexes in Table 3, below:

Table 3. Reflexes of Proto-Northern-Iroquoian *r.

Language	Reflex Phoneme	Source
Kanyen'kéha	l	(Julian, 2010)
Onyota'a:ka	l	(Julian, 2010)
Onoñda'géga	∅	(Woodbury, 1981)
Gayogohó:nq'	ɹ	(Julian, 2010)
Onödowá'ga:	∅	(Woodbury, 1981)
Skarù·rę?	r	(Woodbury, 1981)

Woodbury (1981) states that the loss of this phoneme in Onoñda'géga occurred “sometime after 1750 and before 1852” (p. 103), which will have specific implications for the present work.

Stress, epenthesis and syllable structure vary within the Rotinohseshá:ka languages and therefore will be covered in section 2.6.2 in regards to Kanyen'kéha only, or in specific place name examples as needed.

Despite the geographic distance between them, based upon a 100-word Swadesh list, Julian (2010) estimates a shared Swadesh vocabulary between all Rotinohseshá:ka languages (including Skarù·rę?) of no less than 65%, up to a 95% shared Swadesh vocabulary between Kanyen'kéha and Onyota'a:ka. Therefore, it would not be surprising to find shared semantic components, patterns and structures between languages.

The Iroquoian languages share a number of interesting features which are outlined in the subsections below.

2.5.2 Morphology and Syntax

The linguistic structure of Rotinohseshá:ka languages makes an analysis of words and phrases, including place names, complex, and requires strict attention to

grammatical functions for analysis. The Kanyen'kéha examples in Table 4 all appear very similar and differ in only very minor ways, in some cases by a single sound, making minimal or near-minimal pairs:

Table 4. Kanyen'kéha near minimal pairs.

Root or Word	Meaning	Source
<i>-kwaront-</i>	'to have a bulge'	Michelson (1973), p. 140
<i>karón:ta</i>	'log' or 'tree trunk'	Maracle (2001), p. 131
<i>-kahront</i>	'something having a hole in it'	Michelson (1973), p. 65

Although *-kwaront-*, *karón:ta* and *-kahront* appear very similar to each other, they each have different morphological requirements which must be fulfilled in order for them to be used as part of a grammatical utterance. The root of *karón:ta*, the second example in Table 4, is *-ront-*, a nominal root which requires the nominal prefix *ka-* and the nominal suffix *-a*. Both *-kwaront-* and *-kahront* are verbal roots which require prefixes in order to be considered grammatically correct as well: *-kwaront-* may take the pronominal prefix *ka-*, but *-kahront* must take a different class of pronominal prefix, such as *ik-* (Michelson, 1973). Furthermore, *-kwaront-* requires one of several suffixes while *-kahront* does not. This information can be used to discern the actual morphemes used within place names in the face of near-minimal pairs such as these, coupled with the complexities of language contact (see Chapter 4).

The Rotinonhseshá:ka languages are structurally polysynthetic and inflectionally rich, making them markedly different from Indo-European languages such as English, Dutch or French which demonstrate typologically isolating characteristics. The Rotinonhseshá:ka languages do exhibit some free morphemes, such as particles (for example, Kanyen'kéha *tsi*—'that', *oh*—'what', *tanon*—'and') and some free pronouns (for example, Kanyen'kéha *i'i*—'I', *raonha*—'he') which have no internal structure, but the vast majority of morphemes are bound: nominal and verbal root morphemes carry semantic content and, for the most part, obligatorily take various prefixes and suffixes which must all be joined together in order to form a grammatical phrase (Mithun, 1996).

Roots may be modified with prefixes or suffixes to create a verbal or nominal stem, and also allow for the “stacking” of affixes, since concepts such as size, position, authenticity, and utility are encoded within prefixes and suffixes (ibid). As a result, the concepts of “nouns” and “verbs” appear more like “noun phrases” and “verb phrases” than in Indo-European languages. In particular, noun phrases can be more “noun-like” in that they behave structurally like the English grammatical concept of nouns, or more “verb-like”, in that they function as nouns, but behave structurally like the English grammatical concept of verbs (Ontario Ministry of Education, 2011). In addition, single affixes often encode multiple grammatical concepts (Mithun, 1984; Chafe, 2012; Baker, 1996). These phenomena are illustrated below in Example (1) from Kanyen’kéha.

Example 1.

<i>ra-</i>	<i>-nón:we’-</i>	<i>-s</i>	<i>ako-</i>	<i>tyá:’tawi</i>
3.M.S.AN>3.S.INAN-	-like(v.)-	-HAB	POSS.F.S-	dress(n.)
‘He likes her dress.’				

(Baker, 1996, adapted by Ingram and Owennatekha Brian Maracle (p.c), 2018)

In this example, the first phrasal structure is comprised of a verbal root *-nonhwe’-³*, (‘like’) which may take several optional prepronominal prefixes (not found in the example), a pronominal transitive prefix *ra-* (used for actions by masculine animate nouns on inanimate nouns), and the suffix *-s* which marks habitual aspect. The second phrasal structure is comprised of a nominal root *tyá:tawi* (‘dress’) together with its nominal prefix (the feminine singular possessive *ako-*).

The Rotinonhseshá:ka languages also feature incorporation and allomorphy, two aspects of morphosyntax with major implications for the present study. Incorporation consists of embedding a noun root into a verb stem to create a structural verb which “modifies the meaning of the verb and makes it more specific by relating the action of the verb exclusively to the object designated by the noun” (Ontario Ministry of

³ The form of the root given here, which is an abstract unconjugated form, differs slightly from the conjugated verb in the example above due to morphophonemic alternations that take place with certain affixes.

Education, 2011, p. 103). Example 2, below, demonstrates the syntactic and semantic effects of incorporation in Skarù·rẹʔ.

Example 2.

/-rəʔn-/							'log'
/u-	-rəʔn-	-e	waʔ-	-t-	-k-	-ù:rə-	-ʔ/
NPFx-	-(n.)log-	-NSFX	AOR-	-DU-	-1.S-	-(v.)split-	-AOR

'I split a log.'

/waʔ-	-t-	-k-	-rəʔn-	-ù:rə-	-ʔ/
AOR-	-DU-	-1.S-	-(n.)log-	-(v.)split-	-AOR-

'I log-split.'

Source: Mithun, 2000, adapted by Ingram, 2019

Allomorphy, the situation in which a single morpheme may be realized in several different forms as the result of phonological or morphological circumstances, occurs in the Rotinohsheshá:ka in response to incorporation. Many verbal roots feature one of these different forms, known as an allomorph, which is used when a noun is incorporated into the verbal root, as given in (3), below, taken from Onödowá'ga:

Example 3.

Unincorporated Verb	Incorporated Allomorph	Meaning
-aʔse-	-e-	'fall'
-nɔʔnɔwe-	-nɔwe-	melt

Source: (Chafe, 1967)

The next two sections narrow the focus of geography and linguistic phenomena to the Kanyen'kehá:ka themselves. Section 2.6.2 discusses Kanyen'kehá:ka geography, and 2.6.2 outlines specifics of the phonology, morphology and syntax of the Kanyen'kéha language.

2.6 The Kanyen'kehá:ka

2.6.1 Geography

In order to provide a more in-depth discussion of the geography of Kanyen'kehá:ka territory, it is necessary to delineate the boundaries of that territory. Skenendoah delimits "Mohawk territory" as extending to the Hudson River on the east

(1847); a northeastern boundary is also delineated in Lake Champlain at Rock Dunder in present-day Shelburne Bay, Vermont as documented by Day (1981, 1998). Day also helps to delineate the northern boundary: Lake Champlain connects directly with the St. Lawrence River via the Richelieu River, flowing through the modern-day province of Quebec, and two modern-day Kanyen'kehá:ka communities (Kahnawà:ke and Akwesashne) are located on the St. Lawrence River, which establishes the northern boundary. While the western boundary, the boundary between the Kanyen'kehá:ka and Onyota'a:ka, was unknown according to Skenandoah in 1847, Halsey (1901) states that the Unadilla River is the dividing line between the Kanyen'kehá:ka and to the east and the Onyota'a:ka to the west (p. 16). The Unadilla River joins with the Susquehanna and Chemung Rivers at Tioga, which, as stated above, marks a meeting point of significance to the Rotinonhseshá:ka.

I have used the information from Skenandoah, Halsey, Day and Beauchamp to create a sketch of approximate Kanyen'kehá:ka territory. Using these boundaries, I limited the compilation of place names to within, or in close proximity to, this territory, unless a source specified that a name outside of this area was of Kanyen'kéha origin, or some other factor led me to believe that the name was Kanyen'kéha. The north, south, east and western delineations described in this section are shown as a gray line in Appendix C. The Kanyen'kehá:ka "boundaries" mentioned by Skenandoah are given in red, and the Onyota'a:ka "boundary" is given in yellow. This is an "outline" of the Kanyen'kéha geographic area under study for the present work.

The traditional territory of the Kanyen'kehá:ka, eastern-most of the Rotinonhseshá:ka, was centred around the river bearing their English name, the Mohawk River valley outside of present-day Albany, New York. Snow, Gehring and Starna (1996) state that this river valley "has been a major corridor linking the Atlantic Coast to the interior of North America for thousands of years" (p. xviii). At around 150 miles long, the river is situated on the Hudson-Mohawk lowlands, which is essentially a large valley carved through the relatively soft bedrock of shale, sandstone and limestone, leaving the surrounding, harder bedrock of the Adirondacks and the

Appalachian Mountains standing at a higher elevation (Isachsen, Landing, Lauber & Rogers, 2000); evidence of this erosion can be seen at Little Falls, a deep gorge cut by the river itself (New York State Department of Transportation, 2013) as well as in the geological phenomenon known as “kettle holes”, round holes in limestone or other soft rock created either by the melting of a block of glacial ice, or by the continuous grinding of granular material against limestone in a circular motion (ibid).

Since it is clear from French, Dutch and English historical documentation that the Kanyen’kehá:ka were prolific travelers, it is necessary to understand the landscape from a more regional perspective as well. Extending to the St. Lawrence River to the North, this region is comprised of several of the physiographic provinces shown in Figure 5 including the Hudson-Mohawk Lowlands (9), parts of the Erie-Ontario Lowlands (8), the St. Lawrence-Champlain Lowlands (11), the Adirondack Mountains (1) and parts of the Allegheny Plateau (2). The Erie-Ontario Lowlands and the St. Lawrence-Champlain lowlands are both low-lying areas adjacent to Lakes Erie and Ontario, and the St. Lawrence River and Lake Champlain, respectively. The lowland which divides these two ranges is a sandy flat just north of Albany, near the Mohawk River (New York State Department of Transportation, 2013). The Allegheny Plateau (2) is situated directly south of the Mohawk-Hudson Lowlands, separated on the east by an escarpment just west of Albany, NY (ibid). This is considered part of the Appalachian Plateau which extends south into Tennessee. The southeastern part of the plateau, nearest to the Mohawk River, also features long, deep ravines and valleys, some of which have filled with water to create the distinctive Finger Lakes. While the Tug Hill Plateau and the Adirondacks are both highlands, the Tug Hill Plateau is part of the Appalachian Mountain Range and is unrelated to the Adirondack Mountains. Both areas, however, are very rocky with sandy or gravel-filled soil and have a tendency to be swampy where upland areas do not drain (French, 1860).

The Adirondacks are also interesting from a naming perspective in that the name is derived from the Kanyen’kéha language; Prince (1900) states that this term “takes its name from a well-known Mohawk word *rătīrōntăks*, ‘they eat trees’” (p. 123). While the

morphology and definition of this word are accurate, the name “Adirondacks” was applied to this mountain range by Ebenezer Emonds, a non-Indigenous geologist for the New York State Geological Survey (Cherniak, 2005). At least one other name, “Tawahus,” found in the vicinity of the High Peaks area of the Adirondacks, appears to be of Indigenous origin, but to date I have not seen any mention of this name in any of the literature or historical documentation predating 1800, and therefore it is possible that Emonds also provided this name as well. This has particular implications in that there may be an ethnophysiological difference between European languages, which have a tendency to name mountain ranges, and Kanyen’kéha, which may not name single mountains, or mountain ranges, at all.

The next section discusses the unique qualities of Kanyen’kéha which set it apart from the other Rotinonhseshá:ka languages.

2.6.2 Language

2.6.2.1 Phonology and Morphosyntax

Consonant and vowel inventories for Kanyen’kéha⁴ are given in Tables 5 and 6, below. Of particular importance to this study is the aforementioned lack of a bilabial consonant series⁵ (see Section 2.5.1) and the presence of nasalized vowels.

Table 5. Kanyen’kéha Consonant Inventory.

	Alveolar	(Pre-)Palatal	Velar	Glottal
Stop	<i>t</i> [t, d]		<i>k</i> [k, g]	’ [ʔ]
Affricate	<i>ts</i> [tʰ, dʒ]			
Nasal	<i>n</i> [n]			
Fricative	<i>s</i> [s, z]			<i>h</i>
Rhotic	<i>r</i> [ʀ [ʁ]			
Glide		<i>y</i> [j]	<i>w</i>	

⁴ Julian (2010) provides evidence that /ts/ and /kʷ/ historically behave like phonemes rather than consonant clusters, specifically in regard to their modern reflexes in Tsalagi (Cherokee).

⁵ It should be noted that the bilabial stop *p* (together with its voiced allophone [b]) and the bilabial nasal *m* occur in Kanyen’kéha spoken in Akwesashne, but Bonvillain (1973) considers this to be due to French and/or English influence.

Source: Ingram, Anonby and Taylor, 2019. Phonetic equivalents are provided for consonants and vowels whose phonetic value varies or whose phonemic transcription is not based on the IPA (International Phonetic Alphabet).

Kanyen'kéha has retained *r as [ʀ] in Kahnawà:ke, [ʀ] or [l] in Akwesashne, [ʀ] in Tyendinaga, and [ʀ] at Six Nations of the Grand River⁶. The Onyota'a:ka language, more closely related to Kanyen'kéha than the other Rotinohseshá:ka languages (see Figure 9), realizes this phoneme as [l]. Okwáho, a speaker from Akwesashne notes that Onödowá'ga: and Onoñda'géga "shorten" Kanyen'kéha words (p.c.); this statement may reflect the fact that *r (or in Proto-Northern-Iroquoian, *ɽ) has been lost in both languages, and replaced with compensatory vowels (Julian, 2010), although other factors may also be at play which are beyond the scope of this dissertation.

The language has a symmetrical inventory of six basic vowel qualities, which can be either short or long, and includes two nasalized vowel categories:

Table 6. Kanyen'kéha Vowel Inventory.

	Front	Central	Back
High	<i>i, i:</i>		<i>on</i> [ũ], <i>on:</i> [ũ:]
Mid	<i>e, e:</i>	<i>en</i> [ẽ], <i>en:</i> [ẽ:]	<i>o, o:</i>
Low		<i>a</i> [a~a], <i>a:</i> [a:~a:]	

(Source: Bonvillain, 1973, Mithun, 2004, adapted by Anonby and Ingram, 2018)

Vowel length is indicated in Kanyen'kéha orthography (and the phonological transcription used here) by the use of a colon (:) over long vowels. They can be stressed or unstressed (Bonvillain, 1973); Kanyen'kéha is a pitch-accent language, with stressed syllables exhibiting either a high tone (indicated in transcription/orthography with a ´ over the stressed vowel), or a falling tone (indicated by ` over the stressed vowel) (Mithun, 2004, p. 2). The two tones are demonstrated in Example 4, below.

⁶ Data for Wahta is not available.

Example 4.

Kanyen'kéha Word	Gloss	Reference
<i>onón:ta</i>	'hill, mountain'	Michelson (1973), p. 84
<i>onòn:ta</i>	'milk'	Michelson (1973), p. 86

Kanyen'kéha also features vowel epenthesis which “allows the surfacing of consonants that underlyingly appear in phonotactically illegal contexts” through the insertion of a vowel (Hall, 2011, p. 1576). Kanyen'kéha features three vowels (*i*, *e* and *a*) which, following Michelson (1989), appear in the environments listed in Table 7, below.

Table 7. Epenthetic Vowels in Kanyen'kéha.

Epenthetic vowel	Environment of Insertion
<i>e</i>	C_sonorant
<i>e</i>	C_?#
<i>e</i>	V_CC where the first consonant is “any nonsyllabic segment except <i>h</i> or <i>s</i> ” (Michelson 1989, p. 41-42)
<i>a</i> (“the joiner”)	between any two nonsyllabic segments at a boundary inside the verb base
<i>i</i> (“the augmentor”)	added to verbs containing one underlying vowel

Epenthetic *a* is particularly important to this study since it may appear between an incorporated noun root and a locative suffix. An example from Michelson (1989, p. 48) is given as Example 5 below:

Example 5.

Underlying morphemes:	<i>ka-</i>	<i>-naw-</i>	<i>-kon</i>
Surface realization:	<i>ka-</i>	<i>-naw-</i>	<i>-akon</i>
	it	swamp	EXLOC
	'in the swamp'		

2.6.2.2 Morphology and Syntax

Kanyen'kéha demonstrates what Mithun (2000a) calls “multicategorization”, i.e., “what might be identified as a verb on formal morphological grounds, for example, might function semantically or syntactically as a nominal to designate an object” (p. 397). Multicategory nominals are classified and described in various ways throughout the literature; those that are relevant to this study are described below according to my own observations and understandings from the literature.

2.6.2.2.1 Nominals

2.6.2.2.1.1 Structural Nouns

Also called “formal nouns”, structural nouns behave structurally like nouns in English do, and refer to “non-living things or inanimate objects, but also include living things found in nature, such as plants, vegetables, and some animals” (Ontario Ministry of Education, 2011, p. 10). There are four possible structure types for nominals according to Michelson (1973):

∅	root	∅
prefix	root	∅
∅	root	suffix
prefix	root	suffix

Figure 10. Four possible structure types for nominals according to Michelson (1973)

The nominal root determines if a nominal prefix is needed and, if so, selects from a set including *a-*, *o-*, *ka-*, and sometimes *i-* (Ontario Ministry of Education, 2011). A noun prefix specifies gender on living or animate nouns or takes a neuter prefix for inanimate objects “which constitute the overwhelming majority of nouns in the lexicon” (Mithun, 2000, p. 399). The neuter noun prefixes are either *ka-* or *o-*; according to the Ontario Ministry of Education, “*o-* occurs frequently, but not exclusively, with nouns that designate things found in nature; *ka-*...occurs frequently, but not exclusively, with nouns that designate manmade objects” (p. 11). Nominal suffixes include *-a*, *-e* and *-on* (Bonvillain, 1973, Ontario Ministry of Education, 2011) and infrequently *-o'* (Beatty, 1974). Some of these are demonstrated in Example 6, below.

Example 6.

<i>kanáta</i>	'village'	
<i>ka-</i>	<i>-nat-</i>	<i>-a</i>
NPFX-	-NROOT-	-NSFX
<i>onónta</i>	'hill, mountain'	
<i>o-</i>	<i>-nont-</i>	<i>-a</i>
NPFX-	-NROOT-	-NSFX
<i>ó:nenhste</i>	'corn'	
<i>o-</i>	<i>-nenhst-</i>	<i>-e</i>
NPFX	-NROOT-	NSFX

Nouns that do not take a prefix or suffix usually begin with *a-*, but also more rarely include *i-* and *e-* (Ontario Ministry of Education, 2011).

2.6.2.2.1.2 Unanalyzable or Idiomatic Nouns

Unanalyzable or Idiomatic nouns function grammatically like a noun, but do not have the formal structure of either a noun or a verb. Unanalyzable nouns only occur in one form and are, as their name implies, unanalyzable. Bonvillain (1973) points out that they are often the names of animals and may be onomatopoeic. The examples in below are from my own fieldwork.

Example 7.

Nominal	Gloss	Source
<i>kitkit</i>	chicken	Okwáho
<i>ohkwá:ri</i>	bear	Okwáho
<i>è:rhar</i>	dog	Okwáho
<i>tawístawis</i>	snipe	Kanaseraken

2.6.2.2.1.3 Verbal nouns

Verbal nouns function similarly to the way that nouns function in English but are structurally verbs. These nouns often describe tools, objects or even animals based on some functional or characteristic attribute:

Example 8.

<i>ska'nyonhsa</i>	'moose'	lit. "the one with the nose" (Michelson, 1973, p. 5)
--------------------	---------	--

yakotiyaneronhstha 'ghost'

lit. "it makes people feel spooky" (Michelson, 1973, p. 20)

A morphological breakdown of the structure of the verbal noun shows that it follows the basic structure of a verb:

Example 9.

The root, together with its aspectual suffix forms a verb stem (sometimes called a verb base) to which is added an obligatory pronominal prefix. Many of these nouns take a feminine indefinite pronominal prefix, such as *ye-* and *yon-* in Kanyen'kéha.

2.6.2.2.2 Verbals

As described above, the basic structure of a Kanyen'kéha verb consists of a minimum of a prepronominal prefix and verb stem (root plus aspectual suffix, see Example 9, above). Verbal stems in Kanyen'kéha can also be more complex; they may contain a verbal root together with suffixes that modify the root (such as the causative or instrumental), or they may be made up of a nominal root together with a verbal root. In the latter case, the noun root undergoes incorporation into the verbal root (see Example 2) and the entire complex is inflected as a verbal in regard to pronominal prefixes and aspect (Ontario Ministry of Education, 2011).

Kanyen'kéha (as well as other Iroquoian languages) features a class of verbal roots known as "positional verbs" which "specify the position in which the object designated by the noun is most often found" (ibid, p. 106). According to the same source, this class often appears with landscape and natural features where the nominal root (the feature) is incorporated into the positional verbal root, and thus inflected as a verbal. Because these often describe landscape and natural features which are in a specific, fixed state, positional verbals often utilize the stative aspect. Some positional verbals found within Kanyen'kéha place names include *-ot-* ('be standing'), and its

associated allomorphs, *-yen-* ('be lying') and *-hr-* ('be sitting on top of'); these can be found throughout the place name entries in Chapter 5.

A variety of other affixes can be used together with any of the verbal stems outlined above, but both nominal stems and verbal stems as well as these affixes must occupy specific spaces within the morphology; for example, an aspectual suffix cannot occupy the position of a prepronominal prefix and vice versa. A full outline of the Kanyen'kéha "morphological template" with all morpheme slots is presented as Appendix C.

2.6.2.3 Tense and Aspect

Mithun (1996) points out that "[t]he particular way in which tense is indicated depends upon the aspect of the verb" (p. 164). Four types of aspect are generally defined in the literature, although the nature of aspect and mood is still debated. For the purposes of the present work, I adopt Mithun's assessments on Kanyen'kéha aspect in outlining the imperative, habitual, perfective and stative aspects. The imperative aspect (generally denoting the idea of a command in both English and Kanyen'kéha) takes no affix. The habitual (or serial) aspect, denotes a concept similar to the English simple present tense, i.e., events which occur serially or recurring events (Mithun, 2006). Habitual suffixes include *-s*, *-ha'*, *-as*, *-es*, and *-ons* (Postal, 1979, p. 81⁷). The perfective aspect (sometimes referred to as punctual in the literature) encodes entire events with a beginning, middle and end (Mithun, 2006) as a whole. Postal (1979) describes this aspect as utilizing the "rather regular" suffix *-'* (p. 81). The use of a final glottal stop as a marker of aspect would normally make it difficult to pinpoint within historical documentation since this sound may have been unfamiliar to those not accustomed to hearing it, and therefore may not have been transcribed; however, the perfective also obligatorily utilizes one of three modal prefixes, the aorist, future, or optative (*wa'-*, *en-* and *a-*, respectively) making it somewhat easier to locate (ibid). The stative aspect expresses, as its name implies, states of being which can be inherent or

⁷ Following Postal (1979), habitual *-s-* appears in a verbal template slot that precedes other aspectual suffixes (for example, stative and aorist perfective suffixes).

the result of some change in the past (Mithun, 2006, pp. 216-217). Chafe (1967) describes this aspect as “a continuous action or state without defined temporal limits” (p. 12), a situation which would seem to apply to landforms and thus, appears frequently in Kanyen’kéha place names. According to Postal (1979), the stative aspect is “quite irregular”, but may take the form of *-on*, *-en*, *-’on*, $\emptyset$, *-non*, and *’* (Postal, 1979, p. 81)⁸. The Ontario Ministry of Education, states that many stative aspect forms in Oneida and Mohawk do not have suffixes; with these forms, the end of the base is the end of the verb form” (Ontario Ministry of Education (2011), p. 54). This variety of suffixes, including the glottal stop, or the complete absence of a suffix makes analysis from historical sources particularly tricky. Specific stative suffixes also express forms of action that are in the past, remote past or are continuous. Verbal roots which describe an inherent state or a condition occur only in the stative aspect (Ontario Ministry of Education, 2011).

2.6.2.4 *Locatives*

There are two main locative suffixes in Kanyen’kéha. The external locative, *-á:ke* expresses spatial concepts similar to those of the English prepositions ‘on’, or ‘at’ and sometimes ‘in’ (Mithun, 1996), although the internal locative suffix, *-á:kon* is also utilized for the concept of ‘in’ (Ontario Ministry of Education, 2011). Locative suffixes may also convey ideas that would be represented by prepositions in English, such as ‘near’ (*-ákta*; (Ontario Ministry of education, 2011, p. 18) or ‘under’ (*-ó:kon*; *ibid*).

2.6.2.5 *Deictic Markers*

Two other locational prefixes of interest to this study relate to deixis, or words or phrases that depend upon situational context such as speaker, time and place of utterance, for their meaning. For the purposes of this discussion, only locational deixis, or the location of speaker and listener in relation to each other and to other geographical locations at the time of the speech act, is relevant. Locational deixis is encoded within two prepronominal prefixes, the cislocative prefix *t-*, which indicates

⁸ Of note is that the use of this aspect may cause a change in pronominal prefixes, but this does not seem to apply to place names (*ibid*).

direction towards a point of reference (which may be the speaker), and the translocative prefix *y-* which indicates direction away from a point of reference (again, which may be the speaker) (Ontario Ministry of Education, 2011). Both *t-* and *y-* depend upon the spatial relationship of the listener and speaker, and the topic at hand. In addition, some verbal roots which indicate motion obligatorily take a cis or translocative prefix.

With the background information of culture (Sections 2.1, 2.3 and 2.4), geography (2.2, 2.3, and 2.6.1) and language (Sections 2.5 and 2.6.2), we can now take up the topic of past Kanyen'kéha place name studies and examine their methodologies and results. As I will show in Section 2.7, these studies have added much to our understanding of Kanyen'kéha language or culture, but each is missing some of the necessary components for a full analysis as outlined in Section 1.5.

2.7 Kanyen'kéha Place Name Studies

Iroquoian place names are discussed in Lewis H. Morgan's *League of the Ho-De-No-Sau-Nee or Iroquois* (1851) as part of his overall ethnology of the Rotinohseshá:ka, in Ruttenber's *Indian Geographical Names* (1906), in Beauchamp's *Aboriginal place names of New York* (1907) and in Schoolcraft's *Report on Aboriginal names and the geographical terminology of New York* (1845); however, as previously discussed in section 1.3, the latter three studies do not focus exclusively on a specific language family, instead dealing with Indigenous place names as a whole. In addition, they are primarily concerned with the translation of place names, rather than the system of place naming or insights into the Kanyen'kehá:ka language, culture, or ethnophysiography. To date, only three studies have been specifically focussed upon place names in the Rotinohseshá:ka languages, and only two of these are focussed exclusively on the place names themselves. Some of the names analyzed in Chapter 5 are taken from these sources which are outlined below.

Building upon Beauchamp's (1907) *Aboriginal place names of New York*, in 1957, John C. Huden published *Iroquois place-names in Vermont*, which mainly focusses on the eastern shore of Lake Champlain. Huden's methodology takes "Iroquoian names

(chiefly Mohawk designations)...from maps, textbooks, novels, folk tales, diaries, old letters, and even legends,” (Huden, 1957, p. 68) from an area that he claims well-traveled by the Kanyen’kehá:ka between the period of 1667 and 1760 (p. 67). Huden consulted with Mr. Charles A. Cooke, a Kanyen’kéha mother-tongue speaker originally from Kanehsatá:ke, who had relocated to Ottawa at the time of publication, by then 86 years of age. Huden sent his compiled place name list to Cooke before interviewing him “several times”. Cooke commented, importantly, that “Iroquoian names as used by the Iroquois were generally common-sense descriptions, usually concerned with action” (p. 70) and “that most Iroquois names anciently applied to Vermont’s mountains, lakes, rivers and islands were action words” (p. 71). The name analysis itself is organized by modern-day English locations together with the Iroquoian name (or several Iroquoian names) and an approximate English meaning.

The main issues with Huden’s study align with those discussed in Section 1.3. First, there is no morphological breakdown of the names themselves; for example, the name “Onnontio” (the Rotinonhseshá:ka name for Governor Montmagny of Quebec) is given simply as “Mountain Large”⁹. But the *-iyo* suffix of this name (written orthographically as “io”) also appears in several other places: “Regiohne”, “Rogeo Rotsio” and “Rennyoh’neh,” which Cooke translates as “his rock is good”; the name “Ontario”, translated as “beautiful good lake” (p. 74); and “kahwehni’yo,” translated as “large, or beautiful island”. The fact that this morpheme is repeated in several Kanyen’kéha place names is a significant point which will be discussed in Chapter 6. That Huden worked with a Kanyen’kéha speaker is another significant point relating to methodology; Mr. Cooke lent the first insights into Kanyen’kéha place naming conventions. However, it remains unclear how phonological and phonetic technicalities were related between Huden and Cooke since this seems to have been undertaken by written correspondence. There is also no overall discussion of any spatial conceptual differences which may or may not exist. It is also rather difficult to assess which documents Huden used in his analysis, since some references appear merely as “Rare

⁹ The verbal root *-iyo* has more than one interpretation; see Chapter 4.

Map of New England, Library of Congress” (p. 75). Finally, it should be noted that, although this does not necessarily take away from the overall impact of the study, the Champlain Valley, while well-traveled by the Kanyen’kehá:ka, is not necessarily part of Kanyen’kehá:ka territory. The eastern shore of Lake Champlain was an area of “overlapping jurisdiction” with the Abenaki people (see Day, 1981), and this is reflected in the entry for *Rock Rogeo* in Chapter 5 of this study. In essence, Huden looked at place names along a major highway, rather than a (somewhat) stationary homeland.

Lounsbury’s (1960) study *Iroquois place-names in the Champlain Valley* is an example of a thorough place name study informed by three separate fields—linguistics, anthropology, and geography of the area under study. *Iroquois place-names in the Champlain Valley* is a brief sketch of the Iroquoian place names of the Champlain Valley which straddles the present-day states of New York and Vermont in the US and the province of Quebec and includes Lake Champlain, Lake George and the Richelieu River. The area under study is almost identical to Huden’s geographic area since his data was compiled from photocopies of early maps from Huden’s collection at the University of Vermont¹⁰. Nevertheless, the end result is that this study has the same issues with geography as Huden’s study, described above.

Lounsbury utilized a methodology similar or identical to the English Place Names Studies methodology followed by morphological analysis with Kanyen’kéha linguistic consultants, thus making use of ethnographic methods. He supplemented Huden’s map collection with Beauchamp’s *Aboriginal place names of New York* (1907), Ruttenber’s *Indian geographical names* (1906), Lewis H. Morgan’s *League of the Ho-De-No-Sau-Nee or Iroquois* (1851) and E. B. O’Callaghan’s *Documents relative to the Colonial history of the state of New York* (1853). While the former two sources focus on place names themselves, the latter two were presumably intended to supply Lounsbury with a historical and cultural background to the Kanyen’kehá:ka as well as secondary place name data.

¹⁰ These maps were first published in book format in 1959 as *Some early maps depicting the Lake Champlain area, 1542-1792*; this book is now out of print.

Lounsbury's study allows a small glimpse into differences in Iroquoian spatial conceptions (see 1.4). Lounsbury's use of ethnology through consultation with Kanyen'kehá:ka consultants, combined with his detailed morphological analysis represented a step forward in general place name research, even though Lounsbury wrote that his analysis was intended to be merely an experiment, stating "the present writer has not attempted to add to the existing accumulations of data by recourse to original sources. The aim is not to add more data or further conjectures, but to see how much will stand the test of analysis, how much can be known for certainty, and how much must be laid aside as unsure or cast off as erroneous" (Lounsbury, 1960, p. 27). However, because Lounsbury's geographic area is the same as Huden's, and therefore again does not include the Kanyen'kehá:ka homeland itself, he could not necessarily specify the origin of the names on the map beyond "Iroquoian". One of the results is a proposal wherein one place name is a French interpretation of a Wendat translation of a Kanyen'kéha place name, which could just as easily be explained by the fact that it is simply a Wendat name (as verified with John Steckley, p.c.).

One of the benefits of Lounsbury's study, however, is his grasp of Iroquoian morphology. He also states that he received tutoring in the Kanyen'kéha language and consulted his tutors regarding the forms of these names. This allows him to both clearly identify the morphology of the language and articulate that Kanyen'kéha conceptualizations of space are different than those of English speakers, as his explanation of the root *-nyatar-* ('waterway') demonstrates. One linguistic issue which does arise is his claim that the verb root *-oken*, meaning 'split' obligatorily takes a dualic prefix, *te-*, 'two', which, according to my informants, is not necessarily true. This could be explained in one of two ways: first, it may be the case that this prefix is obligatory for something splitting in two; this is understandable, but it is also possible to linguistically describe splitting in three, or four, or any number of ways (Kanaseraken, p.c.). It may also be the case that the prefix *te-* was obligatory with *-oken* at some earlier form of the language but is no longer obligatory in the present-day Akwesashne variety.

Lounsbury's survey devotes about one page each to around 8 different geographical points but does not discuss the identification of the individual roots which make up the place names in terms of typology. In his introduction, he states that this study was intended as an experiment to see if it was possible to analyze the morphology, syntax and meaning of place names as recorded in historical documentation. Although he was successful, he never expanded upon this exploratory work.

One of the only linguistic treatments of Kanyen'kéha naming conventions is Mithun's *Principles of naming* (1984) in which she outlines the basic criteria for proper names in English (those being orthographic capitalization, the inability to pluralize and the fact that they do not take determiners) and, having demonstrated that Kanyen'kéha does not meet a single one of these criteria, asks if Kanyen'kéha has a formal category of proper names. To answer this question, Mithun conducted fieldwork with speakers from Kahnawà:ke and Akwesashne using various generic nouns (including several geographic features, such as "crossroads") as well as proper nouns and place names. She found that, as with example (7), above, verbs in Kanyen'kéha are divided "into varying degrees of nominalization" (Mithun, 1984, p. 43), that the process of nominalization is very productive in Kanyen'kéha, and that these verbal-nominals are conventionalized to form what would function as nominals in languages such as English. Mithun also includes a discussion of Kanyen'kéha proper names (both for humans and places) and their semantic and grammatical constructions, concluding that Kanyen'kéha place names are either verbs or locative nouns, and that "they are probably most often descriptive of some characteristic of the location" (p. 48). Mithun's overall conclusion is that Kanyen'kéha does, in fact, have proper names, based on the fact that many place names no longer refer to their original places and despite being morphologically recognizable, those who speak Kanyen'kéha feel no dissonance about using them out of their geographic context¹¹. She cites several examples including *Kahnawà:ke*, meaning

¹¹ Horn-Miller points out that colonization may have altered ways of relating to landscape as well as ways of thinking. It should be noted that there are arguably at least two different names for the present-day

“at the rapids,” (no longer located at the rapids), and *Kanatakwenhtè:ke*, meaning “outside of town” (now located in town), and demonstrates that in present day Kanyen’kéha, these specific names function semiotically, as do English place names; they are now understood as symbols of place, rather than as a description of a place. Mithun concludes that this grammaticalization, the “independence of proper names from their literal meanings...is exactly what distinguishes proper names from other words” (p. 53).

Of these three studies, all three work with Indigenous consultants; however, Huden is missing the elements of geography and morphological analysis. Mithun’s paper is focussed on language alone (missing the elements of anthropology and geography) and therefore, cannot be considered a study strictly of place names, but rather of linguistic phenomena of names in Kanyen’kéha. Lounsbury’s study utilizes what could be considered the “European methodology” with all three elements of the O’nonna framework: language (morphological analysis), culture (works with Kanyen’kéha informants, knows Onyota’a:ka), and geography (understands differences in landscape through informants explanations), but is small in scale.

2.8 Research Questions

The background information given throughout Chapters 1 and 2 coupled with a brief look into previous work on Kanyen’kéha place names aids in the process of honing a research question that can be answered through the use of the O’nonna Three-Sided Place Name Framework (Section 1.7) and Methodology (1.4). Hill (2017) offers a word of warning regarding the “dangers in segmenting and compartmentalizing aspects of [Rotinohseshá:ka] knowledge” which also seems to support this new framework and methodology, stating, “The [Rotinohseshá:ka] knowledge base exists as a complete entity, and the various parts of it are interconnected and dependent upon each other in

Kanyen’kehá:ka community located on the Bay of Quinte, Ontario. The Mohawks of the Bay of Quinte write the name as “Kenhteke”, ‘on the bay’ (Mohawks of the Bay of Quinte, 2019) while the English-based name is Tyendinega, a form of Joseph Brant’s Kanyen’kéha name (Rayburn, 1997, p. 351). To date, I have not found another instance of a commemorative place name (i.e., named for a person) in the Kanyen’kéha naming convention, suggesting that commemorative place naming in Kanyen’kéha was borrowing from the English place naming tradition.

order to understand the whole. When one removes a segment of it, that portion ceases to be what it is within the context of the whole” (p. 16). Place names are no different, and are, perhaps, more complicated in this regard given the intertwining of language, culture and landscape as outlined in Figure 2. As such, a person not immersed in the culture of the place namers is more likely to notice salience rather than full significance (Anonby, p.c.), and, especially where Indigenous communities are concerned, it is best to leave the work of name categorization and typology creation to place namers themselves where possible. Since this is the case for me, for the purposes of this study, I will concentrate on the salience of semantic concepts and grammatical structures of Kanyen’kéha place names, rather than their sense and/or full significance.

The general research questions to be answered are outlined on page 38. These, however, are applicable to any place name study. Since place names generally follow the grammatical requirements of a language as shown in the example of Winchester in Section 1.1, the research questions must be honed to align with the individual language under study. As outlined in section 2.6.2.2, roots form the core of Kanyen’kéha phrases with prefixes and suffixes required to create a grammatically correct nominal or verbal. While not discounting the role of particles or affixes in place names, a root communicates lexical semantic concepts, and therefore, should be present in place names regardless of whether the name is one of several types of nouns, verbs, or even full sentences (see section 2.6.2.2). Taking inventory of these roots and examining patterns of salience enables me to draw conclusions regarding semantic naming concepts as well as grammatical patterns, if applicable. Therefore, my first research question asks, “Which lexical roots are used within Kanyen’kéha place names?” Further targeted questions are designed to pinpoint semantic patterns specific to the Kanyen’kehá:ka. These include:

- What kinds of ideas do the semantics of these roots signify?
- Are some roots used more than others? Are some nominal roots used more often with certain verbal roots?

- Are Kanyen'kéha names based upon landscape or water features? Are they cultural activities? Are these names ethnophysiological terms?
- Given the meaning of these roots, do these place names appear to fit into previously-theorized place naming categories, or do they represent new categories?

Other targeted questions are designed to examine grammatical patterns that may be specific to the Kanyen'kéha language. These include:

- Are the roots within place names nominal roots or verbal roots? Are they both? Is one type more common than another? Are they verbals that behave like nominals?
- Are names based upon events or occurrences? Do names describe an action? If so, what action? What kind of tense and/or aspect occurs in Kanyen'kéha place names (if any)?

2.9 Hypothesis

Based upon known Kanyen'kéha place name meanings as well as findings from Kanyen'kéha place name studies outlined in section 2.7, I hypothesize that some or many Kanyen'kéha place names are based upon descriptions of natural features; more specifically, because of the central role that water plays in Rotinohseshá:ka and Kanyen'kehá:ka geography (Sections 2.2 and 2.6.1, respectively), I predict that many names will be based upon descriptions or locations of hydrological phenomena. Kanyen'kéha names as used by the Kanyen'kehá:ka in the present day appear to be mainly nominal phrases (as evidenced by *Akwesashne* and *Kahnawà:ke*, see Chapter 5) which utilize external locative suffixes. However, *Kana'tsyóhare* appears to be an entire verbal phrase with an incorporated nominal (see Chapter 5). Because of this variation in grammatical structure, it is difficult to predict what grammatical patterns may be used within the place names. Careful morphological analysis will provide further information regarding patterns in the use of nominal or verbal phrases, locative suffixes, and other affixes.

Chapter 3.

A general outline of my own place name study methodology is given in this section. While it utilizes some specific components of the English Place Name methodology (see 1.3.1), it also takes into consideration the situation of Indigenous names in North America where the original names may have been replaced or modified due to colonization. Section 3.1 discusses the Kanyen'kéha Naming Stratum and its interaction with the American English macrostratum, as well as how this interaction is considered in the present study. Section 3.2 is an outline of the methodology I used specifically for archival research in the course of searching for historical Kanyen'kéha place names. In this section, I discuss the different types of archives and archival materials and the decisions that I made regarding what would be used for this study. I also outline the methods I used for data collection from these sources, selection of data from these sources, and organization and refinement of that data. Because working with the Kanyen'kehá:ka and their knowledge is an important part of this study, Section 3.5 outlines the ethics and protocols that I followed, and that I will continue to follow in future work with the Kanyen'kehá:ka. Finally, Section 3.6 outlines the ethnographic work undertaken together with Kanyen'kehá:ka consultants.

3.1 Defining the Kanyen'kéha Naming Stratum

Many place names in the Mohawk River valley (see Kanyen'kehá:ka Geography in 2.6.1) have already been established as Kanyen'kéha place names either through Kanyen'kehá:ka knowledge and oral history, through written historical documentation, or both. One such example is Canajoharie (Kanyen'kéha: *Kanatsyóhare*) which is today a Kanyen'kehá:ka community that re-established its traditional territory around Fonda, NY in 1993 (see further Porter, 2006). However, it is both possible and common for a single place name to serve in more than one stratum and therefore represent more than one naming pattern; for example, any modern place name derived from an Indigenous place name in North America serves simultaneously within both the original language stratum as well as the modern English language stratum, and the macrostratum (here, the present-day American English stratum) may utilize a place name differently than a

microstratum. In other words, the place name in the Kanyen'kéha microstratum may impart different knowledge through the Kanyen'kéha language than it does in the English language. This is certainly true in the case of the name *Canajoharie/Kanatsyóhare*: *Kanatsyóhare* is a Kanyen'kéha place name and refers to a large kettle hole in the vicinity, an ethnophysiographical concept of note to within the Kanyen'kéha microstratum. This name makes up part of the Kanyen'kéha place naming pattern, but it also serves as a modern English place name as Canajoharie, part of the American English (as well as Canadian English and Canadian French) conventions of borrowing Indigenous place names. However, because the name is not readily understood within the English macrostratum (at least by the average layperson), it is categorized as "an Indigenous place name", rather than as a descriptive place name. The microstratum (Kanyen'kéha) marks a landscape feature; the macrostratum marks only the origin of the anglicized name. There may also be multiple substrata in a single location; for example, the Kanyen'kéha language substratum exists within the larger Iroquoian-language-based Rotinohseshá:ka stratum, which lies in the American English stratum.

In order to accurately examine the patterns within a single stratum and describe a naming convention based upon those patterns, only Kanyen'kéha names must be considered. As stated in Section 1.3.1, the English Place-Names Society (EPNS) methodology begins from a present-day place name and categorizes individual language strata only after the collection of archival data, the establishment of a place name corpus, and at least initial linguistic analysis to determine the linguistic origin of the name. This study deviates from the EPNS methodology in that we approach the work from the opposite direction: I have pinpointed a specific stratum to be studied (Kanyen'kéha for my part and "Iroquoian" for Lounsbury's part) and am attempting to populate the corpus with all instances of names belonging to that stratum (which may or may not also be used in other naming strata). In the EPNS methodology, the place name data determines the stratum, while in this study, the stratum is pre-defined.

The first task is finding data sources, i.e. locating Kanyen'kéha place names. Documentation of place names in North America takes at least two forms: Kanyen'kéha place names were originally passed through oral histories, and the access to, and use of, oral histories requires its own methodology. This will be discussed in Section 3.6. However, there is also an archival component to the work that originates with colonial historic documents which may have recorded Kanyen'kéha place names in the same manner as those outlined in Lounsbury (1960) (see Section 2.7). The next section will explore the methodology used for the archival research used to locate such information.

3.2 Archival Research Methodology

This section outlines the methodology used for archival research which is often a significant component of a place name study. Geography and time period play a role in determining the sources that will be useful to a place name study. The considerations pertinent to this study are outlined in Section 3.2.1 and 3.2.3. Sections 3.2.4 and 3.2.5 show how I identified and organized the data, respectively.

3.2.1 Types of Sources

3.2.1.1 Initial Considerations

The attestation of Kanyen'kéha place names is scattered through myriad written records and spanning centuries, thus making the task of locating individual place names complex. For work in North America, establishing a specific geographical location, such as that outlined in 2.6.1, also helps to determine a time period of an overall search for names, since colonization and settlement progressed from the coasts gradually towards the interior. Common sense dictates that the best primary sources of names would be those who had contact with the Kanyen'kehá:ka when they lived in the Mohawk River Valley. As well, early documents may help to determine the origin of present-day place names still in use and highlight historical names which are no longer in use. The more data that is available for analysis, the easier it will be able to see specific patterns within the names themselves. Therefore, both time period and geography will determine what kind of documents may contain Indigenous place names. These limitations are especially pertinent in the use of maps, as described in section 3.2.3.

3.2.1.2 Geographic Limitations

Geographic limitations for this study will conform to the study boundaries established in section 2.6.1, above. Despite having established the study boundaries, it is possible to find Kanyen'kéha place names outside of Kanyen'kehá:ka territory, or to find the Indigenous place names of one group's language within the boundaries of another Rotinohseshá:ka member group. Presumably, this occurred when the person documenting the name asked a Rotinohseshá:ka person for a name without necessarily understanding the linguistic differences between Iroquoian languages (or, indeed, the difference between each of the Rotinohseshá:ka themselves). An example of this situation occurs in Table 8, in section 3.2.4, below, taken from the raw data.

3.2.1.3 Time Period

The time period for this study at first seems to be somewhat self-evident, i.e., 1492 to present day. However, research can become highly inefficient without further date refinement. While Cartier was the first to have any direct contact with Iroquoian peoples in 1534 (Snow, 1996), only two names are recorded, with one being a misunderstanding (*Kanata*, which became the name "Canada," meaning 'settlement'), as opposed to a proper name. Since the Rotinohseshá:ka were further from the coastline towards the interior of the continent, significant historical dates help to establish a more targeted period of time for archival research. Many of those used for this study are outlined in Section 3.3; a brief overview is given here:

- 1609: Hudson sails up the Hudson River; Champlain joins Wendat and Algonquin forces in skirmishes with the Rotinohseshá:ka at Lake Champlain and Onondaga (Snow, 1996, p. 78-79);
- c. 1613: The Dutch and Kanyen'kehá:ka enter into the Two Row wampum (*Tekani Teyothata'tye Kaswentá*) treaty agreement (Hill, 2013, see Section 3.5, below);
- 1624: New Amsterdam (present day New York City)/Colonies of the New Netherlands established (Shorto, 2005, p. 37);
- 1646: Jesuit Isaac Jogues killed at Kahnawà:ke (Snow, 1996, p. 114);
- 1654: Jesuit LeMoyne establishes a mission to Onondaga (present day Syracuse, NY) (Metz, 1995);
- 1664: Dutch colonies are surrendered to England (Shorto, 2005);
- 1677: Establishment of the Covenant Chain Treaty between Rotinohseshá:ka and the British which effectively extends the Two Row wampum treaty

- agreement to the British (Snow, 1996, p. 124);
- 1755-1760: French and Indian/Seven Years War (North America); France and Britain fight for control of North America (Snow, 1996);
- 1768: Treaty of Fort Stanwix; establishes a boundary between colonists and Rotinohseshá:ka (ibid, p. 149);
- 1775: Start of American Revolutionary War (ibid); 13 British colonies seek independence from Britain;
- 1779: Clinton-Sullivan Campaign (ibid); Washington orders Generals Clinton and Sullivan to destroy Rotinohseshá:ka houses and fields in response to some Rotinohseshá:ka allegiance with the British;
- 1784: The Haldimand Treaty establishes Rotinohseshá:ka community along the Grand River, Ontario (Six Nations Council, 2008).

In particular, there is likely to be written documentation in regards to the Jesuit missions and travels to Rotinohseshá:ka territory, administrative documents from diplomatic meetings and negotiations, and maps and detailed landscape information from military expeditions.

3.2.3 Documentation Used for this Study

I considered primary sources to be those which record first-hand accounts of interaction with Rotinohseshá:ka, from people directly connected to that interaction. For this study, my primary sources included the *Relations des Jésuites*, some of which are included in Snow, Gehring and Starna (1996), *the Documentary history of the state of New York* (O'Callaghan, 1849 and 1850), and travel journals and documents collected in Snow, Gehring and Starna (1996). I considered secondary sources to be those that refer to one of the primary sources but involve some form of secondary analysis or interpretation. Many of my secondary sources are mentioned in the first two chapters, such as Morgan's *League of the Ho-dé-no-sau-nee or Iroquois* (1851), Beauchamp's *A history of the New York Iroquois* (1905), Lounsbury's *Iroquois place-names in the Champlain Valley* (1960), Snow's *The Iroquois* (1996), and Parmenter's *The edge of the woods* (2010). Secondary sources also included compilations of Indigenous place names such as Ruttenber's *Indian geographical names* (1906), Beauchamp's *Indian names in New-York* (1893) and *Aboriginal Place Names of New York* (1907), Huden's *Iroquois place-names in Vermont* (1957),

I found maps to be an excellent source of place name data for my first-year pilot project, and therefore, I also utilized them for this study. Some maps, like Loring's *A draught of Lake George, and part of Hudsons River taken September 1756* were created by those with direct knowledge of the area and place names recorded; therefore, I considered these to be primary sources. As with the sources outlined in the previous paragraph, I considered those maps that depended upon primary sources and interpreted these sources to be secondary sources. There are several major online repositories of digitized maps available for viewing on the internet. For this study, I utilized those from Old Maps Online (www.oldmapsonline.org), which provides a geographical bounding box on a modern-day map (allowing for the geographical boundaries of this study to be set according to modern-day boundaries) as well as a timeline for map searches, the Library of Congress Maps Division (www.loc.gov/maps/) which hosts over 37,000 online maps searchable by time period, state, language, subject, etc. and the Norman B. Leventhal Map Center at the Boston Public Library (www.leventhalmap.org/collections/atlases/) which also provides a geographical bounding box.

3.2.4 Identifying Place Name Origin

When place names are found, even with the context of geographic location, it may not be clear if the name belongs to the naming stratum in question. Since multiple languages may be used within the same geographic area either simultaneously or in succession, historical knowledge such as that outlined in 3.2.2, in addition to knowledge of the languages themselves, is useful to help pinpoint the possible linguistic origins for a name. This also helps to avoid the “shoehorning” described in Section 1.4. In order to outline the Kanyen'kéha place name typology following from the research question, only Kanyen'kéha names can be considered. Some names, such as *Kanatsyóhare* have been confirmed by Kanyen'kéha language speakers as being Kanyen'kéha names (see Porter, 2006); however other place names such as Cohoes, could be of several different linguistic origins, including Kanyen'kéha, Dutch or an Algonquian language. A linguistic origin must be hypothesized for the place names that a researcher encounters, and the

researcher must decide whether to document names that are of uncertain origin, and how to go about doing so. A phonological analysis using a language’s phonemic inventory aids in the initial step of identifying the linguistic family of that name. For example, the Iroquoian languages are distinguished by a complete absence of bilabials (Julian, 2010, as outlined in section 2.5.1), while the neighbouring Algonquian languages (Mahican, Mohegan, Lenape, Abenaki, etc.) all make use of bilabials (see, for example, Cuoq, 1886; Brinton, 1888). Therefore, while it is possible that a name like “Papaconck” is Iroquoian, it is highly unlikely due to the presence of the bilabial [p].

In an example given below in Table 8, the name “Tioniongarunte” or “Tiohuwaquaronta” appears to be of Iroquoian origin and refers to “the most Easterly Seneca Town” (Beauchamp, 1907, p. 33). Although labeled as “Seneca,” the Onödowá’ga: language does not utilize rhotics (Chafe, 1967, p. 5), and therefore the name cannot be of Onödowá’ga: origin. As outlined in Section 2.6.2, Kanyen’kéha does utilize the rhotic /r/ or [r], but, in addition, Onoñda’géga utilized /ɹ/ until the late 18th or early 19th century (Julian, 2010), and Julian (2010) asserts, “the shift of [Proto-Mohawk-Oneida] */ɹ/ to [Modern Onyota’a:ka] /l/ does not appear to have been complete until relatively recently, as documents from Ontario and Wisconsin continue to show both <r> and <l> into the late nineteenth century” (p. 227). Thus, we could conclude that in this instance, the original transcriber, Zeisburger, quoted by Beauchamp, was recording a Kanyen’kéha, Onyota’a:ka or Onoñda’géga version of a Onödowá’ga: place name.

Source	Collector	Year	Language	Name	Referent	Present-Day Location	Notes	Given Meaning

<i>Aboriginal Place Names of New York</i>	Beauchamp, William M.	1907	English	Tioniongarunte or Tiohuwaquaronta	Village	At or near Olean	"the most Easterly Seneca Town on the Allegheny" (p. 33)	"a wooded point" ¹²
---	-----------------------	------	---------	-----------------------------------	---------	------------------	--	--------------------------------

Table 8. A non-Onödowá'ga: documentation of a Onödowá'ga: place name.

In addition, it may not always be possible to ascertain the exact language of naming if the name lies in an overlapping geographic area; for example, Kanyen'kéha and Onyota'a:ka are so closely related as to be mutually comprehensible (Ohkwáho, p.c., see also Figure 9). While there are some ways to establish whether a name is Kanyen'kéha or Onyota'a:ka (the use of [j] in Kanyen'kéha versus [l] in Onyota'a:ka and Akwesasne Kanyen'kéha, for example, or other relevant information related to an attested name form), it may not be entirely possible to distinguish if a name is Kanyen'kéha or Onyota'a:ka.

This is a good example of why all the elements outlined in Section 1.5 are necessary: in some cases neither linguistics nor geography can determine the origin of a place name in this situation, but history, whether through colonial documentation or traditional oral histories, and the cultural knowledge of consultants, may be able to provide additional necessary evidence to situate a place name's origin and meaning.

It is also necessary to have some knowledge of dynamics of language contact since a place name in its present-day form may have undergone significant change from its original form. Colonization has played a significant role in the history of North America with Indigenous and non-Indigenous peoples interacting through the medium of language—not only their own mother tongue(s), but also other languages that they came into contact with through trade, travel, diplomacy, and every day relationships. Following Bloomfield (1930/1984), a person's mother tongue influences the way one hears the sounds of a differing language (p. 80); thus, a name pronounced using the

¹² There are two names here: "Tioniongarunte" to me translates as something like 'wide point/peninsula' while "Tiohuwaquaronta" seems to mean 'a canoe is bulging' or 'bulged canoe'. The confusion comes from the verbal root *-karonte* or *-kwaronte*, 'to be wide' and 'to be bulging', respectively, closely resembling the nominal root *-ront-*, 'log'. The significance of either name is unknown.

sounds of the naming language may have been interpreted differently by a listener whose language had a differing phonological inventory. This phenomenon has major implications for the study of place names in North America in that many place names come from Indigenous languages, and many of these names were used and passed on by those who did not speak the origin language. Compounding the issue is the fact that many languages, including non-Indigenous languages, were primarily oral, or utilized a literacy differing from European documentation¹³; this means that not only the mother tongue pronunciation of a name was subject to different phonological interpretations, but the subsequent recording and reading of a name could also be interpreted in multiple ways, depending on factors involving language contact and orthographic systems.

Migration of both Indigenous and non-Indigenous peoples also provided opportunities for contact between related and unrelated languages. The movement of people and their languages is also responsible for the “migration” of place names; people “carry” a place name to a new location, or even multiple locations, giving it independence from the original geographical context or semantic meaning. Mithun (1984) and Snow (1996) outline this case for the Kanyen’kéha place name *Kahnawà:ke* which originated in the Mohawk River Valley but was carried northward to its present-day location on the St. Lawrence River (see further Ingram, Anonby and Taylor, 2019, Part II). Thus, in order to understand the original meaning of the name in the naming language, it may be necessary to have an understanding of not just the phonology of the origin language, but also the phonology of a secondary (or even tertiary) language, as well as literary conventions of these languages, and historical sound changes which may have occurred in those languages since the time of recording.

Finally, an understanding of morphology and syntax are necessary for the actual semantic analysis of the place name itself. Knowledge of morphological and syntactic typology will aid with this process by allowing for a better understanding of the possible

¹³ For example, birch bark scrolls, pictographs, petroglyphs, wampum, etc., are “traditional forms of symbolic literacy which consist of both icons and symbols” by Indigenous groups in North America (Gehl, p.c.).

grammatically acceptable structures of the names themselves, which is especially useful for languages which are typologically very different from the researcher's own. In the example given in Table 8, above, the reading for "wooded" likely extends from a misunderstanding of the nominal root *-ront-*, meaning 'log' or 'tree trunk' (Michelson, 1973). However, the prefix *ka-* is used together with the root *-ront-* to indicate that that root is being used as a nominal; in the name "Tioniongarunte" the root *-ront-* is in the verbal root position (see Appendix C), and *y-* (spelled "io" here) serves as the nominal prefix indicating that the root which follows it, "-onion-" (probably *-onhya-*, 'point, peninsula') is a nominal; the full nominal *karonta* used as the term 'log' in its current location within the name "Tioniongarunte" is grammatically incorrect. However, the verbal root *-karont-* and its aspectual ending *-e'* would be grammatically correct in these positions, and therefore are much more plausible.

3.2.5 The Kanyen'kéha Place Name Database

After collecting written place names according to the geographic limitations and time period and identifying them as probable Kanyen'kéha place names, I then input all data from the archival research directly into a Microsoft Access database for organizational purposes. This program also allowed me to customize fields, sort and search specific fields and parts of fields, export data and generate reports. I recorded the following information for each place name:

Information regarding the place name:

- Exact transcription of the place name from the document as written¹⁴;
- The appropriate referent if available, i.e. natural feature such as river, lake, mountain, etc. or constructed feature such as village, fort, camp;
- Modern name if available;
- Given meaning if available;
- Any applicable notes.

I also recorded information regarding the source document in which the place name was found:

¹⁴ At this stage, if I was in doubt as to whether the name was Kanyen'kéha in origin or not, I recorded the name. Names which were not Kanyen'kéha in origin or of unknown origin were later excluded through work with Kanyen'kéha speakers, or a lack of evidence (both linguistic and extralinguistic) of origin.

- Document name;
- Document author or attribution;
- Year of creation or publication;
- In which language the document is written;
- The mother tongue or mother tongues of the author if known.

Figure 11, below, shows a screenshot of the Kanyen'kéha Place Names Database on my own computer.

FileHomeCreateExternal DataDatabase ToolsHelpFieldsTableTell me what you want to do

View

Clipboard

Filter

Sort & Filter

Refresh All

Records

Find

Text Formatting

Names2

Document Name	Document Type	Author	Year	Language of Document	Language of	Place Name	Associated Feature	Modern Name
Map of New Netherlands, with a	Map: In Mohawk Count van der Donck	1656	Dutch	Dutch	Carenay	Village		
Le Canada, ou Nouvelle France, & Map: http://digital.libra Sanson, Nicola:		1656	French	French	Oioque	River		Mohawk River
Le Canada, ou Nouvelle France, & Map: http://digital.libra Sanson, Nicola:		1656	French	French	Ongiara	Sault		Niagara Falls
Map of New Netherlands, with a	Map: In Mohawk Count van der Donck	1656	Dutch	Dutch	Schanatissa	Village		
Map of New Netherlands, with a	Map: In Mohawk Count van der Donck	1656	Dutch	Dutch	t'lounontogo	Village		
Le Canada ou Nouvelle France & Map: www.raremapsco Sanson, N.		1657	French	French	Ongiara	Sault		Niagara
Of the Mission of Sainte Marie	Relations des Jesuits: In le Mercier	1667-1668	French	French	Ganaouagué	Village		
Of the Mission of Sainte Marie	Relations des Jesuits: In le Mercier	1667-1668	French	French	Gandaouagué	Village		
Of the Mission of Sainte Marie	Relations des Jesuits: In le Mercier	1667-1668	French	French	Gandaouaguén	Village		
Of the Mission of Sainte Marie	Relations des Jesuits: In le Mercier	1667-1668	French	French	Tionnontoguen	Village		
Of the Mission of he Martyrs in tl Relations des Jesuits: In Pierron		1669-1670	French	French	Gandagaro	Village		
Of the Mission of he Martyrs in tl Relations des Jesuits: In Pierron		1669-1670	French	French	Gandaouagué	Village		
Of the Mission of he Martyrs in tl Relations des Jesuits: In Pierron		1669-1670	French	French	Tionnontoguen	Village		
Of the Mission of Sainte Marie Ar Relations des Jesuits: In Lamberville		1672-1673	French	French	Gandaouagué	Village		
Of the Mission of Sainte Marie Ar Relations des Jesuits: In Lamberville		1672-1673	French	French	Gannagaro	Village		
Of the Mission of Sainte Marie Ar Relations des Jesuits: In Lamberville		1672-1673	French	French	Tionnontoguen	Village		
Observations of Wentworth Gree Manuscript: In Mohaw Greenhalgh		1677	English	English	Cahaniaga	Village		
Observations of Wentworth Gree Manuscript: In Mohaw Greenhalgh		1677	English	English	Canagora	Village		
Observations of Wentworth Gree Manuscript: In Mohaw Greenhalgh		1677	English	English	Teshiroque	Lake		
Observations of Wentworth Gree Manuscript: In Mohaw Greenhalgh		1677	English	English	Tionondogue	Village		
Journal of a Voyage to New York Journal: In Mohawk Coi Danckaerts		1680	Dutch	Dutch	Cahoos	Falls		Cohoes
Carte de l'Amerique Septentrion: Map: https://www.loc. Franquelin, Jea		1688	French	French	Anniaouénré	Bay		Henderson's Bay

Record: 1 of 2518

Figure 11. Screen shot of Kanyen'kéha Place Names Database.

3.3 Data Refinement

In total, I entered 2,518 name forms (i.e., elements used as “names” on maps or within documents) into a Microsoft Access place name database. These name forms had either been identified within the documentation as Indigenous (e.g., “Indian”, “Aboriginal”, “Haudenosaunee” or “Mohawk”), or met the criteria of being **both** 1) not comprehensible in English, French or Dutch, and 2) having at least one component that could be a Kanyen'kéha component, such as the prefix *ka-* or a locative suffix *-ake* or *-akon*. While this did not guarantee that the name form was Kanyen'kéha, or even Rotinonhseshá:ka, it did indicate an increased possibility of that being the case. Out of these names, approximately 798 different name forms fell within the geographical limitations and time period outlined in 3.2.1 and 3.2.2. I then began a process of

organization of these data; I created a series of documents that grouped names together by various commonalities which included similarity of Kanyen'kéha morphology, similarity of location, and similarity of English translation. All name forms that appeared to be morphologically similar were grouped together in one document; Figure 12 shows the document grouping forms of the place name *Kohserake* (see *Kohserake* in this chapter). All forms that were used in approximately the same location (if known) were grouped together in one document, and all forms whose English translations shared similar semantic elements were grouped together in another document (see Figure 13).

Figure 12. Groupings of forms of *Kohserake*.

ID	Document Name	Document Type	Author	Year	Language of Document	Language of Author	Place Name	Associated Feature	Modern Name	Notes	Name Meaning	Page or Section	Analyzed?
2059	Indian names in New-York : with a selection from other states, ...	Book: https://babel.hathitrust.org/cgi/pt?id=inu.39000005923342;view=1up;seq=11	Beauchamp, W. M.	1893	English	English	Ganentouta	River	Assumption River	p. 34; "Genetota"	"pine standing up"		
621	Mappa geographica Provinciae Novae Eboracae ab Angliis New-York	Map: https://collections.leventhalmap.org/search/commonwealth:z603vq42z	Sauthier, Claude Joseph	1778	English	English/French	Ganentouta	River	Salmon River				
344	Carte du théâtre de la guerre dans l'Amérique Septentrionale,	Map: https://collections.leventhalmap.org/search/commonwealth:z603vt68q	du Chesnoy, Michel	1778	French	French	Ganentouta	River					

Names2													
ID	Document Name	Document Type	Author	Year	Language of Document	Language of Author	Place Name	Associated Feature	Modern Name	Notes	Name Meaning	Page or Section	Analyzed?
170	Footprint 21 of the Red Man	Book	Rutledge	1906	English	English	Cowabesetia	Area		p. 188; "Cowabesetia" "beaver hunting ground" "Cowabesetia" "country"			

During this step, I also compared forms using the Kanyen'kéha Feature List (see 3.4) and several dictionaries.

Several rounds of organization helped me to understand how many of the place name forms were different representations of a single place name, how many place names were repeated in more than one location, and to orthographically analyze the data as outlined in Chapter 4. This reduced the total name forms to approximately 140 possible Kanyen'kéha names which were then brought to each of the consultants for interpretation. Out of these 140 names, 12 of these contained only one understandable root and the rest of the name was uninterpretable; although the research questions as outlined in Section 2.8 require the presence of a root, absent further interpretable morphemes, it was not possible to render an accurate semantic or grammatical analysis. Furthermore, names where only a particle, prefix or suffix were identifiable were not included in this. In total, 87 names were completely interpretable or partly interpretable.

Names from primary sources that fit the geographical and linguistic criteria for Kanyen'kéha place names (i.e., were in the geographic area and did not contain "m", "p" or "b") were entered into the database as written, including accents, hyphens, and other characters such as ß. If data was not attested directly from a speaker, I required for it to be attested from at least one other source in order for me to consider it useable data; in other words, there needed to be at least two separate occurrences of a name within secondary sources. If there were two separate occurrences of a name given in a place names compilation, I considered the name to be useable and cited the compilation as the source. The goal of this exercise was to avoid the situation of manufactured place names such as those created by Schoolcraft (see Section 1.4).

After input, the data underwent several rounds of organization. First, names were sorted into groups based upon the location (either on a map or as given in text) and linguistic structure. Sorting categories in this round included Kanyen'kéha-Onyota'a:ka, Other Rotinonhseshá:ka Language/Territory or Unknown. Data that was identified as probable Onödowá'ga: origin was sent to the Seneca Nation at Cattaraugus for their own analysis. After this round, I focused on the categories Kanyen'kéha-Onyota'a:ka and Other for further organization. As explained in 3.3.1, one of the only

major phonological differences between Kanyen'kéha and Onyota'a:ka is the difference in the quality of the consonant [ɹ] in Kanyen'kéha and [l] Onyota'a:ka; in given that this contrast is not found in the Akwesashne variety of Kanyen'kéha, that this contrast is difficult to establish in the orthography, and that no clear boundary between Onyota'a:ka and Kanyen'kehá:ka territory can be established, it proved difficult to make a distinction between the Onyota'a:ka and Kanyen'kéha place names. Therefore, it made more sense to analyze Kanyen'kéha and Onyota'a:ka together linguistically unless geographic or other specific evidence indicated that a name was either Kanyen'kéha or Onyota'a:ka. In order to better determine whether a name is Kanyen'kéha and Onyota'a:ka in origin, this methodology as well as the protocols outlined in Section 3.5 require that the researcher work directly with the Onyota'a:ka.

In another round of organization, all instances of names that were known to refer to the same geographical location were grouped together in order to examine all attestations over time. Figure 14 is a screen shot showing several attestations of the name *Kohserake* (see the entry in Chapter 5):

Figure 14. Attestations of the name *Kohserake*.

The next step in the process was to reconstruct a likely Kanyen'kéha pronunciation of these names based upon the orthography and the author's mother tongue before presenting the names to Kanyen'kéha speakers for further analysis. This is detailed in Chapter 4.

The place names database and all related files were kept on my personal password-protected laptop and were accessible only to myself; however, for the purposes of field work, around 500 pages of names were printed out and kept in a three-ring binder which accompanied me when I met with consultants. The use of a hardcopy format made it easier for me to survey all attestations of a name since a computer screen can only show so much information at once. It also made morphological analysis easier since consultants and I could more actively investigate the breakdown of a name by making notes on the paper together.

3.4 Kanyen'kéha Natural Features List

At the same time as data collection, I created a list of geographic physical features, materials, food items, wildlife, ecological and environmental terms, and some physical actions that I posited may be used in Kanyen'kéha place naming based upon the known meanings of some present-day Kanyen'kéha names as confirmed by Kanyen'kéha speakers (Ticonderoga, Canajoharie, Akwesashne, Kahnawà:ke, etc.). I also reviewed Kanyen'kéha terms and English translations of Kanyen'kéha terms in Michelson (1973), Bonvillain (1973), and Maracle (1992, 2003) for the same purpose, i.e., to identify roots, stems, affixes, or other linguistic and semantic information used within place names. Although guided by my own hypothesis (see section 2.9), by other Kanyen'kéha name meanings, and by the place naming studies outlined in Section 2.7, this process was not intended to be exhaustive, nor to eliminate my own cultural and ethnophysiological biases. This list was intended to streamline the process of identifying roots, and also help rule out erroneous translations. While the list did serve that purpose, I believe an initial study of landscape ontology such as Levinson (2008) and Duvall (2011) would have been beneficial and I would recommend this course of action as part of the overall methodology.

3.5 Indigenous Knowledge and Ethics

The type of knowledge held within Kanyen'kehá:ka place names, knowledge which requires an intimate, long-term connection to a landscape, can be described as Indigenous Knowledge (abbreviated throughout this text as IK) or Traditional Environmental Knowledge (abbreviated throughout this text as TEK). IK is defined by the Assembly of First Nations as “knowledge informed by aboriginal paradigms as applied to skills, understandings, expertise, facts, familiarities, beliefs, revelations and observations...it is location specific and reflects the particular conditions of unique cultures and peoples in specific geographic locations” (Assembly of First Nations, 2015, p. 4). IK is a distinct type of knowledge, and place names, such as those outlined throughout the previous chapters, are a means of transmitting knowledge of the landscape and environment. According to the Secretariat of the Convention on

Biological Diversity (2007), Traditional Knowledge also encompasses other practices such as storytelling, ceremonies, music, dance, and artistic practices, cultural traditions, ideologies and spirituality, hunting, trapping and food gathering techniques, and traditional medicines. Brodnig and Mayer-Schönberger (2000) outline the ways that IK differs from Western-based concepts of science which include an emphasis on experiential and place-based learning, the passing of knowledge through oral tradition, and an understanding of the inter-relatedness and interconnection of all things. UNESCO (2017) defines Indigenous Knowledge as “the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings” (UNESCO, 2017) which is acquired during travel and trade, through acts of cultural significance, and in the process of gathering sustenance and materials. Place is emphasized in the Assembly of First Nations definition of IK, which states that it “reflects the particular conditions of unique cultures and peoples in specific geographic locations” (Assembly of First Nations, 2015, p. 4) and is based on “cumulative, collective experience” (Brodnig and Mayer-Schönberger, 2000, p. 5) in that location over a period of time that extends over generations. IK and Traditional Environmental Knowledge is passed intergenerationally in the course of language acquisition and enculturation.

The ethics of a place name study must be considered very carefully, especially if Indigenous communities and/or IK are to be involved. The Social Sciences and Humanities Research Council (SSHRC) of Canada Statement 2, chapter 9 states:

Research involving Aboriginal peoples in Canada has been defined and carried out primarily by non-Aboriginal researchers. The approaches used have not generally reflected Aboriginal world views, and the research has not necessarily benefited Aboriginal peoples or communities. As a result, Aboriginal peoples continue to regard research, particularly research originating outside their communities, with a certain apprehension or mistrust” (2014, p. 109)...“Where the research is likely to affect the welfare of an Aboriginal community, or communities, to which prospective participants belong, researchers shall seek engagement with the relevant community... The desire to conserve, reclaim and develop knowledge specific to First Nations, Inuit and Métis communities, and to benefit from contemporary applications of traditional knowledge, is a motivating force in community initiatives to assume a decisive role in research” (ibid., p. 111).

This research meets several conditions for engagement, including research that seeks input regarding a community's cultural heritage and traditional knowledge, and the interpretation of research referring to Indigenous communities, peoples, language, history and/or culture.

The 17th century treaty agreement made between non-Indigenous settlers (the Dutch colonists of the New Netherlands, and later the English) and the Kanyen'kehá:ka (and later other Rotinohseshá:ka), the *Tekani Teyothata'tye Kaswenta*, known in English as the Two Row Wampum (Hill, 2013, see Section 2.4), provides a philosophical backbone and praxis for me as a non-Indigenous person undertaking research with the Kanyen'kehá:ka and Rotinohseshá:ka people. According to Rick Hill¹⁵, oral history states that this Treaty is based upon the first encounter between the *Onkwehonwe* ("the people", in this case, the Kanyen'kehá:ka) and the *Skaghneghtadaronni* ("Schenectady-People", the Dutch) and was considered to be the beginning of the treaty relationship. After a series of meetings, in 1613, two Dutch men, including Jacques Elleken who would later become Commander of Fort Nassau, struck an agreement with the Rotinohseshá:ka two miles from Albany near "Tawassagunshee" or "Tawassgunshee" (the river known in Dutch as Noordtman's Kill and today known as Norman's Kill (Beauchamp, 1907, p. 24)). This agreement was then encoded into the *Kaswentha* (below) as per the "traditional forms of symbolic literacy"¹⁶ of the Rotinohseshá:ka and on paper, symbolized by three rings, as per the literacy traditions of the Dutch.

¹⁵ Richard W. Hill, Sr., *Skarù·rę?*, is Senior Project Coordinator at the Indigenous Knowledge Centre at Six Nations Polytechnic at Six Nations, Ontario, former Assistant at the National Museum of the American Indian, former Museum Director of the Institute for American Indian Arts Museum of Contemporary Native Arts in Santa Fe, and a former Lecturer in Native American Studies at the State University of New York at Buffalo. (Six Nations Polytechnic, 2019).

¹⁶ See Footnote 11.

Figure 15. The *Kaswentha*, courtesy Onondaga Nation (onondaganation.org).

Within the wampum belt, the Rotinonhseshá:ka and the Dutch are each represented by one dark blue or purple row. The rows are often described as representing a canoe (the Rotinonhseshá:ka) and a ship (the Dutch) who are both floating on a river; these rows are parallel to each other to demonstrate that neither group will interfere in the laws or ways of life of the other; the late Gayogohó:nq' Chief Jacob Thomas, in his oral history of the *Kaswentha*, explained how the wampum belt was to guide interactions between the two groups: "People who get into your [the Dutch] boat will be guided by it. Your people who will get into the canoe will be guided by the ways of the canoe" (Hill, 2013, citing Thomas' oral history). The first and second white rows represent peace and friendship, respectively, while the last row represents the everlasting nature of the agreement. These principles were also adopted by the English upon forming the Province of New York in 1664. This agreement was recorded as the Silver Covenant Chain, whose links bound the canoe and the ship together, and remains in effect (ibid).

In order to begin this work in a respectful way, I began to build relationships within the communities in which I intended to work and requested participants for an Indigenous Advisory Committee where all questions regarding protocols, field work and interaction with Indigenous communities could be vetted directly by community representatives. Originally, I had intended to study Rotinonhshá:ka names generally, and therefore, the Committee consisted of not only Kanyen'kehá:ka, but other Rotinonhshá:ka as well. In particular, Starla Myers, Kanyen'kehá:ka from Six Nations was instrumental in providing me feedback to questions regarding protocols and respect within a Rotinonhshá:ka context, and to Kanyen'kehá:ka general history. We also often

traded historical documentation, and discussed the implications of that documentation, both in terms of this dissertation, but also in terms of giving present-day situations and actions historical context. Having community members provide guidance in conjunction with my advisors and Indigenous academics such as David Newhouse, Onoñda'géga' from Six Nations, provided balance and accountability between the two rows—the Indigenous communities with whom I work and the university.

In the case of research, to me, the “boat” represents Western philosophies, methodologies and ways of thinking, and the “canoe” represents Kanyen'kehá:ka and Rotinohseshá:ka philosophies, methodologies and ways of thinking. Pualani Louis (2007) advises against using Western-centred research paradigms when undertaking work within Indigenous communities: “The most important elements are that research in Indigenous communities be conducted respectfully, from an Indigenous point of view and that the research has meaning that contributes to the community” (p. 131). She goes on to outline Four Principles in common amongst the majority of Indigenous methodologies. Below, I will give a brief description of each principle as well as how each principle has been implemented in the course of this study.

Principle 1: Relational accountability (p. 133). This principle describes the understanding of interconnectedness in every aspect of being. Figures 2 and 4 introduced in Chapter 1 demonstrate this idea in terms of the process of naming itself, but interconnectedness figures throughout all aspects of the research process and throughout life in general. This includes, and connects, the researcher and the communities in which they are working. Relational accountability is also encoded within the principles of the *Kaswentha* as outlined above and serves as the framework for this ethics methodology.

Principle 2: Respectful presentation (ibid). Pualani Louis describes respectful presentation as the ability to listen deeply and with humility. For me, the ability to do so means beginning by examining my own preconceived notions about what I think of as

knowledge and knowing, and being open to being corrected when I misunderstand, or when I have erred both in terms of facts and in terms of social situations. In essence, I approach this work as a “blank slate” to be populated by different varieties and experiences of knowing.

Principle 3: Reciprocal appropriation. This term, which Pualani Louis attributes to N. Scott Momaday, underscores the need for reciprocal benefits from any research undertaken within Indigenous communities. Historically, such research has been unilateral, benefitting only the researcher and/or academia while failing to provide benefit for the Indigenous communities themselves. Since the communities are in the best position to determine what will be beneficial to them, satisfactory reciprocity is also best determined by them.

Principle 4: Rights and Regulation. This term refers specifically to the imparting, control and ownership of any IK encountered through the course of study and acknowledges the total process as a collaboration with Indigenous communities using Indigenous protocols. The data collected for this study is subject to OCAP® principles where OCAP is an acronym standing for *Ownership, Control, Access and Possession*. As outlined by the First Nations Information Governance Centre (2020), these principles acknowledge First Nations rights and ownership of IK, which includes physical control and access. I acknowledge my responsibility to any knowledge uncovered in the course of this research: all raw data is governed by OCAP principles and is available to the community in both hardcopy and digital format. All of the linguistic consultants have received hard copies of the complete Kanyen’kéha place names list used here, and the communities shall receive copies of this dissertation in digital format (and print if possible) for their own use as requested.

It is appropriate to take an Indigenous-informed approach to this work not only because the work involves IK, but also because the *O’nonna* Three-Sided Place Name Framework and this methodology demand it as part of the ethnographic process. For the purposes of this study, community members are **not** considered to be subjects or

participants, but rather to be consultants and co-researchers. Since the community members control the data and the ethical process through the Indigenous Advisory Board, and are participants in the study, rather than subjects, the Research Ethics Board (REB) review takes on a somewhat different purpose for this study: that of binding the researcher to OCAP principles and to the wishes of the community and Indigenous Advisory Board. This has the effect of shifting the balance of power from the academic institution to the community; the current REB model follows a top down approach that is primarily concerned with the protection of study subjects and assumes that the collected data “belongs” to the researcher. In addition, in this model Participants are considered as individuals, rather than as a collective and the process of consent occurs between a single participant and the researcher. The alternative REB model follows a bottom-up approach wherein the researcher agrees to follow the protocols and rules set forth by the community in regard to the knowledge which is controlled by the community. The people are protected from harm through their ownership, control, access and protection of their own knowledge, thereby removing the possibility of it being used against their will, which has traditionally been an area of friction between researchers and Indigenous communities.

I presented this alternative REB protocol, and its approval from CUREB, to each consultant prior to beginning field work together with a copy of OCAP principles. I explained that any IK discussed was owned, controlled, and possessed by them, that I am “loaned” this information, that they could revoke this “loan” at any time and that copies of the collected data would be accessible to them according to their wishes. I also explained that I was legally obligated through the REB to protect any IK involved in the research according to the wishes of the community.

3.6 Field Work with Linguistic Consultants.

3.6.1 Consultants

All consultants are mother-tongue speakers of Kanyen’kéha. I traveled to either Akwesashne or Kahnawà:ke to meet with them either individually or together. With

permission, I recorded meetings on a digital audio device; in some cases, consultants requested that I not record meetings, except for written notes (with which I complied).

Okwáho (pseudonym) of the Wolf Clan of Akwesashne, has been instrumental in this work since 2014 when I first approached him regarding Kanyen'kéha place names. He has been described as "a scholar of the Kanyen'kéha language, interested in the origins of words and how they came into common use" (Indian Times, 2008), but he also dislikes being called "an authority" since, as he has said, interpretations vary from person to person. Okwáho was a student of Tehanetorens Ray Fadden and served on the Akwesashne Mohawk Counselor's Organization in the 1950s (ibid). Today, he is known for his knowledge of the Kanyen'kéha language and culture, as well as his crafts work on traditional regalia and basketry which is exhibited in major museums. He will not be pleased about my highlighting all of his accomplishments in this dissertation as he is extremely humble; however, I would not have been able to complete this dissertation without him and his partner's help, guidance, insight, and, if I am being honest, food.

Kahentinetha Horn, Bear Clan of Kahnawà:ke is a former model and actress and a notable Kanyen'kéha civil rights activist now featured in Kaniehtiio Horn's "Coffee with my Ma" podcast (see <https://www.stitcher.com/podcast/coffee-with-my-ma>). Kahentinetha worked within the Department of Indian Affairs in several positions and was present in Kanehsatá:ke during the "Oka Crisis" of 1990. Today, she works with speakers of the Kanehsatá:ke variety of Kanyen'kéha to document their knowledge and language and runs the Mohawk Nation News blog (mohawknationnews.com). She is the mother of Dr. Ojistoh Horn, Dr. Kahente Horn-Miller, Waneek Horn-Miller and Kaniehtiio Horn.

Tekarontake Paul Delaronde, Bear Clan of Kahnawà:ke, was "raised in the way of our old people and the way that our people have always taught us, to know who we are, what we represent, where we stand in today's world" (Horn, 2018). He was raised by his grandfather, a Bear Clan chief, and his grandmother, an acting Clanmother, and they did not speak English in the home. He has served as an Expert Witness on Rotinohseshá:ka

Land and Traditional Governance and the Kayanere'kó:wa ("the Great Law of Peace"), and frequently travels to gatherings to share his expertise with others.

Kanasaraken Loran Thompson, Bear Clan of Akwesashne, is former Chief of Akwesashne and a Longhouse speaker. He has appeared before the United Nations. Tekarontake, Kanasaraken and Ateronhiata:kon Francis Boots travel within Kanyen'kehá:ka and Rotinonhseshá:ka communities teaching about the Kayenerekó:wa and Kanyen'kehá:ka history. Kanasaraken has also shared knowledge with the Indigenous people of South America, and, together with Ateronhiata:kon, has been featured on AkwesasneTV's *lonkwaká:raton* ('Our Stories') which examines "how the Mohawk language survives and thrives in the community of Akwesasne...the stories of the history of the territory" and "new approaches to life and language and how they intertwine with contemporary community life" (AkwesasneTV, 2016).

Ateronhiata:kon Francis Boots of Akwesashne is Knowledge Keeper and Longhouse Speaker of the Snipe Clan. He formerly worked for the Mohawk Council of Akwesashne as a historian, and currently teaches the language and history at Kanien'ke in New York state. Together with Tekarontake and Kanasaraken, he travels to share his knowledge of the Kayenerekó:wa and Kanyen'kehá:ka history. His knowledge of Kanyen'kehá:ka history and culture can be described as "encyclopedic".

3.6.2 Field Methods

This section will summarize the field methods I used in working with Kanyen'kéha speakers. Field methods presented a challenge in that although there have been several modern-day studies on Indigenous place names, such as Mithun (1984), Basso (1996), and Jett (2001), elicitation involving place names has primarily been conducted for the purposes of documentation present-day place names or landscape terms, rather than interpretation of place names taken from archival material. Although Mithun and Basso worked with place names from the Kanyen'kéha and the Apache and Navajo languages, respectively, they did not outline their field methodologies, and Jett states that he recorded the names and had the recording transcribed and translated through secondary sources (2001).

Other resources developed in regard to the elicitation and documentation of ethnophysiological terms or toponyms were helpful for those specific aspects of this study. Bohnemeyer, Burenhult, Enfield, & Levinson, through the Language and Cognition department at the Max Planck Institute for Psycholinguistics, have produced an extensive variety of materials as “field manuals and stimulus materials”; there are 36 entries specifically in reference to ideas of space, ethnophysiology, and place names including “Space in Australian languages” and “Route description elicitation”. Of all of these entries, the toponym questionnaire is the most relevant to this project. The questionnaire is “not an elicitation tool. The idea is to make sure you have a comprehensive answer to each of the research questions in the questionnaire. The questionnaire does not detail a general methodology for obtaining the answers, although it gives hints occasionally at criteria for what might count as an answer and examples that suggest possible test frames” (Bohnemeyer, Burenhult, Enfield & Levinson, 2004, n.p.). Many of these resources were very helpful in the development of the Kanyen’kéha Natural Features list (see 3.4 and Appendix D). In addition, Nash and Simpson (2012) was also helpful in developing field methods despite being situated in Australia. Unfortunately, I was not able to follow some of the main recommendations of these resources: Bohnemeyer, Burenhult, Enfield & Levinson (2004), and Turk, Mark, O’Meara & Stea (2012) state that the preferred method for eliciting landscape terms is either directly in the field or through visual stimulus (photography, video, etc.). Likewise, Nash and Simpson (2012) argue that the elicitation of place names and meanings for the purposes of documentation is best done in the field.

It was generally not possible to visit the locations and/or referents of many Kanyen’kéha place names for several reasons. First, the locations and/or referents of Kanyen’kéha place names are scattered throughout various parts of central New York state (but mainly the eastern parts) and Vermont. It was not possible to visit most of these sites without considerably more time, organization, and funding (and the ability for the consultants to travel, which was not always possible). Many of the place name locations are also now owned by individuals and thus “private property”. Many of the

original locations and/or referents have been altered to the point of being unrecognizable (see, for example, Deep Spring, p. 34) and therefore are not conducive to accurate photography or video representation of the referent. Some of these issues were mitigated through the use of maps, which will be explained below.

There were three main categories of elicitation during fieldwork: geographical information (i.e., location, referent, and ethnophysiographical land- and waterscape terms), place name meanings, and linguistic information such as nominal roots, verbal roots, prefixes, and suffixes. Chelliah and de Reuse (2010) recommend a change-up between “easy” tasks and “difficult” tasks in order to avoid fatigue and boredom of both the linguist and the consultant; therefore, I switched between methods either by request, or when I felt it would be beneficial to do something different. This also meant that I switched between the three main categories of elicitation. The methods used in the field are listed below.

3.6.2.1 Open Interview

Since much of Kanyen’kehá:ka history and geography is oral knowledge, I often began with the open interview technique in which I asked the consultant to share whatever knowledge they wished to share of general Rotinohseshá:ka geography and/or place names. As field sessions continued, this progressed into a more targeted discussion of ideas both I and the consultant had had between meetings regarding place, place names or the Kanyen’kéha language.

3.6.2.2 Eliciting Meanings in Kanyen’kéha

Open interviews often started with the place name of the community in which I was in, and it was often the informant that asked if I knew what the name of the community meant. From the establishment of the meaning of the community, I could then ask questions of a more morphological nature based upon the place name. For example, I could then ask, “If Kahnawà:ke means ‘at the rapids’, how could I say ‘by the rapids?’” or “How could I say ‘at the river?’” This helped to identify nominal roots, prefixes and suffixes. However, it also often led to discussion of more local names (see *Tsi kanatayen* and *Kawehtnote*, for example), as well as other Kanyen’kéha names such

as *Tekanyateroken*. During this time, in addition to verifying place names and collecting new names, I was also able to verify and correct the Kanyen'kéha Natural Features word list that I had preassembled for field meetings, as well as fill in some of the features that I had listed in English, but for which I had not found a similar feature in Kanyen'kéha. In addition, I was able to ask some questions about the features themselves, which helped me begin to understand ethnophysiological differences in how the Kanyen'kehá:ka view the landscape: for example, I asked if *kanyatare*, interpreted as either 'lake' (Maracle, 2001) or 'river' (Lounsbury, 1960) or 'a large body of moving water' (Maracle, 2003; Lounsbury, 1960) could be used for Lake Ontario, for the Hudson River, Canaderago Lake, or a small creek flowing through the consultant's back yard.

The discussion of historical Kanyen'kéha names was more difficult in that it entailed my own phonetic interpretation of the data compiled from the documentation (see Chapter 4 for this analysis) and often required some phonetic and morphemic exploration. This was not always the case: when I read my interpretation of the name *Kohserake* to Kahentinetha and Tekarontake, they both said immediately, in perfect unison, "That's 'winter'!" Tekarontake then said, "They must have had a winter camp there." In other cases, the historical documentation helped to piece together the puzzle of a name that we suspected of being Kanyen'kéha, but that had undergone enough phonetic changes as to be uninterpretable. Ohkwáho had been thinking of the name *Kanyaterosseras* for many years, and we were both happy to find that the historical sources supported his suspected interpretation (see the entry in Chapter 5 for this interpretation). Tekarontake also preferred to work out place names for himself by looking through the hard copy at the various ways they had been spelled.

To me, the process of arriving at an interpretation of a Kanyen'kéha place name was very much a reflection of the fact that IK is not held by a single person, but is communal, and this is reflected in Okwáho's comments about not wanting to be considered an "authority"; there is not a single "authority", but rather, this knowledge is distributed amongst community members with each holding different pieces of that knowledge. Therefore, there are many different facets and interpretations of that

knowledge, but everyone is also aware that this is the case, is respectful of others' interpretations, and willing to consider the many alternative interpretations of place names. Thus, I found the overall process of "place name negotiation" to be reflective of the consensus process that is central to Rotinonhseshá:ka governance (see Horn-Miller, 2013). In at least one case, it took several years to arrive at an interpretation which made sense in the context of geography, culture and language and amongst all the people involved.

3.6.2.3 Duplicate Names

During my initial data collection phase I located place names which were used for more than one location. These are discussed in detail in section 6.2.1; instances of repeated names include *Kahnawà:ke* and *Teyoken* (see Chapter 5), and I have written about *Kahnawà:ke* and the implications of duplicate names in particular in Ingram (2018). In terms of field work, these names allowed the opportunity to explore not only why there was more than one instance of the same name, but also explore the geography and ethnophysiology of the places where they appear. For example, I asked, "These two places look like they have the same name. Is this (first area) similar to this (second area) somehow?" This line of questioning helped to establish that many Kanyen'kéha place names are a description of physical features in that each of the names were located at an area with that same feature; in the case of *Kahnawà:ke*, for example, there were rapids in the vicinity of each use of this name.

This technique also helped to establish not only the English interpretation and the meaning of a place name, but also its sense: though the interpretation of *Kahnawà:ke* is "at the rapids", according to Billy Two Rivers, the connotation indicates a type of "border control", since travels were required to portage around the rapids and thus, could be easily observed (KahnawakeTV, 2012; see *Kahnawà:ke* in Chapter 5 for more information).

3.6.2.4 Similar Morphology

In addition to repeated place names, as I completed the initial round of analysis, it became clear that there were many names which share specific morphemes. One

example is use of the nominal root *-nyatar-* ('waterway') which Lounsbury (1960) gives as the nominal root in the Kanyen'kéha names *Kanyatarakwá:ronte'*, *Tsi kanyataro'kte'*, and *Tekanyataroken* (see each entry in Chapter 5 for a full morphological analysis). One of my field techniques for determining morphological boundaries and establishing root meanings was to juxtapose a name whose interpretation I already knew with other names which appeared to be similar in some respect but contained minor differences. For example, I asked Okwáho, "The name "Tionondoroge" seems to be a lot like *Tekanyateroken*. What's the difference between them?" (see *Teyonontoken*).

3.6.2.5 Working from given interpretations

In some cases where an unfamiliar place name required considerable phonetic negotiation from both me and the consultant, an English interpretation had also been attested. Sometimes this interpretation was helpful in determining the semantics and/or morphology of the place name while at other times the interpretation seemed to have no relation to the name (see, for example, Table 8, and Schoolcraft in section 1.3). Together, the consultant and I might work at an unknown place name from several angles, i.e., from the Kanyen'kéha name to an English interpretation, from the attested English interpretation to the Kanyen'kéha semantics and morphology, or from the Kanyen'kéha name and location to an English interpretation. This final method, of determining a name's interpretation using its location, required the use of visual aids in order to be effective.

3.6.2.6 Use of Maps

In many cases, when I asked about an unfamiliar place name, the consultant would ask if I knew the location and/or referent of the name. At first, I was concerned that giving an attested location or referent might be leading the consultant and therefore creating confirmation bias. However, it became clear that this is a necessary component to understanding place name meanings, since physical environment is one of the components of the philosophical framework outlined in Figure 2. Having anticipated that consultants may want to have a visual reference, I assembled a collection of paper-based maps. Paper maps were chosen over digital representations

such as Google Earth or Google Maps since an internet connection was not guaranteed, and since my laptop would already be in use for the purposes of taking notes.

The maps assembled included the following:

- 1) New York state road map via
<http://ontheworldmap.com/usa/state/new-york/new-york-road-map.html>
- 2) New York highway map via
<http://ontheworldmap.com/usa/state/new-york/new-york-highway-map.html>
- 3) New York state outline map with bodies of water and administrative boundaries via
https://en.wikipedia.org/wiki/File:USA_New_York_location_map.svg
- 4) New York state physical map via
<http://ontheworldmap.com/usa/state/new-york/new-york-physical-map.jpg>

- 5) Custom physical map with no settlements, no transportation routes, and no areal boundaries (see Figure 16).

I also included maps of Pennsylvania since I was aware that Rotinohseshá:ka names extend into that modern-day state, even though I was unsure if Kanyen'kéha names would do the

Figure 16. Part of the custom physical map created for field work.

same. Pennsylvania maps included:

- 6) National Highway System (Pennsylvania) via the Pennsylvania Department of Transportation Geographic Information section, found at
http://www.dot7.state.pa.us/BPR_PDF_FILES/MAPS/Statewide/NHS_Statewide_2018.pdf
- 7) Pennsylvania Tourism and Transportation Map via
<http://ontheworldmap.com/usa/state/pennsylvania/large-detailed-tourist-map-of-pennsylvania-with-cities-and-towns.jpg>
- 8) A road map of Pennsylvania with cities via
<http://ontheworldmap.com/usa/state/pennsylvania/road-map-of-pennsylvania-with-cities.html>

The custom map as given in (5) and Figure 12 also included Pennsylvania. These maps were chosen for specific purposes: the road map allowed for the consultant to quickly “get their bearings” for discussion of place names since all were drivers familiar with the road systems. The other maps had different purposes: the physical maps listed here show only the most major of human settlements in order to focus on the physical features of these states, including major bodies of water, mountain ranges, and the Allegheny Plateau. On the New York state map (4), elevation is also indicated in shaded relief using colour, with brown as the highest elevation, green signifying sea level, and blue showing areas below sea level. The custom map, fit on four 18” x 24” sheets and all areal boundaries, settlements, and transportation routes (roads, railroads, airports, etc.) were removed leaving the focus on the landscape and waterways. This map was intended to serve as a “bare bones” version of the geographic area in question by providing only physical features. It could also be oriented in different directions (i.e., East, West, etc.) since it also did not show a compass rose. However, it is important to note that major settlements are often still identifiable by landcover since there is less vegetation in such areas, or the area is more homogeneous in elevation due to the construction of buildings.

Despite being well-prepared with the “map kit”, the consultants consistently chose to utilize only the road maps (Map 1, Map 8) and physical map of New York state (Map 4) in the interviews. The other maps (the New York state outline map, the custom map, the Pennsylvania Highway map and the Pennsylvania Tourism and Transportation Map) were not needed.

While some orthographic analysis was undertaken before field work, the field work itself provided insight into the way that the Kanyen’kéha language, and Kanyen’kehá:ka places in general, have been documented by people speaking different languages. This analysis is presented in Chapter 4, while Chapters 5 and 6 outline the semantic and grammatical results of this study using the methodology outlined in this chapter.

Chapter 4.

Because orthography plays a role in the documentation of place names, some study of its use in relation to the sound system(s) of the languages involved is helpful to prepare for field work. Being aware of the possible sounds of the origin language encoded into orthography provides the basis for the initial presentation and subsequent negotiation of the name to language consultants. However, it is important to note that, since subjective interpretation is involved at every level of this study—from deciphering the location and referent, to orthography and pronunciation, the use of this method represents only a starting point of the exploration of pronunciation.

This chapter outlines the relationships of language to orthography for three of the languages used to document Kanyen’kéha place names: French (Section 4.1.1), Dutch (Section 4.1.2) and English (Section 4.1.3). For each section, I give a brief discussion of the sounds of each language at the time period when speakers of the language would have come into contact with speakers of Kanyen’kéha, as well as a modern-day phonological inventory. In Section 4.2, I discuss some patterns located within the data in regard to the orthographic representations of sounds within place name documentation.

4.1 Orthographical Analysis.

As outlined in Section 2.6.2, the Kanyen'kéha language is markedly different in sound and structure from those of the colonial languages conveyed to the geographic area of the Rotinonhseshá:ka homeland, and these differences have influenced how place names were heard and, compounded by a lack of standardized orthographies, how they were recorded in written form. Following Bloomfield (1930/1984, p. 80), differences in the phonemic inventories of one's mother tongue(s) give rise to variations in the interpretation of phonemes of other languages. French, Dutch, and English each differ in their phonemic inventories, and speakers of each of these languages heard the sounds of Rotinonhseshá:ka languages according to the sound systems of their mother tongue(s). These sounds were then interpreted into and represented by the symbols of written form. This complicates the situation in that no letters or sequences of letters can perfectly represent phonetic structures. In addition, although English, French and Dutch, all use the same alphabet (the Roman alphabet) to symbolize the sounds of the individual language, they do not necessarily use the same alphabetic symbols for sounds, even if the sounds are shared between them. Furthermore, within each of these languages, an individual may have their own way of symbolizing sound, depending on whether a standard system of spelling had been established for a language.

Since it is not always possible to pinpoint the original person who transcribed a Kanyen'kéha name, and, therefore, the mother tongue of the transcriber (as may occur in place name compilations), it is not always possible to apply this method. Familiarity with the transcriber's language is useful to the extent that it informs the field work, i.e., that the researcher can bring an idea of the possible pronunciation of a place name to the consultant. Having a variety of data from a variety of different languages presents the researcher with many different ways to evaluate potential pronunciation, one of which may be understandable to the linguistic consultant thus leading to an understanding of the semantics.

Because the overall goal of the collection of place names is not to analyse the representation of Kanyen'kéha place names in colonial languages, but rather to gather

enough data to bring to a linguistic consultant for field work, and because of the sheer number of names forms represented within the place name entries in Chapter 5, (around 648 total, from the over 2,000 collected), it was not possible to apply this method to every name used here. However, I did make use of the phonemic inventories presented throughout this chapter as much as was possible. I believe a study specifically regarding the interactions and representations between these languages would be both warranted and useful, but that was not the overall goal of this method, nor was it possible here given the time limitations.

Another issue to be considered is the possibility of multiple varieties of Kanyen'kéha based on geographic location throughout the time period under consideration; at present, there are at least four varieties of Kanyen'kéha (as spoken at Six Nations, Tyendinaga, Akwesashne and Kahnawà:ke). There is no reason to assume that there was not variation between Kanyen'kehá:ka villages, although I am unsure if these varieties and their specific variations can be pinpointed. It may be that the present situation of variation in Kanyen'kéha is a result of the natural development of historical varieties of Kanyen'kéha, or it may be that these varieties levelled over time into a single koine which was then geographically redistributed as Kanyen'kehá:ka settled into their present-day locations. However, this problem, as well as historical sound changes applicable to these varieties, must remain unresolved here.

An exact analysis of the different varieties of French, Dutch, and English phonology is far beyond the present research. However, some historical information regarding each of these languages is given below.

4.1.1 French

Name forms from French primary sources represent 7% of the total names of this study. Ayres-Bennett (2004) states of 17th century French, "The discussion of changes in pronunciation illustrates all too well the difficulties of separating out the different parameters of variation at this period" (p. 192-193); of Quebec French in particular, Morin (1996) states that an "understanding of this formation requires the reconstruction of all representative dialectal and social usages in 17th century France

and a better understanding of how modern usages have developed since that time, both in France and in Québec” (p. 265). To date, such a study has not been achieved. However, some historical information helps to make an argument for the use of a phonemic inventory taken from Morin (1996). First, the Académie française was established around 1634 in order to regulate and standardize the French language (Académie française, 2019). This leaves a gap of about 20 years between the time Champlain established the French colony at Quebec in 1608 and began to explore the interior, and when standardization of the language began (Hacket Fischer, 2008). Recollet missionaries arrived in 1615 (Jaenen, 1966) and would remain until the British takeover of Quebec forced Champlain and the Recollets to return to France in 1629 (ibid). In 1632, Quebec was returned to French control, and evangelization came under control of the Jesuits headed by Paul Le Jeune (ibid). The Jesuits documented much of their work in Indigenous languages and with Indigenous peoples and places through the *Relations des Jésuites*, some of which are included in this study. With Montreal founded in 1642 (Ville de Montréal, 2007), French documentation of Indigenous place names continued arguably until the end of the Seven Years’ War with the Treaty of Paris in 1763 which ceded French Canada to the British (Government of Canada, 2019). By this time standardization of European French could have taken hold. Therefore, from the time of contact until 1649 (the destruction of the mission of Saint-Marie-among-the-Huron, which effectively ended the Jesuit presence in New France (Sainte-Marie among the Hurons, 2019)), I follow Morin’s (2009) analysis of French phonemes at the end of the 16th century:

p	t			k		occlusives sourdes
b	d			g		occlusives sonores
f	s	(t)ʃ			h	fricatives sourdes
v	z	(d)ʒ				fricatives sonores
m	n	ɲ				nasales
	l, r, r	ʎ				liquides
		i	ɥ	u		glissantes (dipht.)
labiales	dentales	palatales	labio-palatales	vélaires	laryngales	

Figure 17. Consonants¹⁵ of late 16th c. French from Morin (2009).

i i:	y y:			ʊ ʊ:
e e:	ø ø:			
ɛ ɛ:			ɔ ɔ:	
	a a:			
				ẽ ẽ:
				œ œ:
				ã ã:
				õ õ:

Figure 18. Vowels (left) and nasalized vowels (right) of late 16th c. French from Morin (2009).

Of vowels of this time period, Morin states “Le système vocalique à la fin du XVIe siècle est très voisin de celui qui a été proposé pour la fin du XIIIe siècle...Le trait le plus novateur est la présence de véritables voyelles nasales” (p. 13). Although he separates oral vowels and nasalized vowels within his analysis, I present them both above in Figure 17. Morin also gives several “transitory” phonemic inventories of the vowels from the end of the 17th century to the middle of the 20th century, which are reproduced in Figure 19, below.

Figure 19. "Transitory" phonemic inventory of French vowels from the end of the 17th century to the middle of the 20th century from Morin (2009).

Morin also states that, except for the loss of [h], [λ] (which transitioned to the glide [j]) and a change in the place and manner of articulation of [r], the consonant system remained largely unchanged. Finally, Morin (1996) suggests that the variety of French spoken in Quebec can be traced to the Parisian norm of the 17th century.

The phonemic inventory of modern-day Standard French is given below in Figures 20 through 22 taken from Gess, Lyche, and Meisenburg (2012).

	Bilabial	Labio-dental	Dental	Alveolar	Alveo-palatal	Palatal	Velar	Uvular
stops	p / b		t / d				k / g	
fricatives		f / v		s / z	ʃ / ʒ			ʁ
nasals	m		n			(ɲ)	(ŋ)	
lateral				l				

Figure 20. The consonant inventory of Modern-day Standard French.

Oral	Front		Back	
	unrounded	rounded	unrounded	rounded
high	i / j	y / ɥ		u / w
mid-high	e	ø		o
mid-low	ɛ	œ (ə)		ɔ
low	a		(ɑ)	

Figure 21. Oral vowels of Modern-day Standard French.

Nasal	Front		Back	
	unrounded	rounded	unrounded	rounded
high				
mid-high				
mid-low	ẽ	(œ)		õ
low			ã	

Figure 22. Nasalized vowels of Modern-day Standard French.

4.1.2 Dutch

Although the Dutch language is one of the earliest sources of Kanyen'kéha place name records, the Dutch colony in North America, the New Netherlands, only lasted from 1624 to 1664 (van der Sijs, 2009), which may account for why Dutch names represent only 3% of total place name forms. Van der Sijs asserts that several varieties of Dutch were spoken in the Netherlands, and that, while the written language was in the process of standardization, there was no standard spoken language there (ibid); a noticeable difference between the varieties spoken in Europe and the varieties of North America did not occur until after 1664, when the British took over the colonies of the New Netherlands (ibid). From this point forward, colony administration, governance, treaty-making and trade was largely conducted in English, meaning that it becomes less likely to find Kanyen'kéha place names in Dutch documentation and more likely to find them in English documentation.

According to Buccini (1996), New Netherlands Dutch “has received remarkably little attention” (p. 36). In Buccini (1995), he states that the variety of New Netherlands Dutch in the year 1690 was similar to the variety spoken in Amsterdam during that same time period. According to van Loon (2014), the year 1500 marks the beginning of “Nieuwnederlands”, or “Modern Dutch”. Because Dutch represents such a small percentage of the data, and because there seems to have been little study on New Netherlands Dutch during the particular time period in question, I follow the phonemic inventory of modern Standard Dutch as given below in Figures 25 and 26, taken from Booij (1999).

	Bilabial	Labio dental	Alveolar	Palatal	Velar	Glottal
Plosives	p, b		t, d		k, (g)	
Fricatives		f, v	s, z		x, ɣ	h
Nasals	m		n		ŋ	
Liquids			l, r			
Glides		ʋ		j		

Figure 23. Consonant inventory of Standard Modern Dutch following Booij (1999), p. 7.

	front	central	back		Front	Central	Back
close	i, y		u	Close	i y		u
half close	ɪ, e, ʏ, ø	ə	o	Half close	↑ ↑		↑
half open	ɛ		ɔ	Half open	ɛ œ		ɔ
open			a, ɑ	Open			

Figure 24. Vowel inventory and diphthongs of Standard Modern Dutch following Booij (1999), p. 5 and p. 6, respectively.

Of the names that are documented in the Dutch language, a few observations can be made. The initial phoneme *k* in the names *Kana'tsyóhare* and *Kahnawerote* are represented as “c” in the names *Kana'tsyóhare* (“Canagero”, van der Donck, 1656; “Canagere”, van den Bogaert, 1988, p. 4) and *Kahnawerote* (“Caneray”, van der Donck, 1656; “Canowarode”, van den Bogaert, 1988, p. 4); the *k* of the external locative suffix *-ake* (‘on, in’) is represented as a “g” in *Kana'tsyóhare* (“Canagero”, van der Donck, 1656; “Canagere”, van den Bogaert, 1988, p. 4), *Ahskwake* (“Osquage”, van den Bogaert, 1988, p. 5) and *Teyonontoken* (“Tenotoge”, “Tenotooge”, van den Bogaert, 1988, p. 13) (see the following section, 4.2 for more discussion). Both van den Bogaert (writing in 1634 and 1635) and van der Donck (in 1656) document the “tsy” (pronounced as [tʰj] or [dʰj]) of *Kana'tsyóhare* as a “g” in the forms of “Canagere” (1988, p. 4) and “Canagero” respectively. Van den Bogaert documents the initial *sk* consonant cluster of *Skanatison'* as “sch” (1988, p. 5). Finally, the *h* phoneme does not seem to be presented at all in the orthographic convention used by van den Bogaert: not only is the post-vocalic *h* of

Kahnawerote missing in “Canowarode” (1988, p. 4), but neither “h” appears in his transcription of *Ohyonhke*, which he writes as “Oyöge” (1988, p. 1).

4.1.3 English

Kytö (2004) writes of the English spoken in North America before 1700 that “no major differences from the language of the mother country can be expected as the period between the first settlement and the [Salem Witch trials of 1692] was too short to make any far-reaching changes possible” (p. 134). Therefore, I follow Schlüter’s (2017) work for Early Modern British English until 1700, as given in Figure 25, below. She states, “After the re-establishment of initial /h/, the loss of its allophones [ç] and [x], and the introduction of /ʒ/ and /ŋ/, the Early Modern English inventory of consonants was practically identical with the present-day one” (2017, p. 34).

		Bilabial	Labiodental	Dental	Alveolar	Post-Alveolar	Palatal	Velar	Glottal
Stop	Voiceless	p			t			k	
	Voiced	b			d			g	
Affricate	Voiceless		f			tʃ			
	Voiced		v			dʒ			
Nasal	Voiceless								
	Voiced	m			n			ŋ	
Fricative	Voiceless			θ	s	ʃ		ɰ	h
	Voiced			ð	z	ʒ			
Liquid	Voiced				l	r			
	Voiced								
Glide	Voiced						j	w	

Figure 25. Early Modern English consonant inventory around 1700 via Schlüter (2017) p. 31 and Ingram.

Figure 26. Early Modern English vowel inventory around 1700 via Schlüter (2017), p. 31.

Of particular note here is that, according to Schlüter, /r/ was not lost in what is today Modern Standard British English until the 18th century, meaning that even for speakers of English from Britain, /r/ should still be realised, rather than deleted postvocally as it is Modern Standard British English.

Early Modern English would become Modern English around 1700 (Bergs & Brinton, 2017) by the time American and British English diverged in the 19th century (Schlüter, 2017). From the time when English first arrived in North America, to the time that it could definitively be called “American English”, the language underwent several phases described by Wolfram & Schilling (2015). These included the “foundation stage”, in which the Early Modern English phonemic inventory outlined in Figures 25 and 26 were likely used, followed by “exonormative stabilization”, i.e., the levelling of multiple varieties brought from the multi-variety British Isles. According to Longmore (2007), this had largely been achieved by the end of the 18th century with British observers noting “North American English as unmarked by dialect differences—as homogeneous” (Longmore, 2007, p. 535).

On the European side of the Atlantic, Bergs and Brinton (2017) state, “Attempts at reduction of variation were most successful on the plane of spelling, where by 1650 a spelling system was achieved which differs only little from the system still in use today” (p. 183). Noah Webster’s reform of American English spelling conventions and pronunciation would not occur until the 1783 publication of “*A grammatical institute of the English language*” and his first dictionary published in 1806 (Noah Webster House, 2019). The different varieties of English spoken in North America and non-standardized

spelling are well-reflected in the English documentation of Kanyen'kéha names through their myriad written forms. Judging English pronunciation between 1700 and 1790, during the time period where English speakers would have had the most interaction with Kanyen'kéha speakers, is more difficult than the time period prior to 1700 outlined in the previous paragraph due to these multiple problems. Therefore, I defer to the Modern American English phonemic inventory, which is given below in Figures 27 and 28 following Hayes (2009).

		<i>Bilabial</i>	<i>Labiodental</i>	<i>Dental</i>	<i>Alveolar</i>	<i>Palatoalveolar</i>	<i>Palatal</i>	<i>Velar</i>	<i>Glottal</i>
<i>Stops</i>	<i>voiceless</i>	/p/ <u>p</u> in			/t/ <u>t</u> in			/k/ <u>k</u> in	
	<i>voiced</i>	/b/ <u>b</u> in			/d/ <u>d</u> in			/g/ <u>g</u> ill	
<i>Affricates</i>	<i>voiceless</i>					/tʃ/ <u>ch</u> in			
	<i>voiced</i>					/dʒ/ <u>g</u> in			
<i>Fricatives</i>	<i>voiceless</i>		/f/ <u>f</u> in	/θ/ <u>th</u> in	/s/ <u>s</u> in	/ʃ/ <u>sh</u> in			/h/ <u>h</u> ymn
	<i>voiced</i>		/v/ <u>v</u> im	/ð/ <u>th</u> is	/z/ <u>z</u> ip	/ʒ/ <u>vi</u> sion			
<i>Nasals</i>		/m/ <u>m</u> itt			/n/ <u>n</u> ip			/ŋ/ <u>si</u> ng	
<i>Approximants</i>	<i>lateral</i>				/l/ <u>L</u> ynn				
	<i>central</i>	/w/ <u>w</u> in			/ɹ/ <u>r</u> im		/j/ <u>y</u> ing		

Figure 27. Modern Standard American English consonant inventory following Hayes (2009), p. 21.

	<i>Front Unrounded</i>	<i>Central Unrounded</i>	<i>Back</i>		<i>Diphthongs</i>
			<i>Unrounded</i>	<i>Rounded</i>	
<i>Upper high</i>	/i/ <u>b</u> eat			/u/ <u>b</u> oot	/aɪ/, /aʊ/, /ɔɪ/ b <u>i</u> re, b <u>ou</u> t, C <u>oi</u> t
<i>Lower high</i>	/ɪ/ <u>b</u> it			/ʊ/ <u>f</u> oot	
<i>Upper mid</i>	/eɪ/ <u>b</u> ait	/ɔ/ abb <u>o</u> t		/oʊ/ bo <u>a</u> t	<i>Rhotacized upper mid central unrounded</i>
<i>Lower mid</i>	/ɛ/ be <u>t</u>		/ʌ/ bu <u>t</u>	/ɔ/ bo <u>u</u> ght	
<i>Low</i>	/æ/ ba <u>t</u>		/ɑ/ fa <u>th</u> er		/ɜ/ Be <u>r</u> t

Figure 28. Modern Standard American English vowel and diphthong inventory following Hayes (2009), p. 22.

4.2 Orthographic Patterns

Even though Kanyen'kéha place names were documented in several languages, each with variation in spelling, orthographic patterns emerged within the data. Some of these will be examined within this section. As previously stated, the topics of varieties of colonial languages in North America, perception of those languages and orthographic representations of those languages are a separate field of study and this section should be considered only a brief introductory analysis of my own observations of the data.

The first noticeable pattern is that Kanyen'kéha *k* [k, g] is often transcribed as “g” within the data; this is likely due either to prevocalic voicing (Bonvillain, 1973, p. 28) or possibly differences in the rules governing aspiration. As outlined in Ingram, Anonby and Taylor (2019), this pattern is especially apparent in instances of the external locative suffix *-(á:)ke* [(á:)ge], meaning ‘at’, ‘on’, or ‘in’ in English (Ontario Ministry of Education, 2011, p. 15-16), and the verbal root *-oken* [ógǣ], meaning ‘to be merging or forking’ (Lounsbury, 1960, p. 49; Michelson, 1973, p. 151). Examples are reproduced in Table 9, below, from Ingram, Anonby and Taylor (2019). The verbal root *-oken* [ógǣ] is also present in the name *Astenhroken* in Table 12, below.

Table 9. Orthographic variants of the suffix *-(á:)ke* [(á:)ge] in historical documents from Ingram, Anonby and Taylor (2019).

<u>Suffix</u>	<u>Full Place Name</u>	<u>Language</u>	<u>Source</u>	<u>Year</u>
<u>(Orthography)</u>	<u>(Orthography)</u>			
“-age”	“Osquage”	Dutch	van den Bogaert	1634
“-agué”	“Ossaragué”	French	Lalement	1646
“-aga”	“Caughnawaga”	English	Clinton	1810
“-ago”	“Canaderago”	English	official place name ¹⁷	c. 1800 to present-day

Table 10. Orthographic variants of the root *-oken* [ógǣ] in historical documents from Ingram, Anonby and Taylor (2019).

<u>Root</u>	<u>Full Place Name</u> ¹⁸			
-------------	--------------------------------------	--	--	--

¹⁷ New York State Department of Environmental Conservation, 2018.

¹⁸ The transcriptions from van den Bogaert, Lalement, Clinton, Schuyler and Pierron are based on excerpts from the original sources as collected in Snow, Gehring and Starna (1996).

<u>(Orthography)</u>	<u>(Orthography)</u>	<u>Language</u>	<u>Source</u>	<u>Year</u>
“-ooge”	“Tenotooge”	Dutch	van den Bogaert	1634-1635
“-oguen”	“Tionnontoguen”	French	Pierron	1669-1670
“-oge”	“Tionondoge”	English	Schuyler	1693
“-ogen”	“Techirogen”	French	Bellin	1755

Table 10 also demonstrates another apparent orthographic pattern in which the nasalization of the final vowel of *-oken* [ogã] is preserved in the French transcriptions (“Tionnontoguen” and “Techirogen”), but not the corresponding Dutch and English transcriptions. Figure 18 in Section 4.1.1 demonstrates that, by the end of the late 16th century, European French had four nasalised vowels in its phonemic inventory; Walker (1984) demonstrates that varieties of French in North America also had between three and four nasalised vowels (p. 9 and 81). In both European and North American French, *ẽ* [ẽ] is the closest nasalised vowel to the appropriate Kanyen’kéha nasalised vowel, /ǣ/, transcribed in Table 10 as “en”.

A second pattern which deserves consideration is the representation (or absence) of /h/. This pattern is evident in the transcriptions of the name *Kahnawà:ke*. The morphophonemic structure of this name (the pronominal prefix *ka-* added to the root *-hnaw-*) produces a post-vocalic [h], a position in which it is not used in English. The result is a wide variety of orthographic representations of this name¹⁹, several examples of which are given below in Table 11 together with the documenting language:

Table 11. Orthographic representations of *Kahnawà:ke*

Orthography	Language of Documentation	Documenter	Year
Gandaouagué	French	le Mercier Pierron Lamberville	1667-1668 1669-1670 1672-1673
Gandaouágué	French	le Mercier	1667-1668
Gandaouaguen	French	le Mercier	1668-1669
Cagnawaga	English	Johnson Letters	1748-1774
Cognawage	English	Johnson Letters	1748-1774
Cacknawaga	English	Wraxall	1754

¹⁹ The interpretation of the initial consonant is also of interest, since this could either be an interpretation of an unaspirated consonant or evidence of intervocalic voicing (which would indicate names given postvocally within a longer utterance), or both.

Canawage	English	Anonymous	1756
Ganawaga	English	Montresor	1777
Caghnawaga	English	Johnson	1760-1761
	French/English	Sauthier &	1776
	French/English	Fadden	1777
	French/English	Sauthier & Lotter	1778
	French	Sauthier du Chesnoy	1778
Cahnuaga	English	Long	1791
Caghnawahga	German	Rohde	1802
Gänowauga	English	Morgan	1851
Kanawaga	English	Beauchamp	1893
Kaknnaogue	Unknown	Via Snow, Gehring & Starna (1996)	Probably prior to 1693
Kaghnuwage	Unknown	Via Snow, Gehring & Starna (1996)	Probably prior to 1693

This phenomenon can also be noted in instances of the root *-hr-* in the name *Astenhroken*, all instances of which are recorded in English (Table 12, below). *Astenhroken* also utilizes the verbal root *-oken* as shown in Table 10.

Table 12. Absence of “h” in orthographic representations of *Astenhroken*.

Orthography	Documenter	Year
Astenrogen	Ruttenber	1906
Astorenga	Beauchamp	1893
Astorogan	Beauchamp	1893
Astenrogen	Beauchamp	1893

The deletion of *h* as in Tables 11 and 12, above, can be compared to renderings of the same consonant in onset position, as it is also used in English, as in Table 13, below, although French and German interpretations are not available:

Table 13. [h] in onset position in Kanyen’kéha place names.

Orthography	Kanyen’kéha Name	Documenter	Year
Skahundowa	<i>Skahentowa</i>	Beauchamp	1893
Gehunda	<i>Kahenta</i>	Halsey	1901
Kahenta	<i>Kahenta</i>	Ruttenber	1906

Orthography also presents some evidence that the present day Kanyen'kéha central low vowels *a* [a~ɑ], *ɑ*: [ɑ:~ɑ:] were historically back rounded [ɑ] (Anonby, p.c.). Especially where it is used as the initial vowel of a place name, *ɑ*- is often represented as "o", as shown in the non-exhaustive examples in Table 14, below.

Table 14. *ɑ*- represented as "o" in the initial vowel of a place name.

Kanyen'kéha Name	Orthography	Documenter	Year
<i>Ahskwake</i>	Oisquage	Pfister	1759
	Osquage	Montrésor	1777
	Osguage	du Chesnoy	1778
<i>A'nowarake</i>	Ohnowara'ke	Huden	1957
<i>Astenhrowanen</i>	Otsten ro wanen	Huden	1957
<i>Atstenke</i>	Otsege	Anonymous	1720
	Ossega	du Chesnoy	1778
	Otesa'ga	Morgan	1851
	Dosego	Beauchamp	1893
	Ostenha	Halsey	1901

It should be noted, however, that there are instances where this pattern does not hold (for example, the initial "a" of *Akwesashne* is never written as "o"), and further study is thus required.

These data demonstrate that "a single affix can be reinterpreted and transcribed in various ways based on the original language of both the speaker and the listener, and the writing system used by the listener" (Ingram, Anonby and Taylor, 2019, p. 34). Because of this, some amount of interpretation, informed by knowledge of the phonology, morphology and history of the appropriate languages, is required of the researcher; it can never be entirely objective since it is based on the language perceptions of the multiple people involved in the transmission of a place name from the time of its utterance to its present-day form.

Chapter 5.

The next chapter is the result of the evaluation of the collected data using the philosophical framework and methodology outlined throughout the previous chapters. While my initial research question was “What are the roots of Kanyen’kéha place names?” it became apparent that many grammatical aspects of a place name are equally as important (see Chapter 6 for this discussion), and therefore I offer here as complete morphological and semantic interpretation as possible. Each name is listed together with a morphological gloss, and an English literal interpretation of the full name together with the source of that interpretation. The number of individual name forms (i.e., unique orthographic representations) is given together with information regarding the **location** and the **referent** which are important to distinguish for future work; **location** here is the physical position at which the place name can be found. The **referent**, however, is the physical entity (whether natural or constructed) to which the name is applied. As can be seen from this section, within each entry, a single Kanyen’kéha name may be used in multiple locations apparently simultaneously, or a single location may utilize multiple names. It is possible that each of these names has a different referent within a single location, but this point remains unclear, and represents a future avenue of research. While a precise location for each name (if available) was given to each linguistic informant, this location is not provided in this dissertation in order to help to maintain the OCAP principles of Control and Possession. However, the number of locations where the name is used, together with a description of the referent, are provided within each entry. All name forms are listed together with the appropriate bibliographic information. It should be noted that the dates supplied within the “Written representations” category are dates of publication, and not of collection. Finally, any other applicable information of importance is listed under “Note” within the entry. In some cases, an entire place name could not be reconstructed from the available evidence, but one or more morphemic units was discernible: in instances where an interpretation was uncertain, the icon precedes the name(s) or morphemic unit. In other cases, more than one interpretation of a whole name is possible; for this

situation, the name in its entirety is given, followed by the morphological breakdown and its gloss, with alternative morphological analyses and glosses following in the same format. Where more than one interpretation is possible, all possible morphemes are given under the “Components of this name” section. Stress marks, while important for the verification of a place name interpretation, are included where they have been supplied according to the consultant. More accurate stress marks will be required both in writing and audible pronunciation within a place names atlas (see Chapter 6). Analysis of aspect is difficult because of their wide variety of representations, including Ø. Because of this complexity, I assume no aspectual suffixes unless they present overtly. My focus here is on interpreting the basic semantics of a place name, but the use of specific morphemes, such as *cis-* and *translocatives*, demonstratives, the dualic as it relates to changes in state, the iterative, and the use of tense and aspect all deserve their own individual examination. Interpretations of these names may become clearer over time with the addition of further historical, cultural, or landscape evidence, and so the analysis presented here represents the beginning of study, rather than its conclusion.

Ahskwake

ahskw- -a- -ke
bridge- -EPEN- -EXLOC

Components of this name:

-*ahskw-*, nominal root: ‘roof, bridge, platform’

Sources: Michelson (1973, p. 139); Maracle (2003, p. 128)

-*ke*, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/1

Referent category: creek

Written representations:

“Oisquage”	(Pfister, 1759)
“Osquage”	(Montréal, 1777)
“Osguage”	(du Chesnoy, 1778)
“Otsquago”	(Anonymous, 1756; Beauchamp, 1893, p. 33; Beauchamp, 1907, p. 125)
“Otsquage”	(Sauthier & Fadden, 1776; Sauthier & Lotter, 1777; Sauthier, 1779; Ruttenber, 1906)

“Otsquägo” (Morgan, 1851, p. 501)
 “Otsquaga” (Beauchamp, 1893, p. 42)
 “Otsqua'go” (Beauchamp, 1907, p. 93)

General location number: 1/1

Referent category: settlement

Written representations: “Osquage” (van den Bogaert, 1988, p. 5; Snow, Gehring & Starna, 1996, p. 280)
 “Osquago” (van den Bogaert, 1988, p. 13)
 “Otsquage” (Ruttenber, 1906, p. 215)

Note: Several similar names and their referents (particularly Ruttenber’s (1906) “Otsquage” have become confused over time because of their similarities. Beauchamp (1907) places “Os-qua-ge” and “Oh-qua-ge” together suggesting these are two variants of the same name. Part of the confusion may arise in that the first documentation of this name from van den Bogaert mentions “a village with nine houses” (Gehring and Starna, 1988, p. 7) (not palisaded, i.e., not a “castle”), and that the chief’s name was “Oquaho, i.e., wolf” (ibid) which is likely the clan rather than a personal name. On the return journey, van den Bogaert documents the village as “Osquago” and the chief as “Osquahoo” respectively (ibid, p. 21). The non-standardization of these two terms may be part of the source of the confusion.

Gehring and Starna (1988) define this name as ‘a roof’ (p. 37), but Okwáho suggests that it is rather like a “platform”, thus allowing for an interpretation of both ‘roof’ and ‘platform’. There is an Oquaga Creek and Oquaga Lake located near Arctic, NY, but this location did not appear in the historical record and therefore I have assumed it was named after, and perhaps for, the name form presented here.

This root is extremely similar to *-itskw-*, defined by Maracle (2003) as ‘a place one sits’; the nominal form given by this source, *otskwa* could also a candidate for the names listed above barring further evidence.

See also *Okwahohake*.

Akwesashne

ahkwesas- -*hne*
 bird(sp.)- -EXLOC

Components of this name:

ahkwesas-, nominal root: ‘partridge, pheasant’

Sources: Michelson (1973, p. 167); Maracle (2001, p. 16)

-*hne*, nominal suffix: external locative meaning approximately ‘at the home of, at the abode of’

Sources: Huden (1957, p. 73); Ontario Ministry of Education (2011, p. 34)

General location number: 1/1

Referent category: town

Written representations: "Akwissasne" (Beauchamp, 1893, p. 29)
"Ahquasos'ne" (Beauchamp, 1907, p. 189)
"Akwissas'ne" (Beauchamp, 1907, p. 189)

A'nowarake

a'nowar- *-a-* *-ke*
turtle- -EPEN- -EXLOC

Components of this name:

a'nowar-, nominal root: 'turtle'

Sources: Michelson (1973, p. 182); Maracle (1992, p. 1)

-ke, nominal suffix: external locative meaning approximately 'on, in'

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/2

Referent category: cove

Written representations: "Ohnowara'ke", "Ononwada'ge" (Huden, 1957, p. 72)

General location number: 2/2

Referent category: unspecified

Written representations: "Ohnowara'ke" (Huden, 1957, p. 72)

Astenhroken

a- *-stenhr-* *-oken*
NPFX- -stone- -(v.)split

Components of this name:

-stenhr-, nominal root: 'stone, rock'

Sources: Marcoux (n.d., n.p.); Michelson (1973, p. 172); Maracle (1992, p. 75); Maracle (2003, p. 226); First Peoples' Cultural Council (2019, n.p.)

Note: Okwáho states that this type of rock has "layers"; Ateronhiatakon identifies this as slate. This root may historically be *-tstén-* based upon the forms of the root surveyed (see sources immediately below).

-oken, verbal root: 'split, forked, being at the junction of two branches of something'

Sources: Lounsbury (1960, p. 49); Michelson (1973, p. 151)

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) states that this root requires the dualic (*te-*) specifically with the nominal root *-nyatar-* ('a waterway'), and this coincides with Kanasaraken's statements that dualic is not always required with this verbal root.

General location number: 1/1

Referent category: portage

Written representations: “Astenrogen” (Ruttenber, 1906, p. 217)

Note: According to Ruttenber, “The Mohawk here breaks through the Alleghany ridge which primarily divided the waters of the Ontario Basin from the Hudson” (1906, p. 218).

General location number: 1/1

Referent category: hill

Written representations: “Astorenga”, “Astorogan”, “Astenrogen” (Beauchamp, 1893, p. 33)

Astenhrowanen

a- *-stenhr-* *-owanen*

NPFx- *-stone-* *-(v.)be.large*

Components of this name:

-stenhr-, nominal root: ‘stone, rock’

Sources: Marcoux (n.d., n.p.); Michelson (1973, p. 172); Maracle (1992, p. 75); Maracle (2003, p. 226); First Peoples’ Cultural Council (2019 n.p.)

Note: Okwáho states that this type of rock has “layers”; Ateronhiatakon identifies this as slate. This root may historically be *-tstén-* based upon the forms of the root surveyed (see Sources).

-owanen, verbal root: ‘large, big, great’

Sources: Michelson (1973, p. 138, 159); Maracle (2003, p. 51-52)

Note: As per Kanaseraken, the suffix *-owanen* indicates an object that is smaller than that using the suffix *-owa/-kowa/-howa*.

General location number: 1/1

Referent category: point

Written representations: “Otsten ro wanen” (Huden, 1957, p. 72)

Atstenke

a- *-tsten-* *-ke*

NPFx- *-stone-* *-EXLOC*

Components of this name:

-stenhr-, nominal root, historically probably *-tstén-*: ‘rock, stone’; Okwáho says that it has “layers”; Ateronhiatakon identifies this as slate.

Sources: Marcoux (n.d., n.p.); Michelson (1973, p. 172); Maracle (1992, p. 75); Maracle (2003, p. 226); First Peoples’ Cultural Council (2019, n.p.)

The historical morpheme seems to fit the rather copious documentations of this place name. Halsey (1901) also writes of a particular rock within the lake itself from which the name may come, which is today known locally as “Council Rock” (see Figure 29, taken from Halsey, 1901).

-ke, nominal suffix: the external locative suffix meaning approximately 'on, in'

Sources: Ontario Ministry of Education (2011)

General location number: 1/1

Referent category: lake

Written representations: "Otsege" (Anonymous, 1720; Montrésor, 1777)
"Otsége" (Evans, 1749)
"Ostege" (Anonymous, 1756)
"Ostega" Hilliard d'Auberteuil, 1782)
"Otsega" (Hinton, 1780)
"Ossega" (du Chesnoy, 1778)
"Otsego" (Sauthier, 1779; Dewitt, 1792; Russell, 1795;
O'Callaghan, 1849, p. 655; Halsey, 1901, p. 269; Ruttenber,
1906, p. 152; Williams, 1906)
"Ocsega" (O'Callaghan, 1849, pp. 649)
"Otesaga" (Beauchamp, 1893. P. 67)
"Ostenha" (Beauchamp, 1893, p. 67; Halsey, 1901, p. 21)
"Osago" (Halsey, 1901, p. 224)
"Otesaga", "Assega" (Halsey, 1901, p. 21)

Figure 29. "Council Rock," possibly the source of the referent name, from Halsey (1901).

Itskarakon

itskara- -kon
(v.)bitter- -INLOC

Components of this name:

itskara-, verbal root: 'bitter'

Sources: Maracle (2003, p. 125)

-akon, internal locative suffix: 'in'

Sources: Ontario Ministry of Education (2011, p. 16)

Note: In the names utilizing the root *-stenhr-* above, the initial vowel appears to have been interpreted in various ways; the same mechanism may be occurring here as well but requires more evaluation. However, the landscape itself (see note below) lends additional evidence to suggest the interpretation given here.

General location number: 1/1

Referent category: creek

Written representations: "Otsgaragu" (Beauchamp, 1893, p. 76; Halsey, 1901, p. 31)

Note: There are mineral springs in the vicinity of the location of this name, and these may have been the original referent.

Kahenta

ka- *-hent-* *-a*

NPFX- *-grassland-* *-NSFX*

Components of this name:

-hent-, nominal root: 'meadow, grassland'

Sources: Marcoux (n.d., n.p.); Maracle (1992), p. 121; Maracle (2003, p. 186); First Peoples' Cultural Council (2019, n.p.)

General location number: 1/1

Referent category: river

Written representations: "Gehunda" (Halsey, 1901, p. 19)

Kahnawà:ke

ka- *-hnaw-* *-a-* *-ke*

NPFX- *-current-* *-EPEN-* *-EXLOC*

Components of this name:

-hnaw-, nominal root: 'current, rapids'

Sources: Michelson (1973, p. 51); Maracle (2001, p. 148);
Maracle (2003, p. 207)

Note: "describes a situation where water (or some liquid) is moving quickly in a particular way or direction, or against the intended direction and therefore is often interpreted as a 'current', 'rapids', or as in reference to a 'spring' or 'well' where the water is being forced out from where it is" (Maracle, 2001, p. 148; cf. Ingram, 2018).

-ke, nominal suffix: external locative meaning approximately 'on, in'

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/5

Referent category:	settlement
Written representations:	<p>"Canawage" (Anonymous, 1756)</p> <p>"Cannaounaguo" (Homann, 1763)</p> <p>"Ganawaga" (Montrésor, 1777)</p> <p>"Caghnawaga" (Sauthier & Fadden, 1776; Sauthier & Lotter, 1777; Sauthier, 1778; du Chesnoy, 1778; Sauthier, 1779; O'Callaghan, 1849, p. 443; Snow, Gehring & Starna, 1996, p. xxiii, p. 257)</p> <p>"Cognawage" (O'Callaghan, 1850, p. 445)</p> <p>"Gänowauga" (Morgan, 1851, p. 507)</p> <p>"Ganaouágué", "Gandaouagué", "Gandaouaguen" (Snow, Gehring & Starna, 1996, p. 152)</p> <p>"Gandaouagué" (Snow, Gehring & Starna, 1996, p. 151)</p> <p>"Gandaouagué" (Snow, Gehring & Starna, 1996, p. 169)</p> <p>"Caghnawahga" (Gehring & Starna, 1996, p. 373)</p>
General location number:	2/5
Referent category:	settlement
Written representations:	<p>"Cahnuaga" (Long, 1791, p. 5)</p> <p>"Cocknawaga" (Long, 1791, p. 25,</p> <p>"Cagnawaga" (O'Callaghan, 1850, p. 353)</p>
General location number:	2/5
Referent category:	river
Written representations:	<p>"Kanawaga" (Beauchamp, 1893, p. 72)</p> <p>"Ganawa'ga" (Beauchamp, 1907, p. 96)</p>
General location number:	3/5
Referent category:	creek
Written representations:	"Cacknawaga" (O'Callaghan, 1849, p. 304)
General location number:	4/5
Referent category:	river
Written representations:	<p>"Gahenwaga" (Beauchamp, 1893, p. 64)</p> <p>(See Note regarding the next six names.)</p> <p>"Cahihoneüaghe" (Coronelli, 1689)</p> <p>"Cahihonouiiaghe" (Sanson, 1696)</p>
General location number:	4/5
Referent category:	settlement
Written representations:	<p>"Cahihonouagué" (De l'Isle, 1703)</p> <p>"Cahihonouage" (Popple, 1733)</p>

Note: "Cahihoneüaghe" (Coronelli), "Cahihonouiiaghe" (Sanson), "Cahihonouagué" (de l'Isle), "Cahihonouage" (Popple), "Kaionhouague" (Beauchamp, 1907, p. 168), and "Gainhoua'gué" (Beauchamp, 1907, p. 168) may simply be mistaken forms of

Kahnawà:ke misheard and/or copied from one map to another; this becomes more likely given that they were created in close succession to each other (1689; 1696; 1703), although Popple's (1733) map remains somewhat problematic in that regard.

Kahnawataкта

<i>ka-</i>	<i>-hnaw-</i>	<i>-at-</i>	<i>-akta</i>
NPFx-	-current-	-stand-	-EXLOC

Components of this name:

-hnaw-, nominal root: 'current, rapids'

Note: "describes a situation where water (or some liquid) is moving quickly in a particular way or direction, or against the intended direction and therefore is often interpreted as a 'current', 'rapids', or as in reference to a 'spring' or 'well' where the water is being forced out from where it is" (Maracle, 2001, p. 148; cf. Ingram, 2018).

Sources: Michelson (1973, p. 51); Maracle (2001, p. 148); Maracle (2003, p. 207)

-t-/at-/ot-, verbal root: 'stand, be there'

Sources: Michelson (1973, p. 177); as per Ontario Ministry of Education (2011), this root is part of a class known as "positional verbs, which specify the position in which the object designated by the noun is most often found" (p. 106)

-akta, external locative suffix: 'near'

Sources: Ontario Ministry of Education (2011, p. 18)

General location number: 1/1

Referent category: outlet to a lake

Written representations: "Ganawatecton" (Ruttenber, 1906, p. 185)

Note: The analysis for this name is similar to that in *Kahnawatake*; the root is likely to be *-hnaw-*, possibly *-hnawenht-*, or *-hnaw-* and the incorporated root *-t-*. The final "on" in the documentation of this name may be due to devoicing (since the previous two consonants are devoiced) coupled with the closure of the glottis following the vowel, but this remains unclear.

Kahnawerote

<i>ka-</i>	<i>-hnawer-</i>	<i>-ot-</i>	<i>-e</i>
NPFx-	-spring-	-stand-	-STAT

Components of this name:

-hnawer-, nominal root: 'spring, well'

Sources: Michelson (1973, p. 184); Maracle (2003, p. 245)

-t-/at-/ot-, verbal root: 'stand, be there'

Sources: Michelson (1973, p. 177); as per Ontario Ministry of Education (2011), this root is part of a class known as "positional verbs,

which specify the position in which the object designated by the noun is most often found” (p. 106)

-e, stative aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54.)

General location number: 1/1

Referent category: settlement

Written representations: “Canowarode” (Ruttenber, 1906, p. 197; Beauchamp, 1907, p. 121; van den Bogaert, 1988, p. 4)

Note: The following names all refer to a village, but it remains unclear if it is the same village as the first three written representations.

Q “Carenay” (van der Donck, 1656)

Note: The following two names refer to an area, but it remains unclear if it is the same area as any of the above.

Q “Kadarode”, “Canowarode”, “Caronay”, “Carenay”, “Kaneray” (Ruttenber, 1906, p. 209)

Note: One issue with an analysis for the names immediately above names using *-hnaw-* is an entry in the Marcoux dictionary (n.d.) which states “yo.hna.we.róte” with the meaning ‘It possesses a swamp’ (n.p.) The referent in this case is both a village and an area on either side of a creek, making either interpretation possible according to the geography.

Q *Kahnawatake*

ka-	-hnaw-	-at-	-a-	-ke
NPFx-	-current-	-stand-	-EPEN-	-EXLOC

Components of this name:

-hnaw-, nominal root: “describes a situation where water (or some liquid) is moving quickly in a particular way or direction, or against the intended direction and therefore is often interpreted as a ‘current’, ‘rapids’, or as in reference to a ‘spring’ or ‘well’ where the water is being forced out from where it is” (Maracle, 2001, p. 148; cf. Ingram, 2018).

Sources: Michelson (1973, p. 51); Maracle (2001, p. 148); Maracle (2003, p. 207)

-t-/-at-/-ot-, verbal root: ‘stand, be there’

Sources: Michelson (1973), p. 177; as per Ontario Ministry of Education (2011), this root is part of a class known as “positional verbs, which specify the position in which the object designated by the noun is most often found” (p. 106)

-ke, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/1

Referent category: creek

Written representations: "Canouwedage" (Pfister, n.d.)
"Onowadaga" (Sauthier & Fadden, 1776; Sauthier, 1778)
"Canounedage" (Montrésor, 1777)
"Canowedage" (Beauchamp, 1893, p. 32)
"Canoweda'ge", "Onnawadage", "Tekanoweda'ge"
(Beauchamp, 1907, p. 91)

Note: There are several roots that are extremely similar, and one of the challenges of this study has been to tease these apart; the names marked here represent one of those instances in that the roots may be *-hnaw-* + *-t-* as indicated in this entry, *-hnawenht-*, defined as 'dropping rapids, riffle' (see Ingram, 2018, Table 5), or these could be instances of *-naw-* ('marsh', Maracle, 1973, p. 77) including *-(h)nawe't-* 'wet ground, swamp, marsh' (Maracle, 2003, p. 31), 'mire' (Maracle, 2003, p. 31). In such cases, the pronominal prefix may provide a clue as to the root (compare "Canouwedage" (Pfister) with "Onowadaga" (Sauthier & Fadden, 1776; Sauthier, 1778), but this may also simply be transcription error. Landscape evidence lends support in regard to this issue: the referent of the above name flows over bedrock and is low in alluvial deposits (Milone and Macbroom, Inc., 2014), but contains rapids (American Whitewater, 2019), thus raising the possibility that, at least for instances referring to this creek, a name including the root *-hnaw-* ('current') is more appropriate than one including *-naw-* ('marsh').

Kahnekatoton

ka- *-hnek-* *-a-* *-toton*

NPFX- *-liquid-* *-EPEN-* *-?*

ka- *-hnek-* *-at-* *-oton*

NPFX- *-liquid-* *-stand-* *-?*

Components of this name:

-hnek-, nominal root: 'liquid'

Sources: Michelson (1973, p. 160); Maracle (2003, p. 182); First Peoples' Cultural Council (2019, n.p.)

-t-/at-/ot-, verbal root: 'stand, be there'

Sources: Michelson (1973), p. 177; as per Ontario Ministry of Education (2011), this root is part of a class known as "positional verbs, which specify the position in which the object designated by the noun is most often found", p. 106

Note: If the verbal root is *-t-/at-/ot-*, the final *-on* could be interpreted as a stative ending as per Postal (1979).

General location number: 1/1

Referent category: river

Written representations: "Ganegatodo" (Beauchamp, 1893, p. 35)
"Ganegatodo" (Beauchamp, 1907, p. 101)

Kahyonhatatye

ka-	-hyonh-	-a-	-tatye
NPFx-	-river-	-EPEN	-continue

Components of this name:

-hyonh-, nominal root: 'river, stream, creek, moving water'

Sources: Maracle (1992, p. 24); Maracle (2003, p. 211)

Note: Okwáho (p.c.) states that the difference between the nominal root -hyonh- and the root -nyatar- is based on size: -hyonh- is smaller than -nyatar-.

-tatyes-, verbal root: 'continue onward'

Sources: Maracle (2003, p. 139)

General location number: 1/2

Referent category: river

Written representations: "Geihuhatatie" (Beauchamp, 1907, p. 88)
"Atatea" (Beauchamp 1893, p. 32; Beauchamp, 1907, p. 194)

General location number: 2/2

Referent category: river

Written representations: "Atateka" (Beauchamp, 1893, p. 84)

Note: This root seems to be missing the habitual aspectual suffix -s, although it may take another aspectual ending or, as in the case of a stative aspectual ending, none at all. This point remains unclear.

Kana'tsyakowa

ka-	-na'tsy-	-a-	-kowa
NPFx-	-cauldron-	-EPEN-	-AUG

Components of this name:

-na'tsy-, nominal root: 'kettle, pot, cauldron'

Sources: Bruyas (1863, p. 51); Michelson (1973, p. 169)

-owa/kowa/-howa, augmentative attributive suffix: 'big, large'

Sources: Ontario Ministry of Education (2011), p. 30

Note: Although this suffix was given to me as -kowa (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/1

Referent category: hill

Written representations: "Kanjearagore" (Beauchamp, 1893, p. 76; Beauchamp, 1907, p. 201)
"Kanjearagra", "Kanajeakowa" (Beauchamp, 1907, p. 201)

Kana'tsyóhare

ka- -na'tsy- -ohare
NPFX- -cauldron- -wash

Components of this name:

-na'tsy-, nominal root: 'kettle, pot, cauldron'

Sources: Bruyas (1863, p. 51); Michelson (1973, p. 169)

-ohare, verbal root: 'wash'

Sources: Michelson (1973, p. 183)

Note: The name *Kana'tsyóhare* refers to a riverine pothole in Canajoharie Creek (Okwáho, Kanaseraken, p.c.). This name is in use in modern-day Kanyen'kéha *in situ* by a modern-day Kanyen'kehá:ka community there headed by Sakokwenionkwas Thomas Porter.

General location number: 1/unknown

Referent category: settlement

Written representations: "Canagero" (van der Donck, 1656)
"Conejóxery" (Evans, 1749)
"Canajohary" (O'Callaghan, 1849, p. 295)
"Congoreri" (Bellin, 1755)
"Conejockery" (Kitchin, 1756)
"Conjejoceri" (Lotter, 1756)
"Canajoharie" (d'Auberteuil, 1782; Sauthier, 1779; Halsey, 1901, p. 291; Ruttenber, 1906, p. 214)
"Conoghoheere" (O'Callaghan, 1849, p. 295)
"Conogohery", "Conhogohery" (O'Callaghan, 1849, p. 352)
"Canagera" (Ruttenber, 1906, p. 191)
"Canagere" (van den Bogaert, 1988, p. 4); Ruttenber, 1906, p. 214; Beauchamp, 1907, p. 120; Snow, Gehring & Starna, 1996, p. xxiii)
"Gandagirol", Banigiro", Gandagora" (Ruttenber, 1906, p. 214)
"Canagora" (Beauchamp, 1893, p. 44; Ruttenber, 1906, p. 214; Snow, Gehring & Starna, 1996, p. 189)
"Kana'tsyóhare" (Lounsbury, 1960, p. 28)
"Canagero" (Snow, Gehring & Starna, 1996, p. xxiii)
"Canagere", "Canagora", "Gandagaro", "Kanagirol",
"Canajorha" (Beauchamp, 1907)
"Canagora" (Snow, Gehring & Starna, 1996)

General location number: 1/unknown

Referent category: area

Written representations: "Canaioharie" (Anonymous, 1720)

Note: This location and referent may be the same location and referent as location 1.

General location number: 1/unknown
Referent category: creek
Written representations: "Canaioharie" (Anonymous, 1756)

General location number: 1
Referent category: creek
Written representations: "Canajohary" (Pfister, 1759; Montrésor, 1777)
 "Canajoharie" (Sauthier, 1778; Sauthier, 1779)

General location number: 2
Referent category: creek
Written representations: "Canajohary" (Pfister, 1759)

Kanata

ka- -nat- -a
 NPFX- -settlement- -NSFX

Components of this name:

-nat-, nominal root: 'settlement, village, town'
 Sources: Michelson (1973, p. 183); Maracle (2003, p. 242)

General location number: 1/3
Referent category: creek
Written representations: "Canada" (Sauthier & Fadden, 1776; Hinton, 1780; Beauchamp, 1893, p. 51)
 "Kanata" (Beauchamp, 1893, p. 51)

General location number: 2/3
Referent category: creek
Written representations: "Canada" (Mitchell, Kitchin, Jeffreys & Fadden, 1774; Sauthier & Lotter, 1777; Sauthier, 1778)

General location number: 3/3
Referent category: creek
Written representations: "Canada" (Anonymous, 1720; Sauthier & Lotter, 1777; du Chesnoy, 1778; Sauthier, 1778; Snow, Gehring & Starna, 1996, p. 297)
 "Gannada" (Web & Shirley, 1758)
 "Cannada" (Pfister, 1759; Montrésor, 1777)

Kanatakhwa

ka- -nat- -a- -hkhwa
 NPFX- -settlement- -EPEN- -spot

ka- -nat- -a- -(h)kwe
 NPFX- -settlement- -EPEN- -HAB.PAST

Components of this name:

-nat-, nominal root: ‘settlement, village, town’

Sources: Michelson (1973, p. 183)
Maracle (2003, p. 242)

-hkhwa-, verbal root: ‘place or spot’

Sources: Michelson (1973, p. 51)

-(h)kwe, habitual/former past suffix: “implies that the event is no longer occurring and is not expected to reoccur” (Bonvillain, 1981, p. 65)

Sources: Bonvillain (1981, p. 46); Ontario Ministry of Education (2011, p. 59)

Note: The aspectual suffix for the verbal root *-hkhwa-* is unknown, but the stative aspectual suffixes *-on* or *-en* would explain the presence of the “n” in the written representation (see p. 166).

General location number: 1/1

Referent category: settlement

Written representations: “Ganataguan” (Norman, 1785)

Note: There is also the possibility that this is a form of *Kanatakwenhtë:ke*, ‘outside of town’ (see Section 2.7).

Kanawa’tstakera’s

<i>ka-</i>	<i>-nawa’tst-</i>	<i>-akera’-</i>	<i>-s</i>
NPFx-	-mud-	-stink-	-HAB

Components of this name:

-nawa’tst-, nominal root: ‘mud, quicksand, mire’

Sources: Maracle (2003, p. 190)

-akera’-, verbal root: ‘stink, smell bad’

Sources: Michelson (1973, p. 177); Maracle (2003, p. 226)

-s, habitual aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/1

Referent category: spring

Written representations: “Kanaswastakeras” (Beauchamp 1893, p. 73; Beauchamp, 1907, p. 191)

Kanen’tote

<i>ka-</i>	<i>-nen’t-</i>	<i>-ot-</i>	<i>-e</i>
NPFx-	-evergreen-	-stand-	-STAT

Components of this name:

-nen’t-, nominal root: ‘evergreen, cedar’

Sources: *-nen’t-*: Michelson (1973, p. 149); Maracle (2003, p. 56)

Note: The root for 'pine tree', *-hneht-* (Maracle, 2003, p. 199) is also possible.

-t-/at-/ot-, verbal root: 'stand, be there'

Sources: Michelson (1973), p. 177; as per Ontario Ministry of Education (2011), this root is part of a class known as "positional verbs, which specify the position in which the object designated by the noun is most often found" (p. 106)

-e, stative aspectual suffix

Sources: Ontario Ministry of Education (2011), p. 54

General location number: 1/3
Referent category: river sandy creek
Written representations: "Genentouta" (Sauthier & Lotter, 1777)

General location number: 2/3
Referent category: waterway
Written representations: "Ganentouta" (Sauthier, 1779)
"Ganentouta" (Beauchamp, 1893, p. 34)
"Genentota" (Beauchamp, 1893, p. 34)

General location number: 3/3
Referent category: river unknown
Written representations: "Ganentouta" (Sauthier & Fadden, 1776)
"Genentota" (du Chesnoy, 1778)

Note: This name may be similar to the English concept of a "stand" of trees as per Tekarontake.

Kanenhstakayenne

ka- *-nehst-* *-akayen-* *-ne*
NPFX- -corn- -ancient- -RPST

Components of this name:

-nehst-, nominal root: 'corn'

Sources: Michelson (1973, p. 143), Maracle (2003, p. 139)

-akayen, verbal root: 'ancient, old'

Sources: Michelson (1973, p. 166)

-ne, remote past suffix emphasizing age

Sources: Postal (1979, p. 84); Ontario Ministry of Education (2011, p. 60)

General location number: 1/unknown
Referent category: settlement
Written representations: "Gannatsegaion" (Franquelin, 1688)
"Ganetsegune" (Evans, 1749)

	<p>"Canistagnione" (Anonymous, 1758)</p> <p>"Nehagnina" (Pfister, 1759)</p> <p>"Cannistaganna" (Montrésor, 1777)</p> <p>"Conastigaone" (Sauthier & Lotter, 1777)</p> <p>"Canastigaone" (Sauthier, 1778)</p> <p>"Ganestaguane" (Kitchin, 1778)</p> <p>"Canastigaone" (Sauthier, 1779)</p> <p>"Canistaguaha", "Conestagione", "Connestigune", "Canastagione" (Beauchamp, 1907, p. 195)</p> <p>"Nestigione" (Beauchamp, 1907, p. 196)</p>
General location number:	2/unknown
Referent category:	settlement
Written representations:	"Canasteiagon" (Homann, 1759; Homann, 1763)
General location number:	2/unknown
Referent category:	flats
Written representations:	"Conistigione", "Nistigioune" (Beauchamp, 1893, p. 76)
General location number:	unknown
Referent category:	unknown
Written representations:	<p>"Canistagaioni" (Anonymous, 1756)</p> <p>"Nistigione" (O'Callaghan, 1850, p. 99)</p> <p>"Quenestiago" (O'Callaghan, 1850, p. 185)</p> <p>"Canastagioene" O'Callaghan, 1850 p. 42)</p> <p>"Canastagiorne" (O'Callaghan, 1850, p. 16)</p>
General location number:	unknown
Referent category:	area
Written representations:	"Canastigaone" (Sauthier & Fadden, 1776)
General location number:	unknown
Referent category:	town
Written representations:	<p>"Kenastegune" (Mitchel, Kitchin, Jeffreys, Fadden, 1774)</p> <p>"Canastigo" (du Chesnoy, 1778)</p>
General location number:	unknown
Referent category:	area
Written representations:	"Canistagioni" (Anonymous, 1720)
General location number:	unknown
Referent category:	town
Written representations:	"Canastagiowane", "Kanistagionne", "Kanistegaione" (Ruttenber, 1906, p. 201)

General location number: unknown
Referent category: unknown
Written representations: “Canistaquaha” (Beauchamp, 1893, p. 74)

Note: This name is several locations with several referents, but all locations are within 11km of each other by land (Google Maps, 2019b), or 15km by water (Google Maps, 2019b). Some of these locations could be attributed to cartographer error, but more research is required.

Given the fact that the first attestation of this name was over 300 years ago, the use of the remote past in this name seems especially significant.

Kanonhwaro'hare

<i>ka-</i>	<i>-nonhwar-</i>	<i>-ohar-</i>	<i>-e</i>
NPFx-	-head-	-attach.at.end-	-STAT

Components of this name:

-nonhwar-, nominal root: ‘head, brain’
 Sources: Michelson (1973, p. 139);
 Maracle (2003, p. 61)

-ohar-, verbal root: ‘attach at the end’
 Sources: Michelson (1973, p. 89)

-e, stative aspectual suffix
 Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/1
Referent category: island
Written representations: “Ganonwaro'hare”
 (Huden, 1957, p. 72)

Note: This name appears to be a reference to a specific custom, namely, the displaying of scalps on poles, often upon or in the vicinity of village palisades, a practice outlined by Williamson (2007) and attested by van den Bogaert in his visit to an Onyota'a:ka settlement (Gehring and Starna, 1988). However, Okwáho emphasizes that this name means something closer to a skull, or an entire head. This name applies both to an Onyota'a:ka settlement (it is unclear as to which), as well as to a location in Kanyen'kehá:ka territory at Isle-aux-Têtes in the Richelieu River (later called Île Ash according to Palmer (1866)).

Figure 30. Kanonhwarohare' may refer to the practice of scalping, a form of trophy-taking, depicted here.

Kanyatarahontsi

<i>ka-</i>	<i>-nyatar-</i>	<i>-a-</i>	<i>-hontsi</i>
NPFx-	-waterway-	-EPEN-	-(v.)dark-coloured

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-hontsi, verbal root: 'dark-coloured'

Sources: Michelson (1973, p. 138); Maracle (2003, p. 125); Kanasaraken (p.c.); Okwáho (p.c.)

Note: This root is often interpreted as 'black' in English.

General location number: 1/1

Referent category: lake

Written representations: none—this form was passed orally to me as *Kanyatarahontsi* (Okwáho, p.c.)

Note: The 'dark' colour often mentioned may be associated with waters originating from the Adirondacks flowing into the St. Lawrence lowlands, since they pick up iron during their travels through that geological province. This name was provided by Okwáho; Kanasaraken provided a detailed meaning of the root *-hontsi*.

Kanyatarake

ka- *-nyatar-* *-a-* *-ke*

NPFX- *-waterway-* *-EPEN-* *-EXLOC*

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-ke, nominal suffix: external locative meaning approximately 'on, in'

Sources: Ontario Ministry of Education (2011), p. 15-16

General location number: 1/1

Referent category: lake

Written representations: "Caniaderago" (Russell, 1795)
"Canadarago" (USGS, 2019)

Kanyatarakowa

ka- *-nyatar-* *-a-* *-kowa*

NPFX- *-waterway-* *-EPEN-* *-AUG*

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-owa/kowa/-howa, augmentative attributive suffix: 'big, large'

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/1

Referent category: river

Written representations: "Ganatarogin" (Beauchamp, 1893, p. 72)
"Ganatarago'in", "Ganiataragowa" (Beauchamp, 1907, p. 190)

Kanyatarekaront

<i>ka-</i>	<i>-nyatar-</i>	<i>-e-</i>	<i>-karont</i>
NPFx-	waterway-	EPEN-	-be.wide

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-karont-, verbal root: 'be wide'

Definition: to be wide

Sources: Maracle (2003, p. 246), Kanaseraken (p.c.)

Note: Maracle gives this root with the dualic; this situation may be similar as to the case with the verbal root *-oken* (c.f. *Teyoken*).

General location number: 1/1

Referent category: lake

Written representations: "Gon yat a re Ga ront" (Huden, 1957, p. 70)

Kanyatarakwaronte'

<i>ka-</i>	<i>-nyatar-</i>	<i>-a-</i>	<i>-kwaront-</i>	<i>-e'</i>
NPFx-	-waterway-	-EPEN-	-bulge-	-STAT

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-kwaront-, verbal root: 'bulge'

Sources: Michelson (1973, p. 140)

-e', stative aspectual aspect

Sources: Lounsbury (1960, p. 38) /Lukaniec (2018, p. 71)

General location number: 1/1
Referent category: lake
Written representations: “Caniaderi Guarunte” (Beauchamp, 1893, p. 26)

Kanyatarosseres

ka-	-nyatar-	o-	ssere-	-s
NPFx-	-waterway-	-EPEN-	-(v.)fall-	-HAB

Components of this name:

-nyatar-, nominal root: ‘waterway’

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples’ Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-s, habitual aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

Note: Within the documentation (i.e., Lounsbury, 1960; Ruttenber, 1906; Beauchamp, 1907), there is generally consensus that this name utilizes the root -nyatar- (‘waterway’). I cannot locate a verbal root in my available resources that matches the morphology following this root (other than habitual -s), but the discussion within the literature of the meaning of this name, particularly in Ruttenber (1906, p. 186) matches Okwáho’s interpretation of ‘the waters fall down’ (although the offered morphology does not).

This name may refer to where the Hudson flows out of the Adirondack Mountains; the locations of three of the written forms (“Caniaderosseras” (Beauchamp, 1893), “Kayandorossa” (Beauchamp, 1907) and “Kayaudorossa”, (Ruttenber, 1906) apply to the black triangle in Figure 31, below, which topographically shows that the river has carved its way through the ridge indicated by the black line. However, this name may instead be a reference to the basin in the same location since it also applies to a tract of land (see Figure 32) and to a creek which issues from the basin which is located within that tract.

Figure 31. Several locations and possible referents of *Kanyaterosseras*.

General location number:	1/2
Referent category:	area (see Figure 32)
Written representations:	<p>"Kayadarosseras" (O'Callaghan, 1849, p. 304)</p> <p>"Cayaderossoras" (O'Callaghan, 1849, p. 361)</p> <p>"Kayaderossres" (O'Callaghan, 1849, p. 441)</p> <p>"Kayadrossera" (Sauthier & Fadden, 1776)</p> <p>"Caniaderosseras" (Montresor, 1777)</p> <p>"Kayadrossera" (Sauthier & Lotter, 1777; Tryckeriet, 1777; du Chesnoy, 1778; Sauthier, 1778)</p> <p>"Kayoderasseras" (O'Callaghan, 1849, p. 378)</p> <p>"Kayaudorossa" (Ruttenber, 1906, p. 185)</p> <p>"Kayaderosseras" (Beauchamp, 1907, p. 195)</p> <p>"Kayaderos'seras" (Beauchamp, 1907, p. 71)</p>

Figure 32. Possible area of the name *Kanyaterosseras*.

General location number:	within location 1
Referent category:	waterfall
Written representations:	"Caniaderosseras" (Beauchamp, 1893, p. 84)
General location number:	within location 1
Referent category:	ravine
Written representations:	"Kayandorossa" (Beauchamp, 1907, p. 238)
General location number:	within location 1
Referent category:	lake
Written representations:	"Kayadoroses" (Seutter, 1750) "Kayadoroses" (Bellin, 1755)
General location number:	within location 1
Referent category:	creek
Written representations:	"Kayadorofes" (Pople, 1733) "Caniadarossira" (Anonymous, 1758) "Coniaderosseras" (Montrésor, 1777) "Kayadrossera" (Kitchin, 1778) "Kayadrossera" (Sauthier, 1778) "Kayadrossera" (du Chesnoy, 1778) "Kayadrossera" (Sauthier, 1779) "Kayaudorossa" (Ruttenber, 1906, p. 185)
General location number:	2/2

Referent category: mountains
Written representations: “Kayaudorossa” (Ruttenber, 1906, p. 185)
“Kayaderos’seras” (Beauchamp, 1907, p. 195)

General location number: unknown
Referent category: unknown
Written representations: “Kanyataróseras” (Lounsbury, 1960, p. 51)

Kanyen’kehá:karononitati

Kanyen’kehaka -hronon- -it- -ati
Kanyen’kehá:ka -POPUL- ? -(v.)be.on.a.side

Elements in this name:

Kanyen’kehá:ka-, name of the Kanyen’kehá:ka Nation for itself, literally “at the flint”

Sources: Lounsbury (1960, p. 25)

-hronon, populative suffix: “referring to the inhabitants of a place”

Sources: Mithun (1996, p. 162)

-ati, verbal root: ‘be on a side’

Sources: Ontario Ministry of Education (2011, p. 110)

General location number: 1/1
Referent category: river
Written representations: “Conneogahakalononitade” (Beauchamp, 1893, p. 44)

Kawehnehske

ka- *wehn-* *-ehs-* *-ke*
NPFX- island- -(v.)be.long- -EXLOC

Components of this name:

-wehno-, nominal root: ‘island’

Sources: Michelson (1973, p. 158); First Peoples’ Cultural Council (2019, n.p.)

-ehs/-es, verbal root: ‘be long’

Sources: Michelson (1973, p. 160); Maracle (2003, p. 183)

-ke, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/1
Referent category: island
Written representations: “Ga’wanasegeh” (Beauchamp, 1907, p. 177)

Kawehniyo

ka- *-wehn-* *-iyo*

NPFX- -island- -(v.)be.beautiful

Components of this name:

-*wehno*-, nominal root: 'island'

Sources: Michelson (1973, p. 158); First Peoples' Cultural Council (2019, n.p.)

-*iyo*, verbal root: 'be large, great, beautiful, good'

Sources: "great" (Ruttenber, 1906, p. 72)
"large or beautiful" (Huden, 1957, p. 74)
"is good" (Lounsbury, 1960, p. 61)

General location number: 1/1

Referent category: island

Written representations: "Kahwehni'yo" (Huden, 1957, p. 74)

Kawehno:ke

Ka- -*wehno*- -*ke*

NPFX- -island- -EXLOC

Components of this name:

-*wehno*-, nominal root: 'island'

Sources: Michelson (1973, p. 158), First Peoples' Cultural Council (2019, n.p.)

-*ke*, nominal suffix: external locative meaning approximately 'on, in'

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/2

Referent category: island

Written representations: "Gawah'nogeh"
(Beauchamp, 1907, p. 65)

General location number: 2/2

Referent category: island

Written representations: "Kawehno:ke" (modern name, see Figure 33)

Kawehnote

ka- -*wehno*- -*t*- -*e*

NPFX -island- -stand -STAT

Components of this name:

-*wehno*-, nominal root: 'island'

Figure 33. The modern-day name Kawehno:ke.

Sources: Michelson (1973, p. 158); First Peoples' Cultural Council (2019, n.p.)

-t/-at/-ot-, verbal root: 'stand, be there'

Sources: Michelson (1973), p. 177; as per Ontario Ministry of Education (2011), this root is part of a class known as "positional verbs, which specify the position in which the object designated by the noun is most often found" (p. 106)

-e, stative aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/4

Referent category: island

Written representations: "Canoda" (Sauthier & Lotter, 1777; du Chesnoy, 1778; Sauthier, 1778)

General location number: 2/4

Referent category: island

Written representations: "Gawenot" (Beauchamp, 1893, p. 25)
"Gawe'not" (Beauchamp, 1907, p. 133)

General location number: 3/4

Referent category: island

Written representations: "Caywa'not" (Beauchamp, 1907, p. 69)

General location number: 4/4

Referent category: island

Written representations: "Ganonkouenot" (Coronelli, 1689)

Kawehtnowanenne

<i>ka-</i>	<i>-wehno-</i>	<i>-wanen-</i>	<i>-ne</i>
NPFX-	-island-	-(v.)be.large-	-EXLOC
NPFX-	-island-	-(v.)be.large-	-RPFX

Components of this name:

-wehno-, nominal root: 'island'

Sources: Michelson (1973, p. 158); First Peoples' Cultural Council (2019, n.p.)

-owanen, verbal root: 'be large, big, great'

Sources: Michelson (1973, p. 138, 159); Maracle (2003, p. 178)

Note: As per Kanaseraken, the suffix *-owanen* indicates an object that is smaller than that using the suffix *-owa/-kowa/-howa*.

-(h)ne, external locative meaning approximately 'at the abode of'

Sources: Ontario Ministry of Education (2011), p. 34 indicates that this external locative occurs following stems ending in a vowel; Bonvillain (1981) (p. 59) indicates that *-ne* is an allomorph of *-ke*.

The remote past suffix, *-ne*, (Postal, 1979, p. 83) is also possible, but more doubtful given the semantics of this name.

General location number: 1/2
Referent category: river
Written representations: “Gäwanowäna” (Morgan, 1851, p. 527)
“Gawanowananeh” (Beauchamp, 1893, p. 68; Halsey, 1901, p. 19)

General location number: 2/2
Referent category: island
Written representations: “Kawenokowanenne” (Beauchamp, 1893, p. 72)

Kentsenkowahne

<i>kentsen</i>	<i>-kowa</i>	<i>-hne</i>
(n.)fish	-AUG	-EXLOC

Components of this name:

kentsen-, nominal: ‘fish’

Sources: Michelson (1973, p. 63)

-owa/kowa/-howa, augmentative attributive suffix: ‘big, large’

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

-hne, external locative meaning approximately ‘at the abode of’

Sources: Ontario Ministry of Education (2011, p. 34) indicates that this external locative occurs following stems ending in a vowel; Bonvillain (1981, p. 59) indicates that *-ne* is an allomorph of *-ke*.

General location number: 1/1
Referent category: river
Written representations: “Kentsiakowane” (Beauchamp, 1893, p. 29)
“Gaujeahgona’ne” (Beauchamp, 1907, p. 77)

Kohserake

<i>k-</i>	<i>-ohsera-</i>	<i>-ke</i>
NPFX-	-winter-	-EXLOC

Components of this name:

k-, nominal prefix: (see 2.6.2)

-ohsera-, nominal root: ‘winter’

Sources: Lounsbury (1960, p. 50)

-ke, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/2
Referent category: area
Written representations: “Couchsachraga” (Kitchin, 1756; Beauchamp, 1907, p. 69)
 “Coughsagrage”, “Couxsachara” (Beauchamp, 1893, p. 26)
 “Coughsaghraga”, “Koghsarage”, “Kohserake” (Ruttenber, 1906, p. 188)
 “Ga sa ra’ ke”, “Koghserage” (Huden, 1957, p. 70)

General location number: 2/2
Referent category: settlement
Written representations: “Kohaseraghe”, “Kohoseraghe” (Beauchamp, 1893, p. 61)

Note: One of these name forms occurs in Onödowá’ga: territory; however, the “r” of this name identifies it as either Kanyen’kéha or the variety of Onoñda’géga spoken prior to 1750 (see Section 2.5.1). Following Bonvillain (1981), this name may be interpreted as ‘in winter’ (p. 47).

Nikahnawate

<i>ni-</i>	<i>ka-</i>	<i>-hnaw-</i>	<i>-at-</i>	<i>-e</i>
PARTF-	NPFX-	-current-	-stand-	-STAT

Components of this name:

ni-, partitive prepronominal prefix: indicates manner or the degree to which a certain condition or state holds true, emphasis;

Sources: Michelson (1973, p. 4); Ontario Ministry of Education (2011, p. 98)

Note: Okwáho and Kanaseraken states that this prefix may also indicate smallness in size although I cannot confirm this within the literature.

-hnaw-, nominal root: ‘current, rapids’

Note: “describes a situation where water (or some liquid) is moving quickly in a particular way or direction, or against the intended direction and therefore is often interpreted as a ‘current’, ‘rapids’, or as in reference to a ‘spring’ or ‘well’ where the water is being forced out from where it is” (Maracle, 2001, p. 148; cf. Ingram, 2018).

Sources: Michelson (1973, p. 51); Maracle (2001, p. 148); Maracle (2003, p. 207)

-t-/-at-/-ot-, verbal root: ‘stand, be there’

Sources: Michelson (1973, p. 177); as per Ontario Ministry of Education (2011), this root is part of a class known as “positional verbs, which specify the position in which the object designated by the noun is most often found” (p. 106)

-e, stative aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/1
Referent category: river

Written representations: “Nihanawa’tē” (Beauchamp, 1893, p. 27)

Note: This is the same location and referent as *Tkahnawate* (see below).

Nikahyonhakowa

<i>ni-</i>	<i>ka-</i>	<i>-hyonh-</i>	<i>-a-</i>	<i>-kowa</i>
PARTF-	NPFx-	-river-	-EPEN-	-AUG

Components of this name:

ni-, partitive prepronominal prefix: indicates manner or the degree to which a certain condition or state holds true, emphasis;

Sources: Michelson (1973, p. 4); Ontario Ministry of Education (2011, p. 98)

Note: Okwáho and Kanaseraken stats that this prefix may also indicate smallness in size although I cannot confirm this within the literature. It may be related to some form of *niwa’a*, ‘it is small’ (Maracle, 1992, p. 51, verified by Okwáho), but this point remains unclear.

-hyonh-, nominal root: ‘river, stream, creek, moving water’

Sources: Maracle (1992, p. 24); Maracle (2003, p. 211)

-owa/kowa/-howa, augmentative attributive suffix: ‘big, large’

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/1

Referent category: river

Written representations: “Nikahionhakowa” (Beauchamp, 1893, p. 34)

Nikentsyake

<i>ni-</i>	<i>kentsen</i>	<i>-ke</i>
PARTF-	(n.)fish	-EXLOC

Elements in this name:

ni-, partitive prepronominal prefix: indicates manner or the degree to which a certain condition or state holds true, emphasis;

Sources: Michelson (1973, p. 4); Ontario Ministry of Education (2011, p. 98)

Note: Okwáho and Kanaseraken stats that this prefix may also indicate smallness in size although I cannot confirm this within the literature. It may be related to some form of *niwa’a*, ‘it is small’ (Maracle, 1992, p. 51, confirmed by Okwáho), but this point remains unclear.

kentsen-, nominal: ‘fish’

Sources: Michelson (1973, p. 63)

-ke, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/1

Referent category: river

Written representations: “Nikentsiake” (Beauchamp, 1893, p. 74; Beauchamp, 1907, 192)

“Nigentsiagi” (Beauchamp, 1907, p. 192)

Note: Kanaseraken states that in the context of use with the following name, *Nikentsenkowa*, the prepronominal prefix *ni-* here indicates ‘smallness’.

Note: *kentsen* is pronounced approximately as [kãdʷã]; *Nikentyake* is pronounced approximately as [nikãdʷjoke], deleting the final nasalized vowel of [kãdʷã] and replacing it with the non-nasalized open back vowel [ɑ].

Nikentsenkowa

ni- *kentsen* *-kowa*

PARTF- (n.) fish -AUG

Components of this name:

ni-, partitive prepronominal prefix: indicates manner or the degree to which a certain condition or state holds true; emphasis

Sources: Michelson (1973, p. 4), Ontario Ministry of Education (2011, p. 98)

Note: Okwáho and Kanaseraken states that this prefix may also indicate smallness in size although I cannot confirm this within the literature. It may be related to some form of *niwa’a*, ‘it is small’ (Maracle, 1992, p. 51, verified by Okwáho), but this point remains unclear.

kentsen-, nominal: ‘fish’

Sources: Michelson (1973, p. 63)

-owa/kowa/-howa, augmentative attributive suffix: ‘big, large’

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/1

Referent category: river

Written representations: “Nigentsiagoo” (Beauchamp, 1907, p. 192)

Note: In 1980, John Mohawk identified the area of the place names *Nikentsiake* and *Nikentsenkowa* as “a fishing place” including a “fish spawning ground” (Matthiessen, 1980).

Ohrarho

o- *-hrarho*

NPFx- -landing

Components of this name:

-hrarho-, verbal root: ‘land, disembark from a boat, dock, go ashore’

Sources: Maracle (2003, p. 36)

General location number: 1/1

Referent category: unknown

Written representations: “Oghraro” (O’Callaghan 1850, p. 128)

Note: This may be an incomplete name since the nominal prefix is evident, but there is no nominal. See also *Teyohtahrarho*.

Ohskenton

ohskenton

deer

Components of this name:

ohskenton, nominal: ‘deer’

Sources: Huden (1957, p. 73); Maracle (2001, p. 1)

Note: This is an unanalyzable nominal.

General location number: 1/unknown

Referent category: point

Written representations: “Scononton” (Lounsbury, 1960, p. 64)

General location number: unknown

Referent category: unknown

Written representations: “Ohskenton’ton” (Huden, 1957, p. 73)

Note: It is unclear if this name refers to an abundance of deer at a location, or to some sort of landscape feature, since Kanasaraken states that this name is reflective of the antlers which protrude from the deer’s head. The location given by Lounsbury is a peninsula which would certainly reflect the idea of protrusion (see Figure 34, below).

Figure 34. One location of *Ohskenton*.

However, Huden lists several locations of this name, including some of which are unspecific. Two locations are associated with ferry crossings, which often utilize peninsulas or the two points of land closest to each other across the body of water in question in order to decrease water travel time. Thus, it is possible to imagine that *Ohskenton* may refer to points of land projecting into the water in a similar way to the manner of a deer’s antlers protruding from its head, although this idea requires more research.

Ohyonhke/Ohyonhyoke

o- *-hyonh-* *-ke*
NPFX- *-river-* -EXLOC

o- *-hyonh-* *-iyo* *-ke*
NPFX- *-river-* -(v.)beautiful -EXLOC

Components of this name:

-hyonh-, nominal root: 'river, stream, creek, moving water'

Sources: Maracle (1992, p. 24); Maracle (2003, p. 211)

-iyo, verbal root: 'be large, great, beautiful, good'

Sources: "great" (Ruttenber, 1906, p. 72)

 "large or beautiful" (Huden, 1957, p. 74)

 "is good" (Lounsbury, 1960, p. 61)

-ke, nominal suffix: external locative meaning approximately 'on, in'

Sources: Ontario Ministry of Education (, p. 15-162011)

Note: This name is somewhat difficult to analyse in that, following Lounsbury (1960), it may actually be several names with several locations and several referents in several languages (p. 26), or there may be only one or two names that have been misunderstood. All are based upon the nominal root *-hyonh-* ('river, stream, creek, moving water' Maracle, 1992, p. 24; Maracle, 2003, p. 211)) with the possible addition of the suffix *-iyo* (to be "large or beautiful" (Huden, 1957, p. 74), "great" (Ruttenber, 1906, p. 72), "is good" (Lounsbury, 1960, p. 61)) and the addition or absence of the external locative *-ke* (meaning approximately 'on' or sometimes 'in' (Ontario Ministry of Education, 2011, p. 15-16)).

The morphological possibilities are:

Kanyen'kéha:

o- *-hyonh-* *-ke*

(This form may require epenthesis to separate the [h] of *-hyonh-* and the [k] of *-ke*, depending upon phonological constraints, but this is difficult to determine since the final [h] of *-hyonh-* is almost never attested.

o- *-hyonh-* *-iyo*

o- *-hyonh-* *-iyo-* *-ke*

(According to Lounsbury, 1960, this is the "proper" form for the Mohawk River, p. 26.)

Other Iroquoian languages:

o- *hy-* *ke*

o- *hy-* *o*

(with *-o* as the verbal root equivalent to *-iyo* as per Lounsbury, ibid.)

o- *hy-* *yo-* *ke*

Locations and referents seem to support the idea of multiple names in multiple languages over several locations.

General location number: 1/5
Referent category: river
Written representations: "Oiogoue" (Beauchamp, 1893, p. 85)
 "Ohioge", "Oiogué", "Ohioge-son", "Vyoge", "Oyoghi"
 (Ruttenber, 1906, p. 12)
 "Oiogoue" (Williams, 1906, p. 83)
 "Oio'gue" (Beauchamp, 1907, p. 196)
 "Ohí:yo", "Ohiyó:ke" (Lounsbury, 1960)

General location number: 1/5
Referent category: section of river
Written representations: "Oiogoue" (Beauchamp, 1893, p. 8)

General location number: 2/5
Referent category: river
Written representations: "Oiogoue" (Sanson, 1656)
 "Ohyonhiyo'ge", "Vyoge", "Oyoghi", "Ohioge" (Ruttenber, 1906, p. 189)
 "Oiogoue" (Beauchamp, 1907, p. 125)
 "Ohyonhí:yo", "Ohyonhiyó:'ke" (Lounsbury, 1960, p. 26)
 "Oyöge" (van den Bogaert, 1988, p. 1)

General location number: 3/5
Referent category: river
Written representations: "Ohí:yo", "Ohiyó:ke" (Lounsbury, 1960, p. 26)

General location number: 4/5
Referent category: river
Written representations: "Ohí:yo", "Ohiyó:ke" (Lounsbury, 1960, p. 26)

General location number: 5/5
Referent category: river
Written representations: "Ohí:yo", "Ohiyó:ke" (Lounsbury, 1960, p. 26)

Ohnawe'take

o- -hnawe't- -a- -ke
 NPFX- -marsh- -EPEN- -EXLOC

Components of this name:

-(h)nawe't-, nominal root: 'wet ground, swamp, marsh'

Sources: -hnawe't-
 Maracle (2003, p. 230)
 -naw-
 Michelson (1973, p. 77)

Note: Maracle (2003) lists this root with an “h”, but this is likely the same root as *-naw-* (Michelson, 1973, p. 77) which does not contain an “h” (see below) with the addition of the incorporated form *-t-* (‘to stand’). I have included the “h” here in parenthesis for the sake of clarity. (See also *Skanawe*.)

-ke, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number: 1/5

Referent category: marsh

Written representations: “Ononwada’ge” (Huden, 1957, p. 72)

Note: This is also the location and referent for the name *A’nowarake*, “Ohnowara’ke”.

General location number: 2/5

Referent category: mud flat

Written representations: “Ohonowa-Langantle” (Pearson, 1883, p. 436)

“Onawedake” (Beauchamp, 1893, p. 44)

Note: This is the same location and referent as *Skanawe*.

General location number: 3/5

Referent category: creek

Written representations: “Onowadaga” (Sauthier & Fadden, 1776; Sauthier, 1778)

“Canoweda’ge”, “Onnawadage” (Beauchamp, 1907, p. 91)

General location number: 4/5

Referent category: creek

Written representations: “Nawaoga”, “Nowadage” (Ruttenber, 1906, p. 198)

General location number: 5/5

Referent category: settlement

Written representations: “Onawatoke” (Kelsay, 1984, p. 253)

“Nawaoga”, “Nowadage” (Ruttenber, 1906, p. 198)

Note: As explained in the entry for *Kahnawatake*, there are several roots that are extremely similar, and one of the challenges of this study has been to tease these apart; the names marked here represent one of those instances in that the roots may be *-hnaw-* + *-t-* as indicated in this entry, *-hnawenht-*, defined as ‘dropping rapids, riffle’ (see Ingram, 2018, Table 5), or these could be instances of *-naw-* (‘marsh’, Maracle, 1973, p. 77) including *-(h)nawe’t-* ‘wet ground, swamp, marsh’ (Maracle, 2003, p. 31), ‘mire’ (Maracle, 2003, p. 31). In such cases, the pronominal prefix may provide a clue as to the root (compare “Canouwedage” (Pfister, 1758) with “Onnawadage” (Beauchamp, 1907)), but this must remain unsolved within the current work. Landscape evidence also lends support in regard to this issue: Beauchamp (1893, 1907) describes “Onawedake” as “place of mud turtles” (p. 32 and 93 respectively), although the lack of [r] makes this interpretation less plausible. The referent of one of one of these nebulously-rooted names, Nowadaga Creek, flows over bedrock and is low in alluvial deposits (Milone and Macbroom, Inc., 2014), but contains rapids (American Whitewater, 2019), thus raising

the possibility that, at least for instances referring to this creek, a name including the root *-hnaw-* is more appropriate than one including *-naw-*. References to the village site cannot be confidently identified as either *-naw-* or *-hnaw-* since the location is unknown. Similarly, the location of the mud flat documented by Beauchamp (1893) as “Onawedake” is unknown. It would seem likely that there are several names here, that they refer to several different entities in different locations, and that several roots have been crossed in the passage of these names through time. I suspect that those names utilizing the nominal prefix *o-* are in reference to ‘mud’, but more historical and geographic detail will be required to fully understand this problem.

Ohswewe

<i>o-</i>	<i>-hsw-</i>	<i>-e-</i>	<i>-ke</i>
NPFX-	-(n.)spout-	-EPEN-	-EXLOC

<i>o-</i>	<i>-shwe-</i>	<i>-e-</i>	<i>-ke</i>
NPFX-	-(n.)lip-	-EPEN-	-EXLOC

Components of this name:

-hsw-, nominal root: ‘lip, spout, mouth, cork, stopper’

Sources: Maracle (2003, p. 37)

-shwe-, nominal root: ‘upper lip’

Sources: Okwáho (p.c.)

-ke, nominal suffix: external locative meaning approximately ‘on, in’

Sources: Ontario Ministry of Education (2011, p. 15-16)

Note: I postulate that one of two nominal roots appears in this place name based upon the following evidence: first, the fact there is likely to be a nominal root after the nominal prefix *o-* (Ontario Ministry of Education, 2011); second, the verbal root *-hr-*, as in the name *T’yosahronatie’* indicates that an object is ‘sitting on top of’ something else (Ontario Ministry of Education, 2011, p. 106); third, this hypothesis is further supported by a note in Ruttenber (1906) which lists “swe’ken” as “‘Outlet,’ or ‘Mouth of a river,’ ‘Pouring out,’ (p. 184); finally, this statement, and the posited root, seem in agreement with an entry in the Marcoux (n.d.) dictionary:

Mouth of a river os.ha.ra

“No term for mouth of a river as they do not say mouth of a river, but where the river goes out” (n.p.)

This is likely also the root of *Ohsweken*, the Kanyen’kéha modern-day name for the Six Nations reserve in Ontario, as well as Oswego (the modern-day town in New York state); a stained glass window located in the Royal Chapel at the Six Nations reserve names the original Kanyen’kehá:ka village that was established there as “New Oswego”.

Figure 35. Stained glass window at the Royal Chapel in Oshwe:ken showing the original name of the village as "New Oswego". Photo Ingram (2016).

One possible explanation for this variation is perceptual compensation of coarticulation (Johnson, Kang and Cibelli, 2013) given the modern-day move towards a pronunciation of [ɑʃwɪkən] for the name of the Six Nations reserve (see Appendix E) (although this may also be a result of misreading of orthography).

General location number: 1/1

Referent category: town

Written representations: "Oswege" (Lotter, 1748; Lotter, 1756)

Note: This name is also found outside of Kanyen'kehá:ka territory as per Lotter (1748, 1756) and Popple (1733).

Okwahohake

okwaho -hake

wolf -POPUL

Components of this name:

okwaho-, nominal: 'wolf'

Sources: Maracle (2001), p. 2

-hake, populative suffix: 'people of'

Sources: Ontario Ministry of Education (2011, p. 33)

General location number: unknown

Referent category: settlement

Written representations: "Okwahohage" (Ruttenber, 1906, p. 215)

Note: This is likely a reference to the Wolf Clan and one of their villages. See also *Ahskwake* for some issues regarding the documentation and interpretation of this name.

Onyatarakwekon

o- -nyatar- *akwek-* -on

NPFx- -waterway- entire- -STAT

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

akwekon, verbal root: 'all, the whole'

Sources: Lounsbury (1960, p. 55)

General location number: 1/unknown

Referent category: bay

Written representations: "Ononderakioegon" (Mackellar, 1757)
"Onderiguegon" (Lounsbury, 1960, p. 87)
"Tieronderaquegon" (Lounsbury, 1960, p. 54)

General location number: 1/unknown

Referent category: marsh

Written representations: "Tekontarakwé:kon" (Lounsbury, 1960, p. 51)

"Yontontarakwé:kon" (Lounsbury, 1960, p. 51)

General location number: 1/unknown

Referent category: area

Written representations: "Onderiguegon" (Beauchamp, 1907, p. 240)

General location number: unknown

Referent category: unknown

Written representations: "Onderiguegon" (Beauchamp, 1893, p. 87)

Note: The name *Onyatarikwekon* is described in English documents as "the Drowned lands" or a "Grand Marais" (c.f. Lounsbury, 1960). This may be an older English (or French) landscape concept which is no longer widely used, which may also explain the variation in referents and locations.

Onyatario

o- -nyatar- -iyo

NPFX- -waterway- -(v.)be.beautiful

Components of this name:

-nyatar-, nominal root: 'waterway'

Sources: First Peoples' Cultural Council (2019, n.p.); Michelson (1973, p. 86); Maracle (2003, p. 63)

Note: This refers to both lakes and rivers.

-iyo, verbal root: 'be large, great, beautiful, good'

Sources: "great" (Ruttenber, 1906, p. 72)
"large or beautiful" (Huden, 1957, p. 74)
"is good" (Lounsbury, 1960 p. 61)

General location number: 1/1

Referent category: lake

Written representations: “Ontario” (Bartram, 1751, p. 36; Amherst, 1760)
 “Ontario” (Ruttenber, 1906, p. 72)
 “Onyatarí:yo” (Lounsbury, 1960, p. 51)

Note: Lounsbury (1960) essentially proposes that the name “Ontario” is a Wendat name via the root *-oñtar-* cognate with Kanyen’kéha *-nyatar-*. However, these differ, as far as I can tell, only by a single vowel, *o*, with the Wendat root taking a null prefix. It seems to me that an analysis by which the root *-nyatar-* serves as both the Wendat and the Kanyen’kéha root each taking different prefixes fits the data somewhat better.

Oswegatchie

Although the referent for this name exists in apparent Kanyen’kehá:ka territory, Kanaseraken and Okwáho state the origin of this name as Onoñda’géga; this is in agreement with Parmenter (2010), who states that this location, originally a mission town, was generally populated by Onoñda’géga, and O’Callaghan (1849), in which Peter Wraxall writes “At this Sweegassie [Oswegatchie] the French have lately made a Settlement of Indians belonging to the Six Nations of which the greatest part are from Onondaga & Cayouge” (p. 559). Because it is used in this form in Kanyen’kéha, it is included here without further analysis.

General location number: 1/unknown
Referent category: creek
Written representations: “Oswé’gachie” (Huden, 1957, p. 72)

General location number: 2/unknown
Referent category: river
Written representations: “Oswegatchee” (Sauthier & Fadden, 1776; Sauthier & Lotter, 1777; du Chesnoy, 1778; Sauthier, 1779; Hilliard d’Auberteuil, 1782)
 “Oswegatche” (Russell, 1795)
 “Oswegatchie” (Beauchamp, 1893, p. 35)
 “Oswegotchee”, “Soegasti” (Beauchamp, 1893, p. 72)
 “Oswegatch’ie” (Beauchamp, 1907, p. 192)
 “O’swagatch” (Beauchamp, 1907, p. 101)

General location number: 2/unknown
Referent category: settlement
Written representations: “Oswegatche” (Long, 1791)
 “Sweegachie” (O’Callaghan, 1849, p. 472)

General location number: 2/unknown
Referent category: mission
Written representations: “Sweegassie” (O’Callaghan, 1849, p. 294)
 “Swega’che” (Morgan, 1851, p. 25)
 “Oswegatch’ie” (Beauchamp, 1907, p. 192)

General location number:	2, In same location as the settlement, "Mission de l'Abbé Piquet abandon'd" (Sauthier, 1779)
Referent category:	fort
Written representations:	"Oswegatche" (Russell, 1795)
General location number:	3/unknown
Referent category:	settlement
Written representations:	"Oswegatchee" (Sauthier, 1779)
General location number:	unknown
Referent category:	unknown
Written representations:	"Swegage" (O'Callaghan, 1849) "Osweegachie", "Oswegachie" (O'Callaghan, 1849) "Sweegachie", "Swegachey", "Swegachie" (O'Callaghan, 1849)
General location number:	unknown
Referent category:	village
Written representations:	"Swegatsy" (O'Callaghan, 1849)

Oserake

<i>o-</i>	<i>-ser-</i>	<i>-a-</i>	<i>-ke</i>
NPFX-	-(n.)dam-	-EPEN-	-EXLOC

Components of this name:

-ser-, nominal root: 'beaver dam'

Sources: Maracle (2003, p. 73)

-ke, nominal suffix: external locative meaning approximately 'on, in'

Sources: Ontario Ministry of Education (2011, p. 15-16)

General location number:	1/3
Referent category:	area
Written representations:	"Oseragi" (Beauchamp, 1907, p. 196)
General location number:	2/3
Referent category:	creek
Written representations:	"Ossarague" (Beauchamp, 1893, p. 75; Beauchamp, 1907, p. 196)
General location number:	3/3
Referent category:	unknown
Written representations:	"Ossaragué" (Snow, Gehring & Starna, 1996, p. 58)

Note: Maracle (2003) lists this root, but it seems to not be in current use by speakers. This name refers to a fishing area, and thus, and since beaver dams occur in and around waterways, this root is a likely candidate for the basis of the name. While *Kohserake*, 'winter place,' is also a possibility given *Oserake* and *Kohserake* are used in the vicinity of each other, none of the attestations indicate either the "k" or the "h" sound found

within *Kohserake*, both of which are attested for that place name (see Section 4.7); thus, I postulate this separate name. “Oseragi” and “Ossarague” may be the same location with the same referent, but further research is required.

Osharhe'on

o- -sharh- -e- -'on
NPFx- -bulrush- -EPEN- -DISTR

Components of this name:

-sharh-, nominal root: 'bulrush'

Sources: Michelson (1973, p. 140); Maracle (2003, p. 130)

-'on, distributive suffix:

Definition: positional distributive “added to the positional verb to convey the idea that several objects are referred to by the verb – that is, that several standing (or lying, or sitting) objects are distributed over the location specified by the verb” (Ontario Ministry of Education, p. 108).

Sources: Ontario Ministry of Education (2011, p. 107)

General location number: 1/1

Referent category: settlement

Written representations: “Osarhehan” (Beauchamp, 1893, p. 29)

Note: I suspect that the verbal root in this case is -hr-, into which the nominal root -shah- is incorporated, thus making the entire phrase grammatically correct. In its current iteration, without the verbal root, it seems ungrammatical.

Rock Rogeo

General location number: 1/1

Referent category: rock

Written representations: “Regiochne” (Sauthier, 1779)

 “Rodsio Canyatare” (Beauchamp, 1893, p. 83)

 “Rotsiichni” (Beauchamp, 1893, p. 26)

 “Rogeiohne” (Huden, 1957, p. 72)

Note: The second half of this name has been interpreted as “the name of a Mohawk chief who was drowned there” (Beauchamp, 1893, p. 86), of having to do with a spirit or something “spooky” or scary (Okwáho, 2019), and the morphology meaning “his rock is good” (Huden, 1957, p. 72). Several sources describe it as a place where tobacco was offered along with an interpretation that this was to appease the spirit or ghost of the chief. Horn-Miller (p.c.) points out that this is problematic in that the Kanyen'kehá:ka generally did not believe in “water spirits” or “ghosts” and would not have carried out such a ceremony.

The problems of linguistic interpretation and anthropological practice (i.e., tobacco offerings) can be resolved through an analysis in which an non-Iroquoian name, in this

case, an Abenaki name, *Odzihozo* (Day, 1981), was borrowed into Kanyen'kéha, reinterpreted phonologically and its meaning subsequently reinterpreted as a folk etymology, which is suggested by Day (1998). Day writes that this location is extremely significant to the Abenaki and represents "the Transformer," a rock giant who created many of the landscape's natural features before changing himself into stone at that location: "The impression of someone sitting on the rock is heightened by its geological formation which is that of a short cylinder of horizontally bedded dark slate resting on slanting strata of lighter-colored limestone" (1981, p. 47). This name fits well into Kanyen'kéha phonology and morphosyntax with the addition of the third person masculine singular agent prenominal prefix *r-* (Ontario Ministry of Education, 2011, p. 68) and the deletion of the final syllable of "Odzihozo" which yields a suffix the similar to Kanyen'kéha *-io* suffix, completing the reanalysis and leaving the rest of the name (*-odz-*) open to semantic interpretation (p. 121).

Skahentowa

<i>s-</i>	<i>ka-</i>	<i>-hent-</i>	<i>-owa</i>
IT-	NPFX-	-grassland-	-AUG

Components of this name:

s-, iterative prepronominal prefix: indicating a repetitive action

Sources: Ontario Ministry of Education (2011, p. 93)

-hent-, nominal root: 'meadow, grassland'

Sources: Marcoux (n.d., n.p.); Maracle (1992, p. 121); Maracle (2003, p. 186); First Peoples' Cultural Council (2019, n.p.)

Note: With the addition of the verbal root *-owanen* or augmentative suffix *-owa*, the meaning of this root is similar to the English concept of a prairie.

-owa/kowa/-howa, augmentative attributive suffix: 'big, large'

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/2

Referent category: river

Written representations: "Skahundowa" (Beauchamp, 1893, p. 17)
 "Shenando'ah"²⁰ (Beauchamp, 1907, p. 57; p. 54)

²⁰ Since the first and third name forms for location 1 are rather clear, the second name form, "Shenando'ah" can be explained as a mistake in documentation. Beauchamp (1893) states explicitly that the name forms in location two match the meanings of the name form of location 1; the "ch" of the first name form of location 2 may be explained as either a misinterpretation of [s] + [h], as in the second name form of location 2. The second name form of location 2 could be interpreted as utilizing the nominal root *-nont-*, 'hill', but given that this does not fit with the other forms in the same location, coupled with the fact that Beauchamp defines these all as equivalent to the first location, it is more likely that all three are simply mistaken documentations and that the name is therefore identical to location 1. The second name

"Skahundo'wa" (Beauchamp, 1907, p. 54)

General location number: 2/2
Referent category: flat
Written representations: "Chouendhowa", "Shenondehowa", "Shandhot"
(Beauchamp, 1893, p. 74)

Skahentowanen

s- ka- -hent- -owanen
IT- NPFX- -grassland- -(v.)be.large

Components of this name:

s-, iterative prepronominal prefix: indicating a repetitive action

Sources: Ontario Ministry of Education (2011, p. 93)

-hent-, nominal root: 'meadow, grassland'

Sources: Marcoux (n.d. , n.p.) Maracle (1992, p. 121); Maracle (2003, p. 186); First Peoples' Cultural Council (2019, n.p.)

Note: With the addition of the verbal root -owanen or augmentative suffix -owa, the meaning of this root is similar to the English concept of a prairie.

-owanen, verbal root: 'large, big, great'

Sources: Michelson (1973, p. 138, 159); Maracle (2003, p. 51-52)

Note: As per Kanaseraken, the suffix -owanen indicates an object that is smaller than that using the suffix -owa/-kowa/-howa.

General location number: 1/2
Referent category: plain
Written representations: "Skahentowane", "Schahandoanah", "Skehandowana",
"Shenondohawah" (Ruttenber, 1906, p. 204-205)

General location number: 1/2
Referent category: settlement
Written representations: "Scawondaona" (Poppo, 1733)
"Schahandowana" (O'Callaghan, 1853, p. 407)
"Scanandanani" (Beauchamp, 1893)
"Scahandowana" (Beauchamp, 1907)
"Tsanandowas", "Tsanandowans", "Scahantowano",
"Scha,han,do,a,na", "Schahaedawana", "Chanandowa",
"Tsanandowana", "Scahantowano", "Schahandowa",
"Schahacdawana", "Seahautowano", "Skehandowana",
"Chanandowa", "Tsanandowa" (Donehoo, 1928/2018, p. 232)

form in location 2 adds an extra "on", and the final name form of location 2 can be understood as an abbreviation of several forms. All of the name forms of location 2 seem to be missing their pronominal prefixes (ka-).

General location number: 2/2
Referent category: plain
Written representations: “Schahandoanah”, “Skehandowana”, “Shenondohawah”
(Ruttenber, 1906, p. 204-205)

Skanatihson’

<i>s-</i>	<i>ka-</i>	<i>-nat-</i>	<i>-ihs-</i>	<i>-on’</i>
IT-	NPFx-	-village-	-complete-	-STAT

Components of this name:

s-, iterative prepronominal prefix: indicating a repetitive action
Sources: Ontario Ministry of Education (2011, p. 93)

-nat-, nominal root: ‘settlement, village, town’
Sources: Michelson (1973, p. 183)
Maracle (2003, p. 242)

-ihs-, verbal root: ‘create, finish, complete’
Sources: Maracle (2003, p. 45)

Note: Following Snow (1996), this may indicate the new location of a village that was just moved from a previous village site as per Rotinonhseshá:ka custom (p. 67).

-on’, stative aspectual suffix
Sources: Postal (1979, p. 81)

General location number: 1/1
Referent category: settlement
Written representations: “Schanatissa” (Beauchamp, 1893, p. 44; Beauchamp, 1907, p. 125)
“Schanatissa” (Ruttenber, 1906, p. 215)
“Schanadisse” (van den Bogaert, 1988, p. 5; Snow, Gehring & Starna, 1996, p. 280)

Skanawe

<i>s-</i>	<i>ka-</i>	<i>-naw-</i>	<i>-e</i>
IT-	NPFx-	-marsh-	-NSFX

Components of this name:

s-, iterative prepronominal prefix: indicating a repetitive action
Sources: Ontario Ministry of Education (2011, p. 93)

-(h)nawe’t-, nominal root: ‘wet ground, swamp, marsh’
Sources: *-hnawe’t-*
Maracle (2003, p. 230)
-naw-
Michelson (1973, p. 77)

Note: Maracle (2003) lists this root with an “h”, but this is likely the same root as *-naw-* (Michelson, 1973, p. 77) which does not contain an “h” (see below) with the addition of

the incorporated form *-t-* ('to stand'). I have included the "h" here in parenthesis for the sake of clarity.

General location number: 1/1
Referent category: mud flat
Written representations: Schonowe (Beauchamp, 1893, p. 76)

Note: This is the same location and referent as *Ohnawe'take* location 2.

Skanawehs

s-	ka-	-naw-	-ehs
IT-	NPFx-	-marsh-	(v.)be.long

Components of this name:

s-, iterative prenominal prefix: indicating a repetitive action

Sources: Ontario Ministry of Education (2011, p. 93)

-(h)nawe't-, nominal root: 'wet ground, swamp, marsh'

Sources: -hnawe't-
Maracle (2003, p. 230)
-naw-
Michelson (1973, p. 77)

Note: Maracle (2003) lists this root with an "h", but this is likely the same root as *-naw-* (Michelson, 1973, p. 77) which does not contain an "h" (see below) with the addition of the incorporated form *-t-* ('to stand'). I have included the "h" here in parenthesis for the sake of clarity. *-ehs/-es*, verbal root: 'be long'

Sources: Michelson (1973, p. 160); Maracle (2003, p. 183)

General location number: 1/1
Referent category: swamp
Written representations: "Skanowis" (Beauchamp, 1893, p. 50)
"Ska'nawis" (Beauchamp, 1907, p. 141)

Skanen'tati

s-	ka-	-nen't-	-ati
IT-	NPFx-	-evergreen-	-(v.)be.on.a.side

Components of this name:

s-, iterative prenominal prefix: indicating a repetitive action

Sources: Ontario Ministry of Education (2011, p. 93)

-nen't-, nominal root: 'evergreen, cedar'

Sources: -nen't-: Michelson (1973, p. 149); Maracle (2003, p. 56)

Note: The root for 'pine tree', *-hneht-* (Maracle, 2003, p. 199) is also possible.

-ati, verbal root: 'be on a side'

Sources: Ontario Ministry of Education (2011) p. 110

Note: As per Michelson (1973, p. 33,) when utilized with the iterative prefix *s-*, this verbal root indicates ‘the other side’.

General location number: 1/2
Referent category: settlement
Written representations: “Schenectady” (Ruttenber, 1906, p. 202)

General location number: 2/2
Referent category: flat
Written representations: “Skahnéhtati” (Lounsbury, 1960, p. 26)

Note: This name has been variously applied to multiple referents in the vicinity of several locations. Although this is a Kanyen’kéha name, its forms, referents and locations have become part of folk history (see Ruttenber, 1906, p. 202). Location 1, given here, is the present-day location, while Location Two followed Lounsbury (1960) and shares a referent with the name *Skanawe*.

Skanyatariyo

s- *ka-* *-nyatar-* *-iyo*
IT- NPFX- *-waterway-* *-(v.)be.beautiful*

Components of this name:

s-, iterative prepronominal prefix: indicating a repetitive action
Sources: Ontario Ministry of Education (2011), p. 93

-nyatar-, nominal root: ‘waterway’
Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples’ Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-iyo, verbal root: ‘be large, great, beautiful, good’
Sources: “great” (Ruttenber, 1906, p. 72)
“large or beautiful” (Huden, 1957, p. 74)
“is good” (Lounsbury, p. 61)

General location number: 1/1
Referent category: lake
Written representations: “Skanadario” (Beauchamp, 1893, p. 60; Beauchamp, 1907, p. 155)

Skanyatarowanen

s- *ka-* *-nyatar-* *-owanen*
IT- NPFX- *-waterway-* *-(v.)be.large*

Components of this name:

s-, iterative prepronominal prefix: indicating a repetitive action
Sources: Ontario Ministry of Education (2011, p. 93)

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-owanen, verbal root: 'large, big, great'

Sources: Michelson (1973, p. 138, 159); Maracle (2003, p. 51-52)

Note: As per Kanaseraken, the suffix *-owanen* indicates an object that is smaller than that using the suffix *-owa/-kowa/-howa*.

General location number: 1/2

Referent category: lake

Written representations: "Skaghnetaghrowahna" (Beauchamp, 1893, p. 26)
"Skanyatarowanen" (Lounsbury, 1960, p. 51)

General location number: 2/2

Referent category: lake

Written representations: "Skanetaghrowahna" (Beauchamp, 1907, p. 239)
"Skanetoghrowa" (Beauchamp, 1907, p. 241)

Tekahentyento

te- *ka-* *-hent-* *-yen* *to*

DU- NPFX- -grassland- -lie- ?

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-hent-, nominal root: 'meadow, grassland'

Sources: Marcoux (n.d., n.p.); Maracle (1992, p. 121); Maracle (2003, p. 186); First Peoples' Cultural Council (2019, n.p.)

-yen, verbal root: 'lie'

Sources: As per Ontario Ministry of Education (2011), this root is part of a class known as "positional verbs, which specify the position in which the object designated by the noun is most often found" (p. 106)

General location number: 1/1

Referent category: river

Written representations: "Takahundiando" (Beauchamp, 1893, p. 35)

Note: The nominal root *-hent-* and the verbal root *-yen* in this name are educated guesses, along with the interpretation of written "taka" as *t'k-*, which could also be the dualic *teka-*. While the "do" of the final syllable seems very similar to the final syllable of *T'karonto* (made up of the final "t" of the nominal root *-ront-* and the incorporated root

-o-, ‘to be in the water’), this “t” presents a problem as it does not seem to belong to any root and it seems somewhat odd to utilize both -yen and -t- within a single name, since they both are used to indicate that a landscape feature exists somewhere in some way. Therefore, while the -o may, in fact, be the aforementioned incorporated water root, the “t” is still somewhat of a mystery.

Tatyehronon

Tatye -hronon

Tutelo -POPUL

Elements used in this name:

Tatye-, proper nominal: probably ‘Tutelo’

The Tutelo people, whose original territory was located in North Carolina, came under the protection of the Six Nations at some point before their relocation to the Grand River in Ontario (and hence, the name of the neighbourhood “Tutelo Heights” in Brantford) (Hale, 1883).

-hronon, populative suffix: “referring to the inhabitants of a place”

Sources: Mithun (1996, p. 162)

General location number: 1/1

Referent category: settlement

Written representations: “Tatieronno” (O’Callaghan, 1849, p. 481)
“Totieronno” (Beauchamp, 1893, p. 83)

Note: Although the location is outside of Kanyen’kehá:ka territory (see Section 2.6.1), the use of “r” provides evidence that it is either a Kanyen’kéha name or possibly an old Onoñda’géga name. Onoñda’géga was still in the process of losing this consonant in 1750 according to Julian (2010), and this name was documented in 1767, meaning that either is a possibility, although the Onoñda’géga morpheme for the populative suffix -hronon may shed further light on this name.

Tewasenta

Note: I have not been able to locate any modern written sources which attest to this meaning; however, the meaning “waterfall” or “cataract” is often given together with this place name and is confirmed within Bruyas (1863) (see Figure 36, below, from p. 27), “Te.wa.sén.ta” is given by Marcoux (n.d.) as the name for the “Niagara Cataract” (n.p.), and this meaning is confirmed by Okwáho.

Figure 36. The entry for “Tawasentha” from Bruyas (1863), p. 27.

General location number: 1/5

Referent category: creek

Written representations: “Tawasentha”, “Tawaisontha” (Beauchamp, 1893, p. 7)

“Tawalsentha” (Ruttenber, 1906, p. 13)
 “Toowawsuntha” (Ruttenber, 1906, p. 178)
 “Twasenta” (Ruttenber, 1906, p. 179)
 “Tawasen’tha” (Beauchamp, 1907, p. 23)

If the initial “t” of this name is analyzed as the dualic (*te-*), several more name forms in other locations appear to be identical or similar.

General location number: 2/5
Referent category: creek
Written representations: “Wasoutha” (Montrésor, 1777)
 “Wascontha” (Beauchamp, 1893, p. 44)

General location number: 3/5
Referent category: creek
Written representations: “Wassontha” (Beauchamp, 1893, p. 30)

General location number: 4/5
Referent category: river
Written representations: “Wasthonta” (Anonymous, 1756)

With the addition of *t’-* (cislocative) and *-akon* (internal locative, ‘in’; Ontario Ministry of Education, 2011, p. 16)

General location number: 5/5
Referent category: unknown
Written representations: “Datewasunthago” (Beauchamp, 1893, p. 50)

Note: Beauchamp (1907) also mentions Washinta as “falls on Susquehanna” (p. 262) together with the name *Tawasen’tha*; Donehoo (1928/2018) notes “Tawasentha” and “Washinta” (Donehoo, 1928) in Pennsylvania, but these seem to be at a different location than Beauchamp’s “Washinta”. This name may also be related to “Tawagunshi” as given in the oral history of the *Tekani Teyothata’tye Kaswenta*, since the location matches that outlined by Hill (2013). Given that every location is on a waterway, it is possible that the referents are all waterfalls rather than the waterway itself.

Tawinehne

Tawine -hne
 otter -EXLOC

Components of this name:

tawine-, nominal: ‘otter’

Sources: Maracle (2001, p. 1); Okwáho

-hne, nominal suffix: external locative meaning approximately ‘at the home of, at the abode of’

Sources: Huden (1957, p. 73); Ontario Ministry of Education (2011, p. 34)

General location number: 1/1

Referent category: creek
Written representations: “Daweennet” (Beauchamp, 1893, p. 35)
“Dawineh'neh” (Huden, 1957, p. 73)

Tekahsoken

te- *ka-* *-hs-* *-oken*
DU- NPFX- *-lip-* *-(v.)split*

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-hs-, nominal root: ‘lip, spout, mouth’

Sources: Maracle (2003, p. 37)

-oken, verbal root: ‘split, forked, being at the junction of two branches of something’

Sources: Lounsbury (1960), p. 49; Michelson (1973), p. 151

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) is somewhat more specific and states that this root requires the dualic (*te-*) with the nominal root *-nyatar-* (‘a waterway’), and this coincides with Kanasaraken’s statements that dualic is not required with this verbal root.

General location number: 1/2
Referent category: creek
Written representations: “Tegesoken” (Beauchamp, 1893, p. 50)
“Tagasoke”, “Tegeroken” (Beauchamp, 1907, p. 141)
General location number: 2/2
Referent category: settlement
Written representations: “Tekahsó:ken” (Lounsbury, 1960, p. 26)

Tekanyataroken

te- *ka-* *-nyatar-* *-oken*
DU- NPFX- *-waterway-* *-(v.)split*

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-nyatar-, nominal root: ‘waterway’

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-oken, verbal root: 'split, forked, being at the junction of two branches of something'

Sources: Lounsbury (1960, p. 49); Michelson (1973, p. 151)

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) is somewhat more specific and states that this root requires the dualic (*te-*) with the nominal root *-nyatar-* ('a waterway'), and this coincides with Kanasaraken's statements that dualic is not required with this verbal root.

General location number: 1/2

Referent category: point

Written representations: "Ticonderoga" (Tirion, 1769)
"Tekanyataró:ken" (Lounsbury, 1960, p. 53)

General location number: 1/2

Referent category: area

Written representations: "Tieonderoga" (Norman, 1785)
"Tionderoga" (O'Callaghan, 1849, p. 366)

General location number: 1/2

Referent category: fort

Written representations: "Thenonderoga" (Dieskau, 1755)
"Tienderoga" (Sauthier & Fadden, 1776)
"Tienderoga" (Rogers, 1756)
"Tionderoga" (Loring, 1756)
"Ticonderoga" (Anonymous, 1759)
"Ticonderago" (Gibson, 1762)
"Ticonderoga" (Mitchel, Kitchin, Jeffreys, Fadden, 1774)
"Ticonderoga or Tienderoga" (Sauthier & Fadden, 1776)
"Ticonderoga" (Montrésor, 1777)
"Ticonderoga" (Sauthier & Lotter, 1777)
"Ticonderoga" (Tryckeriet, 1777)
"Ticonderoga" (du Chesnoy, 1778)
"Ticonderoga" (Kitchin, 1778)
"Ticonderoga" (Lodge, 1778)
"Tienderoga or Ticonderoga" (Sauthier, 1778)
"Ticonderoga" (Sauthier, 1778)
"Ticonderago" (Hilliard d'Auberteuil, 1782)
"Ticonderago" (Russell, 1795)
"Ticonderoga" (Halsey, 1901, p. 302)

“Ticonderoga”, “Tionderogue”, “Ticonderoro”,
 “Ticonderoga”, “Ticontarogen”, “Decariaderoga”,
 “Ticonderoga”, “Teonderoga”, “Dekariaderage”,
 “Tekaniataroken”
 (Ruttenber, 1906, p. 71)

General location number: 1/2
Referent category: settlement
Written representations: “Ticonderoga” (Medcalfe, 1777)
 “Ticonderago” (Sayer & Bennett, 1783)
 “Ticonderoga” (Long, 1791)
 “Ticonderago” (Smith, Reid & Wayland, 1796)

General location number: 1/2
Referent category: pass
Written representations: “Tononderoge” (Kitchin, 1756)
 “Tionderogue” (O’Callaghan, 1849, p. 370)
 “Ticonderoro” (O’Callaghan, 1849, p. 373)

General location number: unknown
Referent category: unknown
Written representations: “Ticonderoga” (Snow, Gehring & Starna, 1996, p. 256)

General location number: 2/2
Referent category: creek
Written representations: “Icanderoga”, “Jeandarage” (Beauchamp, 1907, p. 123)

General location number: 2/2
Referent category: fort and settlement
Written representations: “Teyeondarago” (Beauchamp, 1907, p. 121)
 “Tenotoge”, “Thenondiogo”, “Teondalo’ga”,
 “Teyondaroge”, “Tionondoroge”, “Tiononderoga”,
 “Teyondaroge”, “Tenotogehatage” (Beauchamp, 1907, p. 126)

Note: There are two name forms used at location two which are extremely similar–*Tekanyateroken* and *Teyononteroken*; it is unclear if they represent two distinct names, or if a single name has been misunderstood. However, the interpretations of both names are applicable to the landscape at location 2.

Tekaswen’karorens

te-	ka-	-swen’kar-	oren	-s
DU-	NPFx-	-board-	?	-HAB

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-swen'kar-, nominal root: 'board, plank'

Sources: Michelson (1973, p. 168); Maracle (2003, p. 126)

-oren- verbal root: unknown; see Note.

-s, habitual aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/2

Referent category: settlement

Written representations: "Tekaswenkarorens" (Beauchamp, 1893, p. 29)

General location number: 2/2

Referent category: settlement

Written representations: "Dekaswenkaro'rens" (Huden, 1957, p. 75)

Note: According to Huden (1957), "Prior to the coming of the Europeans the Mohawks had no word for 'boards,' but they called sheets of bark *oh swa* or *oh-swen ka*; they switched that word to mean 'board or lumber.' The Mohawk word for 'sawmill' was *De ka swen ka ro' rens*, 'that which splits something into boards' (p. 75). This name is used for towns which were the locations of two former saw mills.

Tekyatonyatarí:kon

<i>te-</i>	<i>ky-</i>	<i>-at-</i>	<i>-o-</i>	<i>-nyatar-</i>	<i>-rik-</i>	<i>-on'</i>
DU-	NPF-	-SRFLX-	-EPEN-	-waterway-	-join-	-STAT

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-ky-, nominal prefix: "the neuter dual-number subjective pronominal prefix in the form which it assumes when prefixed to *a*-stems; 'they two (neuter)'. (Lounsbury, 1960, p. 59)

-at-, semireflexive: derivational affix which creates an intransitive verb from a transitive verb (Ontario Ministry of Education, 2011), p. 125).

Sources: Lounsbury (1960, p. 59) Ontario Ministry of Education (2011, p. 126)

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-rik-, verbal root: ‘join together’; according to Maracle (2003), with the dualic this root meaning becomes ‘joining together something that was originally in one piece’.
Lounsbury (1960) states that with the semireflexive (which he called the reflexive), the meaning changes “from ‘put together’ to ‘come together’” (p. 59).

Sources: Lounsbury (1960, p. 59); Michelson (1973, p. 99); Maracle (2003, p. 92)

-on', stative aspectual suffix

Sources: Postal (1979, p. 81)

General location number: 1/1

Referent category: confluence in river

Written representations: “tekiatontaríkon” (Marcoux, n.d., n.p.)
“Tekyatontarí:kon” (Lounsbury, 1960, p. 26)

Teya'hon:wa'hkwat

<i>te-</i>	<i>ya-</i>	<i>-hon:wa-</i>	<i>-hkw-</i>	<i>-a-</i>	<i>-t</i>
DU-	NPF-	-boat-	-lift-	-EPEN-	-CAUS

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-hón:wa-, nominal root: ‘boat, canoe’

Sources: Michelson (1973, p. 138); Maracle (2003, p. 126); Okwáho (p.c.)

-hkw-, verbal root: ‘lift, carry’

Sources: Michelson (1973, p. 160); Okwáho (p.c.)

Note: This verb utilizes the prepronominal dualic prefix *te-* as it indicates a change in state or position from one thing to another (Okwáho, p.c.).

-t, causative suffix: “‘causing something’ or ‘making somebody do something’”

Sources: Michelson (1973, p. 20)

General location number: 1/unknown

Referent category: portage

Written representations: “Dayahoowaquat” (Beauchamp, 1893, p. 33)
“Daya'hoowa'quat” (Beauchamp, 1907, p. 138)

General location number: 2/unknown

Referent category: river section

Written representations: “Daya'hoowa'quat” (Beauchamp, 1907, p. 92)

General location number: 3/unknown; overlaps location 2

Referent category: river section

Written representations: “Daya'hoowa'quat” (Beauchamp, 1907, p. 92)

General location number: unknown
Referent category: portage
Written representations: “Deyehonwahkwa'tha” (Huden, 1957, p. 74)

Note: The referents of Location One and several unspecified locations are portages; the referents of Location Two and Three are sections of a river which both lead to Location One.

Teyohahoken

te- *yo-* *-hah-* *-oken*
DU- NPFX- *-path-* *-(v.)split*

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-hah-, nominal root: ‘road, trail, path’

Sources: Maracle (2003, p. 29)

-oken, verbal root: ‘split, forked, being at the junction of two branches of something’

Sources: Lounsbury (1960, p. 49); Michelson (1973, p. 151)

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) is somewhat more specific and states that this root requires the dualic (*te-*) with the nominal root *-nyatar-* (‘a waterway’), and this coincides with Kanasaraken’s statements that dualic is not required with this verbal root

General location number: 1/1
Referent category: pass
Written representations: “Teyothahó:ken” (Lounsbury, 1960, p. 53)

Teyoken

te- *y-* *-oken*
DU- NPFX- *-(v.)split*

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number ‘two’; also used to indicate a change in state, i.e., from one thing or place to another.

Source: Ontario Ministry of Education (2011, p. 84)

-oken, verbal root: ‘split, forked, being at the junction of two branches of something’

Sources: Lounsbury (1960, p. 49); Michelson (1973, p. 151)

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) is

somewhat more specific and states that this root requires the dualic (*te-*) with the nominal root *-nyatar-* ('a waterway'), and this coincides with Kanasaraken's statements that dualic is not required with this verbal root.

General location number: 1/3
Referent category: creek
Written representations: "Teahoge", "Teugega", "Tioga" (Beauchamp, 1893, p. 32)
"Teuge'ga" (Morgan, 1851, p. 507)

General location number: 2/3
Referent category: river section
Written representations: "Teuge'ga" (Morgan, 1851, p. 507)
"Tio'ga" (Beauchamp, 1907, p. 94)

Note: I have no explanation for the first "g" of Morgan's name, other than that it may have been intended to be "gh", or that it is simply a mistake. It cannot be a pronominal prefix (i.e., *ka-*), since this slot is already occupied by *y-*.

General location number: 3/3
Referent category: river branch
Written representations: "Teohoken" (Beauchamp, 1893, p. 84)

Note: There are versions of this name in other Rotinohseshá:ka territories, i.e., Tioga Point (Athens, PA), and "Theyaoguin" in Onyota'a:ka territory (Beauchamp, 1907, p. 153).

Teyonontahowa

te- *yo-* *-nont-* *-a-* *-howa*
DU- NPFX- -hill- -EPEN- -AUG

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-nont-, nominal root: 'hill, mound, hillock, knoll'

Sources: Michelson (1973, p. 84); Maracle (2003, p. 62); First Peoples' Cultural Council (2019, n.p.)

-owa/kowa/-howa, augmentative attributive suffix: 'big, large'

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/1
Referent category: unknown
Written representations: "Dionondahowa" (Beauchamp, 1893, p. 86)
"Dionœndogeha" (Ruttenber, 1906, p. 181)

“Di-ononda-howe” (Ruttenber, 1906, p. 70)
“Dionondahowa”, “Dionondehowe” (Beauchamp, 1907, p. 240)

Teyonontoken

te- *yo-* *-nont-* *-oken*
DU- NPFX- *-hill-* (v.)split

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-nont-, nominal root: ‘hill, mound, hillock, knoll’

Sources: Michelson (1973, p. 84); Maracle (2003, p. 62); First Peoples’ Cultural Council (2019, n.p.)

-oken, verbal root: ‘split, forked, being at the junction of two branches of something’

Sources: Lounsbury (1960, p. 49); Michelson (1973, p. 151)

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) is somewhat more specific and states that this root requires the dualic (*te-*) with the nominal root *-nyatar-* (‘a waterway’), and this coincides with Kanasaraken’s statements that dualic is not required with this verbal root.

General location number: 1/1

Referent category: settlement

Written representations: “Tenotoge”, “Tenotooge” (van den Bogaert, 1988, p. 13)
 “Thenondiogo” (Snow, Gehring & Starna, 1996, p. 46)
 “t'lounontego” (Snow, Gehring & Starna, 1996, p. 11)
 “Tenotoge”, “Tenotogehoooge” (Ruttenber, 1906, p. 191)
 “Tenotohage”, “Teononté-ogen” (Ruttenber, 1906, p. 198)
 “Teyonontó:ken” (Lounsbury, 1960, p. 53)
 “Tenotoge” (Snow, Gehring & Starna, 1996, p. 5)
 Same location and referent as “Tionontoguen”

General location number: 1/1

Referent category: fort

Written representations: Tionnontoguen (Snow, Gehring & Starna, 1996, p. 170)
 Same location and referent as “Tenotoge”
 “Tionnontoguen” (Snow, Gehring & Starna, 1996, p. 177)
 “Tehondälo'ga” (Morgan, 1851, p. 501)
 “Tenotogehatage” (Beauchamp, 1907, p. 126)

Beauchamp seems to have various other place names for this location and it is sometimes difficult to understand which names apply to which locations and/or which referents. He states that “Teondalo’ga” and “Teah’tontalo’ga” are names used for Ft. Hunter, which is also the site of the first or lower Kanyen’kehá:ka castle (p. 126) although in Ruttenber (1906) this location is described as the fourth Kanyen’kehá:ka castle. These names are also suggestive of a name using the root *-nyatar-* rather than *-nont-*, although the rest of the name suggests the same affixes, *te-* and *-oken*. He goes on to add that the form “Teyeondaroge” is “the same as the last”, although it is not clear whether “the last” refers to the Kanyen’kehá:ka castle or to the previous name (and, if it does refer to the name, it would refer to “Teondalo’ga” rather than “Teah’tontalo’ga” since [r] and [l] may be interchangeable between Kanyen’kéha and Onnontaka). He also states that the castle was “near Ft. Hunter” (p. 127) and not actually Ft. Hunter itself, so it is unclear if “Teondalo’ga” and “Teah’tontalo’ga” refer to the fort, a village, or simply a location. Several other name forms also suggest the root *-nyatar-* rather than *-nont-* or a combination of *-nont-* and *-nyater-*:

General location number:	1/1
Referent category:	settlement
Written representations:	“t'lounontego”(Ruttenber, 1906, p. 215)
General location number:	unknown
Referent category:	settlement
Written representations:	“Tionondoroge”, “Tiononderoga”, “Trenondroge”, “Tiononderoge”, “Ticonderoga”, “Tinnandora” (Beauchamp, 1907, p. 126)

The for this entry may be connected to the form “Tionondoroge” from 1691 which is documented by Beauchamp (p. 127), the 1672 variation does not contain an “r”. Several other forms suggest that there are two names in use in this location, one of which utilizes *-nont-* and one of which utilizes *-nyatar*, since the following name forms refer to a creek at Location 1:

General location number:	1/1
Referent category:	creek
Written representations:	“Diontaroga” (O’Callaghan, 1849, p. 333) “Dionondoroge”, “Chinonderoga” (Beauchamp, 1907, p. 70)

Teyohyonhoken

<i>te-</i>	<i>yo-</i>	<i>-hyonh-</i>	<i>-oken</i>
DU-	NPF-	-river-	-(v.)split

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-hyonh-, nominal root: 'river, stream, creek, moving water'

Sources: Maracle (1992, p. 24); Maracle (2003, p. 211)

Note: Okwáho (p.c.) states that the difference between the nominal root *-hyonh-* and the root *-nyatar-* is based on size: *-hyonh-* is smaller than *-nyatar-*.

-oken, verbal root: 'split, forked, being at the junction of two branches of something'

Sources: Lounsbury (1960, p. 49); Michelson (1973, p. 151)

Note: There is some conflicting information in regard to this root; Lounsbury (1960) states that the dualic (*te-*) is required with this root (p. 49). Michelson (1973) is somewhat more specific and states that this root requires the dualic (*te-*) with the nominal root *-nyatar-* ('a waterway'), and this coincides with Kanasaraken's statements that dualic is not required with this verbal root.

General location number: 1/3

Referent category: waterfall

Written representations: "Tiohionhoken" (Beauchamp, 1893, p. 73; Beauchamp, 1907, p. 194)

General location number: 2/3

Referent category: fork in river

Written representations: "Teyohyonhó:ken" (Lounsbury, 1960, p. 53)

General location number: 3/3

Referent category: fork in river; outside Kanyen'kehá:ka territory

Written representations: "Tiahogo" (O'Callaghan, 1849, p. 408)

Tekahrarho

te- *ka-* *-hrarho*

DU- NPFX- -(n.)landing

Components of this name:

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

-hrarho-, verbal root: 'land, disembark from a boat, dock, go ashore'

Sources: Maracle (2003, p. 36)

Note: There are several documented forms of names that are similar refer to the same referent (a creek), and one is similar, but refers to a different creek. "Tecarhuarloda" and its variant "Tecar'huharlo'da" (Beauchamp (1893) and (1907), respectively) may utilize the verbal root *-t-*, 'stand', but I am unsure as to the grammatical technicalities in this case. Morgan's (1851) form of the verb root *-hrarho-* can be explained by the technicalities of post-vocalic [h] (see page 84), but it is the same location and referent as "Tecarhuarloda" and "Tecar'huharlo'da", strengthening the hypothesis that this is the

verbal root *-hrarho-* in use. “Teughtaghrarow” clearly utilizes *-hraro-*, but the beginning of this form seems to indicate “teyoht-”; “teyo” could be explained as the dualic and a nominal prefix, but I cannot yet explain “ht”. All of these variants are collected here for future analysis.

General location number: 1/2
Referent category: creek
Written representations: “Tearhuharloda” (Beauchamp, 1893, p. 32)
 “Detecar'huharlo” (Morgan, 1851, p. 507)
 “Tear'huharlo'da” (Beauchamp, 1907, p. 126)

General location number: 2/2
Referent category: creek
Written representations: “Teughtaghrarow” (Beauchamp, 1893, p. 32)

Tkahnawate

<i>t-</i>	<i>ka-</i>	<i>-hnaw-</i>	<i>-at-</i>	<i>-e</i>
CISLOC-	NPF-	-current-	-stand-	-STAT

Components of this name:

t-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 29); Michelson (1973, p. 5); Ontario Ministry of Education (2011, p. 87)

-hnaw-, nominal root: ‘current, rapids’

Note: “describes a situation where water (or some liquid) is moving quickly in a particular way or direction, or against the intended direction and therefore is often interpreted as a ‘current’, ‘rapids’, or as in reference to a ‘spring’ or ‘well’ where the water is being forced out from where it is” (Maracle, 2001, p. 148; cf. Ingram, 2018).

Sources: Michelson (1973, p. 51); Maracle (2001, p. 148); Maracle (2003 p. 207)

-t-/at-/ot-, verbal root: ‘stand, be there’

Sources: Michelson (1973, p. 177); as per Ontario Ministry of Education (2011), this root is part of a class known as “positional verbs, which specify the position in which the object designated by the noun is most often found” (p. 106)

-e, stative aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/1
Referent category: river
Written representations: “Tonawadeh” (Beauchamp, 1893, p. 27)
 “Tanawa'deh” (Beauchamp, 1907, p. 80)

Note: This name is found in one form in one location with one referent; it is the same location and referent as *Nikahnawate* (see above). As mentioned in *Kahnawatake*, this

name could consist of a number of other roots. However, Tonawanda is a present-day place name in Onödowá'ga: territory, and Chafe (1967) lists this name under the entry for the Onödowá'ga: root for 'riffles, rapids', "(h/:)now(o)-" (p. 55), together with vb. Rt. -te- and cisloc.' (ibid). I see no documentary evidence for the second "h" in the root -*hnawenht*-, and therefore assume the simplest explanation.

Tkanen'tahowa

<i>t-</i>	<i>ka-</i>	<i>-nen't-</i>	<i>-a-</i>	<i>-howa</i>
CISLOC-	NPFX-	-evergreen-	-EPEN-	-AUG

Components of this name:

t-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 29); Michelson (1973, p. 5); Ontario Ministry of Education (2011, p. 87)

-nen't-, nominal root: 'evergreen, cedar'

Sources: *-nen't-*: Michelson (1973, p. 149); Maracle (2003, p. 56)

Note: The root for 'pine tree', *-hneht-* (Maracle, 2003, p. 199) is also possible.

-owa/kowa/-howa, augmentative attributive suffix: 'big, large'

Sources: Ontario Ministry of Education (2011, p. 30)

Note: Although this suffix was given to me as *-kowa* (Horn, p.c.), it seems to have several allomorphs that I cannot verify.

General location number: 1/1

Referent category: point

Written representations: "Tanendahowa" (Beauchamp, 1907, p. 197)

Tkahnwistaniyonte

<i>t-</i>	<i>ka-</i>	<i>-hwist-</i>	<i>-a-</i>	<i>-niy-</i>	<i>-onte</i>
CISLOC	NPFX	-bell-	-EPEN-	-DAT-	-attached
CISLOC	NPFX	-bell-	-EPEN-	-DIM-	-attached

Components of this name:

t-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 114), Michelson (1973, p. 5); Ontario Ministry of Education (2011, p. 87)

-hwist-, nominal root: 'metal, bell'

Sources: Michelson (1973, p. 58); Maracle (2003, p. 42)

-niy-, possibly dative suffix as per Michelson (1973, p. 20); but Okwáho states in this context, it indicates smallness in size.

-ont(e), verbal root: 'attached to something'

Sources: Maracle (2003, p. 66)

General location number: 1/1

Referent category: mission/church
Written representations: “Tgawistani'yonteh”, “Tekisedaneyont”, “Tgaisdaniyont”
(Huden, 1957, p. 74)

Note: This name is associated with a bell tower at a mission as per Huden.

Tonhnyata

<i>t-</i>	<i>-onhnya-</i>	<i>-t-</i>	<i>-e</i>
CISLOC-	-(n.)point-	-stand-	-STAT

Components of this name:

t'-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 29); Michelson (1973, p. 5)

-onhnya-, nominal root: ‘point, peninsula’

Sources: Lounsbury (1960, p. 59); Michelson (1973, p. 115); Maracle (2003, p. 65); Ontario Ministry of Education (2011, p. 87)

-t-/at-/ot-, verbal root: ‘stand, be there’

Sources: Michelson (1973, p. 177); as per Ontario Ministry of Education (2011), this root is part of a class known as “positional verbs, which specify the position in which the object designated by the noun is most often found” (p. 106)

-e, stative aspectual suffix

Sources: Ontario Ministry of Education (2011), p. 54. According to the same source, “many stative aspect forms in Oneida and Mohawk do not have suffix; with these forms, the end of the base is the end of the verb form” (ibid).

General location number: 1/unknown
Referent category: unknown
Written representations: “Tonniata” (Franquelin, 1688)

General location number: 2/unknown
Referent category: settlement
Written representations: “Toniata” (De l'Isle, 1703)
“Toniata” (Aa, 1714)
“Tonnata” (Poppo, 1733)
“Toniata” (Vaugondy, 1758)
“Toniata” (Homann, 1763)
“Toniata” (Bowen, 1768)
“Toniata” (Mitchel, Kitchin, Jeffreys, & Fadden, 1774)

General location number: 2/unknown
Referent category: island
Written representations: “Toniata” (Kitchin, 1756)
“Toniata” (Pfister, 1759)
“Otaniota” (Sauthier, Ratzer & Fadden, 1776)

"Otaniota" (Sauthier & Lotter, 1777)
 "Otaniota" (Sauthier, 1778)
 "Otaniata" (Sauthier, 1779)
 "Otaniota" (Hinton, 1780)
 "Otondiata" (Beauchamp, 1893, p. 72)
 "Otondiata" (Beauchamp, 1907, p. 193)

General location number: unknown
Referent category: creek
Written representations: "Toniata" (Long, 1791)
General location number: unknown
Referent category: unknown
Written representations: "Yotón:nyate'" (Lounsbury, 1960, p. 58)

Tyohnawatase

t- *yo-* *-hnawatase*
 CISLOC- NPFX- -whirlpool

Components of this name:

t-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 114), Michelson (1973, p. 5); Ontario Ministry of Education (2011, p. 87)

-hnawatase, nominal root: 'whirlpool'

Definition: This root likely consists of *-hnaw-*, 'a current', epenthetic [a] and the root *-tase*, although I cannot locate the root for 'round'. Chafe (1967) indicates under the entry for *-hnaw-* (p. 55), "with vb. rt. *-tase*,-?o:nowota:se:h whirlpool".

Sources: Chafe (1967, p. 55)

General location number: 1/1
Referent category: whirlpool
Written representations: "Dyunowadase" (Beauchamp, 1893, p. 49)

Note: There is one form for this name in one location with one referent, but see also: "Kaghneantasis" (Beauchamp, 1893; Halsey, 1901) and "Kaghneanta'sis" (Beauchamp, 1907).

Tyohsahronati

t- *yo* *-hs-* *-a-* *-hr-* *-on-* *-ati*
 CISLOC- NPFX- -lip- -EPEN- -sit- -DIST- -(v.)be.on.a.side

Components of this name:

t-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 114), Michelson (1973, p. 5); Ontario Ministry of Education (2011, p. 87)

-*hs-*, nominal root: ‘lip, spout, mouth’

Sources: Maracle (2003, p. 37)

-*hr-*, verbal root: ‘sit on top of’

Sources: Ontario Ministry of Education (2011, p. 106)

-‘*on*’, distributive suffix: “added to the positional verb to convey the idea that several objects are referred to by the verb – that is, that several standing (or lying, or sitting) objects are distributed over the location specified by the verb” (Ontario Ministry of Education, p. 108).

Sources: Ontario Ministry of Education (2011, p. 107)

-*ati*, verbal root: ‘be on a side’

Sources: Michelson (1973, p. 33)

General location number: 1/2

Referent category: area

Written representations: “Tyohsahróntyē”, “Tyohshróntyōn”, “Teuchsagrondie” (Lounsbury, 1960, p. 26)

General location number: 2/2

Referent category: area

Written representations: “Tyschsarondia” (Beauchamp, 1993, p. 31)

Tsi kanyatarehske

<i>tsi</i>	<i>ka-</i>	<i>-nyatar-</i>	<i>-ehs</i>	<i>-ke</i>
SUB	NPFX-	-waterway-	-(v.)be.long	-EXLOC

Elements in this place name:

tsi, subordinating particle: ‘that, where’; introduces a subordinate clause

Sources: Michelson (1973, p. 110); Ontario Ministry of Education (2011, p. 46)

-*nyatar-*, nominal root: ‘waterway’

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples’ Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-*ehs/-es*, verbal root: ‘be long’

Sources: Michelson (1973, p. 160); Maracle (2003, p. 183)

General location number: 1/1

Referent category: lake

Written representations: “Tsikaniatareska” (Beauchamp, 1907, p. 194)

Tsi kanyonwareskowa

<i>tsi</i>	<i>ka-</i>	<i>-nyonwara'kowa</i>
SUB	NPFX-	-bullthistles

Components of this name:

tsi, subordinating particle: 'that'; introduces a subordinate clause

Sources: Michelson (1973, p. 110); Ontario Ministry of Education (2011, p. 46)

-nyonwara'kowa, nominal: 'bull thistles'

Sources: Monica Peters, p.c. (via Monigarr.com)

General location number: 1/1

Referent category: lake

Written representations: "Tsikanionwareskowa" (Beauchamp, 1893, p. 72)
"Tsikanionwareskowa" (Beauchamp, 1907, p. 194)

Note: This name form is found in the vicinity of *tsi kanyatarehske*. I initially analysed this name as an instance of the original form *tsi kanyatarehske*, identical to the name presented in that name entry, but with a different referent (and possibly what Stewart would term a "mistake name" (see Table 2). However, the analysis of 'bull thistles' makes more sense in terms of the orthography, the morphology, and the fact that it makes little sense to have to identical place names for two lakes that are next to each other.

Tsi kanyataro'kte'

<i>tsi</i>	<i>ka-</i>	<i>-nyatar-</i>	<i>-o'kt-</i>	<i>-e'</i>
SUB	NPFX-	-waterway-	-finish-	-STAT

Components of this name:

tsi, subordinating particle: 'that'; introduces a subordinate clause

Sources: Michelson (1973, p. 110); Ontario Ministry of Education (2011, p. 46)

-nyatar-, nominal root: 'waterway'

Sources: Michelson (1973, p. 86); Maracle (2003, p. 63); First Peoples' Cultural Council (2019, n.p.)

Note: This refers to both lakes and rivers.

-o'kt-, verbal root: 'finish, end'

Sources: Michelson (1973, p. 150); Maracle (2003, p. 157)

-e', stative aspectual aspect

Sources: Lounsbury (1960, p. 38) /Lukaniec (2018, p. 71)

General location number: 1/3

Referent category: lake

Written representations: "Andiararocté" (Snow, Gehring & Starna, 1996, p. 58)
"Tsi' Yotenyá:taro'kte'" (Lounsbury, 1960, p. 25-26)

General location number: 2/3

Referent category: bay

Written representations: "Tsi' Yotenyá:taro'kte'" (Lounsbury, 1960, p. 25-26)

General location number: 3/3
Referent category: bay
Written representations: “Tsi’ Yotenyá:taro’kte’” (Lounsbury, 1960, p. 25-26)

Tsi kanatayen

<i>tsi</i>	<i>ka-</i>	<i>-nat-</i>	<i>-a-</i>	<i>-yen</i>
SUB	NPFX-	settlement-	-EPEN-	-lie

Components of this name:

tsi, subordinating particle: ‘that’; introduces a subordinate clause

Sources: Michelson (1973, p. 110); Ontario Ministry of Education (2011, p. 46)

-nat-, nominal root: ‘settlement, village, town’

Sources: Michelson (1973, p. 183); Maracle (2003, p. 242)

-yen-, verbal root: ‘lie’

Sources: As per Ontario Ministry of Education (2011), this root is part of a class known as “positional verbs, which specify the position in which the object designated by the noun is most often found”, p. 106

General location number: 1/1

Referent category: settlement

Written representations: None; this name was given to me by Okwáho and Kanasaraken

Tsi owehnokwaronte’

<i>tsi</i>	<i>o-</i>	<i>wehno-</i>	<i>kwaront-</i>	<i>-e’</i>
SUB	NPFX-	island-	bulge-	-STAT

Components of this name:

tsi, subordinating particle: ‘that’; introduces a subordinate clause

Sources: Michelson (1973, p. 110); Ontario Ministry of Education (2011, p. 46)

-wehno-, nominal root: ‘island’

Sources: Michelson (1973, p. 158); First Peoples’ Cultural Council (2019 n.p.)

-kwaront-, verbal root: ‘bulge’

Sources: Michelson (1973, p. 140)

-e’, stative aspectual aspect

Sources: Lounsbury (1960, p. 38)/Lukaniec (2018, p. 71)

General location number: 1/1

Referent category: island

Written representations: “Tsiowenokwarate” (Beauchamp, 1907, p. 194)

Tsi tewatehne'tarenyes

<i>tsi</i>	<i>te-</i>	<i>wa'-</i>	<i>t-</i>	<i>-e-</i>	<i>-hne'tar-</i>	<i>-enye-</i>	<i>-s</i>
DEM	DU-	AOR-	CISLOC-	-EPEN-	-gravel-	-?-	-HAB

Components of this name:

tsi, subordinating particle: ‘that’; introduces a subordinate clause

Sources: Michelson (1973, p. 110); Ontario Ministry of Education (2011, p. 46)

te-, dualic prepronominal prefix: used to indicate two of something, from *tekeni*, the number two; also used to indicate a change in state, i.e., from one thing or place to another.

Sources: Ontario Ministry of Education (2011, p. 84)

wa'-, punctual aorist modal prefix

Sources: Postal (1979, p. 81)

t'-, cislocative prepronominal prefix: indicates motion toward the speaker

Sources: Chafe (1967, p. 29); Michelson (1973, p. 5); Ontario Ministry of Education (2011, p. 87)

-hne'tar-, nominal root: ‘sand, gravel’

Sources: Maracle (2003, p. 31)

-yen-, verbal root: ‘lie’

Sources: As per Ontario Ministry of Education (2011), this root is part of a class known as “positional verbs, which specify the position in which the object designated by the noun is most often found”, p. 106

-s, habitual aspectual suffix

Sources: Ontario Ministry of Education (2011, p. 54)

General location number: 1/1

Referent category: settlement

Written representations: “Tewatenetarenies” (Beauchamp, 1893, p. 73)
Tsi tewatehne'tarenyes (Okwáho, p.c.)

Note: I could not locate the verbal root for this name, although the *-s* indicates the habitual aspect. Beauchamp (1893) lists an interpretation of ‘where the gravel spreads out’, and Mr. Loran agrees with this interpretation, but the exact verbal root itself remains elusive. He also indicates that the prefix, *te-* indicates “more than one”.

Chapter 6.

This chapter begins by presenting an analysis of the overall patterns within the place names described in Chapter 5. I begin first with some initial observations of the place names as a data set and follow with an analysis of semantic patterns (i.e., patterns in the overall meanings of the names) in Section 6.2. In section 6.3, I utilize the discussion from the previous section to answer the research questions posed in Section 2.8. In section 6.4, I propose an analysis of the Kanyen'kéha place naming convention based upon Sections 6.1 through 6.3. Finally, in Section 6.5, I analyze grammatical patterns and discuss the larger implications of these analyses for the fields of linguistics, geography and cognitive science.

6.1 Initial Observations

It was sometimes difficult to determine the exact morphological functions of some affixes because of their representation in orthography, whether due to the particular way in which those sounds were spoken or heard, or the transcription of those sounds. One example is the dualic *te-* and the cislocative prepronominal prefix *t-*; the difference of only a single vowel sound made it difficult to discern which was which in the data, and there are likely to be some mistakes in that regard. A second example is the translocative prepronominal prefix *ya-* and its phonology in relation to pronominal prefixes like *o-*, which remains unclear; it may be that *y-* together with the pronominal prefix *o-* produces *yo-*, or it may be that *o-* simply sounds similar to [jo] in certain contexts. Further study into phonological and morphological mechanisms of Kanyen'kéha and further work with linguistic consultants should help to clarify these situations.

One major issue requiring more study with Kanyen'kéha communities is that of what constitutes a place “name” as opposed to simply a designation of a landscape or waterscape feature. Chapter 5 outlines many instances of descriptions of landscape, and some of these, such as *Kahenta*, appear to simply designate a landscape feature, rather than describing some aspect of the feature. *Kahenta* may serve as a place name, but this may also be a misunderstanding between listener and speaker; for example, the

question of “What is that place called?” could have been understood as “What is the name of that landform?” Since there is no way to verify if this is the case, it is difficult to say what is happening in the situation of the bare nominal form. Stewart (1975) states that the use of descriptive place names is universal, and this is reflected in his “evolved” place names category (see Table 1, p. 15); however, Stewart does not discuss the cognitive technicalities of “evolved” place names, nor account for how a place name evolves from literal to symbolic. As with English, from a formal perspective, many of the names put forth in Chapter 5 could be regarded simply as descriptions of the landscape and waterscape, rather than as a semantic placeholder for a cognitive conception of a place. This is an issue touched upon by Mithun (1984) but the names outlined in Chapter 5 should be revisited with mother-tongue Kanyen’kéha speakers to determine which are considered to be “formal names”, and by what criteria.

6.2 Semantic Analysis

Since I do not want to project my own biases by assuming any of the names would fit into categories such as those outlined by Stewart, this analysis highlights patterns within the data, as opposed to an attempt to categorize semantic meanings.

6.2.1 Repeated Names

Although 87 individual names are given in Chapter 5, many of these occur in more than one location. These repeated names are given in Table 11, below. All of these issues represent avenues for future work.

Table 15. Repeated Kanyen’kéha Names.

Name	Number of Locations
<i>Kohserake</i>	2; 1 location outside of Kanyen’kehá:ka territory
<i>A’nowarake</i>	2 or more (some locations unknown)
<i>Kahyonhatatye</i>	2
<i>Kahnawà:ke</i>	3
<i>Kanata</i>	3 or more (some locations unknown)
<i>Kanen’tote</i>	3
<i>Kawechnoke</i>	2
<i>Kawechnote</i>	4
<i>Kawechnowanenhne</i>	2
<i>Ohyonhke/Ohyonhyoke</i>	5; several outside of Kanyen’kehá:ka territory
<i>Onawe’take</i>	2

<i>Oswegachie</i>	3
<i>Oheweke</i>	2; 1 location outside of Kanyen'kehá:ka territory
<i>Oserake</i>	2
<i>Skahentowa</i>	2
<i>Skahentowanen</i>	2
<i>Skanen'tati</i>	2
<i>Skanyatarowanen</i>	2
<i>T'yohsahronati</i>	2
<i>Tewasenta</i>	5
<i>Tekahsoken</i>	2
<i>Tekaswen'karorens</i>	2
<i>Teya'hon:wa'hkwat</i>	3
<i>Teyoken</i>	3
<i>Teyohyonhoken</i>	3
<i>Tonhnyata</i>	2
<i>Tsi kanyataro'kte'</i>	3

Repeated names make up 54.5% of all Kanyen'kéha place names. The most frequently used place names are *Tewasenta*, 'waterfall', with 5 or more occurrences and *Ohyonhke*, 'at the river' also with 5 or more occurrences. Repeated names are discussed further on page 200, where a hypothesis is offered as to why they are so common in Kanyen'kéha.

6.2.2 Nominal Roots

In order to answer the research question, "Which lexical roots are used within Kanyen'kéha place names?" (Section 2.8), I examined the frequency of individual roots throughout the data, beginning with nominal roots. Individual nominal roots used in Kanyen'kéha place names are given below in Table 16, together with an English interpretation, and the Frequency of Use given as a percentage out of total names.

Table 16. All nominal roots used in Kanyen'kéha place names.

Nominal Root	English Interpretation	% use (Out of 87) ²¹
-nyatar-	'waterway'	16%
-wehno-	'island'	7%
-hnaw-	'current/rapids'	6%
-hent-	'meadow/field'	5%
-hyonh-	'stream/creek'	5%

²¹ Rounded to nearest whole number.

- <i>nat</i> -	'settlement'	5%
- <i>stenhr</i> -/ <i>-tstén</i> -	'rock'	5%
<i>kentsen</i> -	'fish'	3%
- <i>hs</i> -	'lip'	3%
-(<i>h</i>) <i>nawe't</i> -	'marsh'	3%
- <i>nen't</i> -/ <i>-neht</i> -	'evergreen'	3%
- <i>na'tsy</i> -	'cauldron'	2%
- <i>nont</i> -	'hill'/'mound'	2%
<i>akwesas</i> -	'bird'	1%
- <i>ahskw</i> -	'bridge'	1%
<i>a'nowar</i> -	'turtle'	1%
- <i>hah</i> -	'path'	1%
- <i>hnawer</i> -	'spring'	1%
- <i>hnawetase</i>	'whirlpool'	1%
- <i>hne'tar</i> -	'gravel'	1%
- <i>hnek</i> -	'liquid'	1%
- <i>hon:wa</i> -	'canoe'	1%
- <i>hwist</i> -	'bell'	1%
- <i>nawa'tst</i> -	'mud'	1%
- <i>nest</i> - or - <i>nenhst</i> -	'corn'	1%
- <i>nonhwar</i> -	'head'	1%
- <i>nyonwara'kowa</i>	'bulrush'	1%
- <i>ohsera</i> -	'winter'	1%
- <i>onhnya</i> -	'point'	1%
- <i>ser</i> -	'beaver dam'	1%
- <i>shahr</i> -	'bulrushes'	1%
- <i>swen'kar</i> -	'board'	1%
<i>tawine</i> -	'otter'	1%
<i>tewasenta</i>	'waterfall'	1%
Pronominal only		2%
No nominal		2%
Idiomatic/Other		7%
Total		100%

Certain nominal roots are clearly used within place names more frequently than others. The most frequent was the root *-nyatar-*, 'waterway' which appears in 16% of name forms, followed by *-wehno-*, 'island' found in 7% of place name forms and *-hnaw-*, 'current' at 6%. Out of all of the nominals used in Kanyen'kéha names, very few refer to constructed objects; these are *-ahskw-*, 'bridge', *-nat-*, 'settlement', *-swen'kar-*,

‘board’, *-hon:wa-*, ‘canoe’ and *-hwist-*, ‘bell’, which make up only 9% of place name forms,²² although *-swen’kar-* can also be interpreted as ‘bark’, and *-hwist-* as ‘metal’, both naturally occurring. However, at least one nominal root, *-na’tsy-*, ‘cauldron’, reflects a constructed object that is used within two place names (*Kana’tsyóhare* and *Kana’tsyakowa*) as a metaphor for the shape of a landscape feature (a hill and a kettle hole, respectively). The nominal root *-hs-*, ‘lip’ appears to also be another metaphoric use of a nominal root and is strikingly similar to the English use of ‘mouth’ for the section of a waterway where the water flows into a larger body of water.

This analysis leads to some interesting questions regarding the ontology of physical features; for example, is an island considered a landscape feature (i.e., because it is made of rock, soil, etc.), or is it considered a water feature (i.e., it exists within a waterway)? This will be discussed in further detail in Section 6.2.5.

6.2.3 Verbal Roots

The verbal roots used within Kanyen’kéha names are presented in Table 17, below.

Table 17. All verbal roots used in Kanyen’kéha place names.

Verbal Root	English Interpretation	% Use (out of 87)
<i>-at-/-t-/-ot-</i>	‘stand’	10%
<i>-oken</i>	‘split’	8%
<i>-iyo</i>	‘be beautiful’	5%
<i>-owanen</i>	‘be big’	5%
<i>-ehs/-ens</i>	‘be long’	3%
<i>-hrarho-</i>	‘disembark’	2%
<i>-kwaront-</i>	‘bulge/swell’	2%
<i>-yen-</i>	‘be lying’	2%
<i>-akayen</i>	‘be old or ancient’	1%
<i>-akera’-</i>	‘stink’	1%
<i>akwek-</i>	‘be together’	1%
<i>-hkw-</i>	‘lift’	1%
<i>-hontsi</i>	‘be dark-coloured’	1%
<i>-hr-</i>	‘sit on top of’	1%
<i>-ihs-</i>	‘make’	1%

²² The roots *-nest-* or *-nenhst-*, ‘corn’ and *-hah-* ‘path’, may also be considered to be manmade (i.e., in the form of a cultivated cornfield and/or a manmade path), but could also just as easily be considered as natural features (i.e., a deer track, etc.); I leave this interpretation to the namers.

<i>-itskara</i>	'taste'	1%
<i>-karont-</i>	'be wide'	1%
<i>-o'kt-</i>	'finish'	1%
<i>-ohar-</i>	'attach at the end'	1%
<i>-ohare</i>	'wash'	1%
<i>-ont(e)'</i>	'attached to something'	1%
<i>-rik-</i>	'put together'	1%
<i>-taty-</i>	'continue'	1%
Unknown Verbal Roots		5%
No Verbal Root		41%
Total		98%

A verbal root is not used in 41% of Kanyen'kéha place name forms, as compared to the 2.2% of names that do not utilize nominal roots. Mithun (2006) suggests that absences of either 'verbs' or 'nouns' may not be surprising since "there is no subject category, indeed no single 'most grammatically prominent constituent'," (Mithun, 2006, p. 213) within Kanyen'kéha, however, it is unclear as to whether this extends to the naming convention. Of those names which do utilize a verbal root, the most common root to be used is *-t-/at-/ot-*, 'stand', a positional verbal root used in 10% of place names. The second-most-common root is *-oken* ('split'), at 8% followed by *-iyo* 'be beautiful' at 5%. Further exploration of unknown roots will reveal more insight into other verbal roots which may be used, or, as outlined here, the significant pattern of not utilizing verbal roots.

Of equal interest in terms of verbal roots is the fact that three different positional verbals (as described in described in Section 2.6.2.2.2) appear in the Kanyen'kéha place names in Chapter 5. These include *-t-/at-/ot-*, 'stand', which is also the most common verbal root and is used in 10% of place names, *-hr-*, 'be sitting on top of', appearing in 2% of place names, and *-yen-*, 'be lying', found in only 1% of place names.

6.2.4 Location-Related Parts of Speech

The use of locatives as well as certain affixes and particles which are directly related to location or navigation are also relevant to this study. Two external locative suffixes (meaning approximately 'at, on' and sometimes 'in') are used frequently within the

names presented in Chapter 6 while the internal locatives *-akon* ('in') and is used only once.

Table 18. Use of locative suffixes in place names.

Affix	English Interpretation	% Use (out of 87)
<i>-ke</i>	external locative suffix meaning approximately 'at, on' sometimes 'in'	17%
<i>-hne</i>	external locative suffix meaning approximately 'at the home of'	3%
<i>-akon</i>	internal locative suffix: 'in'	1%
<i>-akta</i>	external locative suffix: 'near'	1%

Two other affixes of particular interest are the cislocative prefix *t-* and the subordinate particle *tsi*. The cislocative prefix, a deictic marker indicating motion toward the speaker, occurs in about 7% of total names (although this number may be higher, since it is difficult to distinguish the cislocative with the dualic *te-*), while the subordinate particle, which indicates that the clause that it marks is dependent upon a matrix clause to provide its context, is found in 7% out of 87 names. Both of these affixes and their functions are analysed more thoroughly in Section 6.2.7. It may also be possible that translocative prefix (*y-*, Ontario Ministry of Education, 2011, p. 93) is used within place names, but further research is required.

6.2.5 Other Parts of Speech

The content and meaning of other parts of speech tends to be more grammatical than semantic and therefore, warrant more examination than can be presented here simply for the reason that this will require additional and more in-depth theoretical background of those parts of speech and their functions within the grammar. As such, I present here some brief observations on results that open yet another avenue for further research.

- 59% of Kanyen'kéha place names use the nominal prefix *k-/ka-*; the Ontario Ministry of Education (2011) document states that this neuter prefix "occurs

frequently, but not exclusively, with nouns that designate manmade objects” (p. 11). I did not find this to be the case:

- Out of 52 instances, only 4 (those utilizing the nominal root *-nat-*, ‘settlement’) could be said to be constructed. Two names utilized the root *-na’tsy-*, (‘cauldron’), but as outlined in 6.2.2, these are both metaphors in reference to the shape of a natural feature (a hill and a kettle hole). One name *Kanenhstakayenne* (‘ancient corn’) could be interpreted either as a natural feature or a constructed feature, depending upon cultural views and agricultural practices. Two other names refer to constructed buildings (*Tekaswen’karorens*, ‘splitting boards’, referring to a sawmill and *Tkahwistaniyonte*, ‘bell hanging there’, referring to a church), but the nominal root themselves actually refer to a natural objects: *-swen’kar-* is also the root for ‘bark’ (Maracle, 2003, p. 126) and *-hwist-* refers to any metal, generally (Michelson 1973; Maracle, 2003, p. 42).
- One name, *Tekahraro* contains no nominal root, but utilizes the nominal pronominal prefix and is therefore unanalyzable here.
- 9% of Kanyen’kéha place names use the nominal prefix *o-*; this neuter prefix “occurs frequently, but not exclusively, with nouns that designate things found in nature” (Ontario Ministry of Education, 2011, p. 11);
 - Of these, 4, *Ohraro*, *Ohskentonton*, *Ohkwahohake* and *Oswegatchie* are idiomatic or unanalyzable as a pronominal prefix + stem. The rest refer to natural features.
- 7% of Kanyen’kéha place names use the pronominal prefix *a-*. No information is available in regard to reasons for the use of this prefix.
- 1% of Kanyen’kéha place names use the nominal prefix *y-*; 7% of Kanyen’kéha place names use the nominal prefix *yo-* (Ontario Ministry of Education, 2011, p. 12); the prefix *y-* may actually be the translocative prefix (Ontario Ministry of

Education, 2011, p. 93), but more work with informants will be needed to determine this.

- 5% of Kanyen'kéha place names use the partitive prepronominal prefix *ni-*.
- The iterative prepronominal prefix *s-* is used in 10% of names.
- The dualic prepronominal prefix *te-* is used in 15% of total names.
- The concept of large size is indicating within place names through two different means: the verbal root *-owanen*, 'large' and the augmentative suffix *-owa* (interpreted as 'big', of a size bigger than *-owanen*). The verbal root *-owanen* appears in 5% of place names while the augmentative suffix *-owa* appears in 9% of place names.
- Populative suffixes, those used to designate inhabitants of a place, are used in the name forms of 3 (3%) place names.

6.2.6 Patterns within Names

While the individual components of Kanyen'kéha names are significant, Maracle (2003) writes that "they have meaning only in their contextual association with other roots or morphological elements within the language" (p. x). This context of nominal and verbal roots and their relationship to each other, and other parts of speech, are all elements of the system of place naming in Kanyen'kéha. In order to analyze the semantics of these names in a way that grounds my own cultural interpretations, I examined the most common nominal roots to determine which elements cooccur with them the most frequently.

The most common nominal root, *-nyatar-* 'waterway' co-occurs with the following elements:

Root	Type of Component and Interpretation	Number of Co-occurrences
<i>-iyo</i>	verbal root, 'be beautiful'	2
<i>-hontsi</i>	verbal root, 'dark-coloured'	1
<i>-ake</i>	external locative, 'at, on'	1
<i>-owa</i>	augmentative suffix, 'big'	1
<i>-karont-</i>	verbal root, 'be wide'	1
<i>-kwaronte'</i>	verbal root, 'bulge'	1
<i>-sseres</i>	verbal root, 'fall'	1
<i>-kwekon</i>	verbal root, 'all, the whole'	1
<i>-owanen</i>	verbal root, 'be large'	1
<i>-oken</i>	verbal root, 'split'	1
<i>-rik-</i>	verbal root, 'join together'	1
<i>-ehs</i>	verbal root, 'be long'	1
<i>-o'kte</i>	Verbal root, 'finish'	1

Table 19. Elements following the nominal root *-nyatar-*.

The second most common nominal root, *-wehno-* 'island' occurs with the following elements:

Root	Type of Component and Interpretation	Number of Co-occurrences
<i>-ake</i>	external locative, 'at, on'	1
<i>-ehs/ens</i>	verbal root, 'be long'	1
<i>-iyo</i>	verbal root, 'be beautiful'	1
<i>-kwaronte</i>	verbal root, 'bulge'	1
<i>-ote'</i>	verbal root, 'stand, be there'	1
<i>-owanen</i>	verbal root, 'be large, big, great'	1

Table 20. Elements following the nominal root *-wehno-*.

The third most common nominal root, *-hyonh-* 'river' occurs with the following elements:

Root	Type of Component and Gloss	Number of Co-occurrences
<i>-ake</i>	external locative, 'at, on'	See footnote ²³
<i>-iyo</i>	verbal root, 'be beautiful'	See footnote
<i>-owa</i>	augmentative suffix, 'big'	1
<i>-oken</i>	verbal root, 'split'	1

²³ As per the entry *Ohyonhke/Ohyonhyoke*, number of co-occurrences is difficult to establish.

-tatyes	verbal root, 'continue onward'	1
---------	--------------------------------	---

Table 21. Elements following the nominal root *-hyonh-*.

No obvious patterns are discernible in Tables 19-21.

Next, I assessed verbal roots to determine which elements cooccur the most frequently with them. Although it is more likely for a Kanyen'kéha place name to be based on a nominal alone (see Verbal Roots, 6.2.3), the most common verbal root, *at-/t-/ot-* occurs with the following elements:

Root	Type of Component and Gloss	Number of Co-occurrences
-hnaw-	nominal root, 'current, rapids'	4
-hnawer-	nominal root, 'spring, well'	1
-hnek-	nominal root, 'liquid'	1
-nen't-	nominal root, 'evergreen, cedar'	1
-onhnya-	nominal root, 'point, peninsula'	1
-wehno-	nominal root, 'island'	1

Table 22. Elements co-occurring with the verbal root *-at-/t-/ot-*.

The frequency of the co-occurrence of verbal root *-ot-* 'stand', together with the nominal root *-hnaw-*, 'current', is interesting given that the nominal *-hnaw-* does not require a verbal root within a place name, as attested by the name *Kahnawà:ke*.

The second most common verbal root, *-oken-* co-occurs with the following elements:

Root	Type of Component and Gloss	Number of Co-occurrences
-hah-	nominal root, 'road, trail, path'	1
-hs-	nominal root, 'lip, spout, mouth'	1
-hyonh-	nominal root, 'river'	1
-nont-	nominal root, 'hill'	1
-nyatar-	nominal root, 'waterway'	1
-stenhr-	nominal root, 'stone, rock'	1
-y-	pronominal prefix	1

Table 23. Elements co-occurring with the verbal root *-oken-*.

Of note here is the fact that four of these roots, *-hs* ('lip'), *-hyonh-* ('river'), *-nyatar-* ('waterway') and *-y-* (a pronominal prefix meaning approximately 'it'), refer to water features even though only two (*-hyonh-* and *-nyatar-*) are semantically

water-specific; *-hs-* and *-y-* both refer to water only in the context of the rest of the name.

It is also important to note that two names, *Kahenta* and *Kanata* are bare nominals (although *Tewasentha* may also be a bare nominal) and *Ohrarho* appears to be a bare verbal. Out of 87 name forms, 45 contain a nominal root or prepronominal, a verbal root, and some form of aspect making them grammatical phrases.

The Natural Semantic Metalanguage Approach as outlined in Goddard (2010) may prove useful for a more exact interpretation of place name semantics. This approach attempts to identify lexical semantic universal components between languages and then use those components to compare larger semantic concepts cross-linguistically. However, this technique should still be used with the direction and input of the Kanyen'kehá:ka community.

6.2.7 Discussion on Semantics

In terms of semantics, of note are several nominals referring to groups of people, i.e., *Ohkwahohake* for a village of the Wolf Clan and *Tatyehronon*, a possible reference to the Tutelo people, who came under the protection of the Gayogohó:nq' as they integrated into the Rotinonhseshá:ka (Dawn Martin-Hill, p.c.). Otter, fish, turtle, deer and beaver are mentioned, although the significance of these animal-related names must be interpreted by the Kanyen'kehá:ka themselves; for example, the beaver dam, according to Beauchamp, marks a "fishing spot", which may indicate that the reference is actually to the best place for fish, rather than the beaver dam itself, and references to otters or turtles may hold similar inferences. In addition, turtles have cultural significance as a clan animal and the keepers of the well (Kayanere'kowa); their shells also serve in Kanyen'kehá:ka material culture. Finally, the deer reference may, as stated in the entry for *Oskonnoton*, actually have nothing to do with deer and may simply be an interpretation of a landscape feature. Other nominals are references to culture-specific practices, i.e., "winter" and "head on the end of a pole"; plant-based names, such as "corn", "bulrushes", "bull thistle," and "evergreen, cedar" may be considered cultural terms rather than solely references to foodstuffs, materials, or simply descriptive place

names, and these should be considered by Kanyen'kehá:ka. Especially notable is an olfactory descriptive, i.e., *Kanawa'tstakera's*, 'the mud stinks', akin to the Onödowá'ga: name "Cattaraugus", having the same meaning (Chafe, 1967, p. 93).

There are two borrowings from other languages, one from an Iroquoian language and one from an Algonquian language. The first is *Oswegatchie*, which, as stated in its entry (p. 118) is likely an Onoñda'géga term. Although Onoñda'géga is related to Kanyen'kéha, the name is used in its Onoñda'géga form, rather than as the Kanyen'kéha translation. Whether this is a case of "true borrowing", or a borrowing from English and/or French (which initially borrowed it from Onoñda'géga) has yet to be determined. The Kanyen'kéha name for the present-day Rock Dunder, *Rock Rogeo* is also a borrowed name which has become a folk etymology: Mr. Charles Cooke was able to translate this name for Hudén (1955) as a Kanyen'kéha word. However, Day (1981) convincingly traces the origin of this name to Abenaki, an Algonquian language, which may also explain the cultural issues with the name raised by Dr. Horn-Miller (see the entry in Chapter 5). This should serve as a reminder that, even though Indigenous place names may utilize descriptive terms, a researcher should not make the mistake of assuming that Indigenous naming conventions will not use categories such as folk etymology, or that they will not borrow from other languages. In other words, Indigenous naming conventions are not "primitive" as sometimes insinuated by Stewart (p. 43) but contain their own rich variety of conventions.

Based upon the frequency of certain nominal roots, it is evident that water plays a major role in Kanyen'kéha place naming as hypothesized in Section 2.9: water is the topic of the most-used place name (*Tewasentha*, 'waterfall') and the second-most-used name (*Ohyonhoke*, 'at the river' or 'at the beautiful river') and the most frequently-used nominal root, *-nyatar-* ('waterway') encodes concepts of water, as does the third most frequently-used nominal root, *-hyonh-*, 'river'. The second-most common nominal root, *-wehno-* ('island') appears at first to break this pattern. However, if an island is considered to be a feature of note within a waterway in its entirety, rather than as land

isolated by water, the pattern again fits, and all of the most-frequently-used roots refer to some aspect of water.

This conclusion is unsurprising considering the words of Billy Two Rivers, as first presented in Section 2.3, that the Kanyen'kehá:ka lived inside the "circle of waters". However, Mr. Two Rivers also provides further insight regarding another name having to do with water, *Kahnawà:ke*:

At that time our people were able to keep track of who passed through our territory and cross what they now call our borders. Our people even had what the English called a 'customs house'. In our area, Kahnà:wake, we had one of these customs houses, it was the rapids. People traveling the St. Lawrence would have to get out of their canoes and portage. That's how we knew who was coming and going through our territory. Another one of these customs houses was in an area now called Chambly. The rapids there also allowed us to know who was canoeing and walking through our lands, and we'd be able to keep track of them until they reached Albany. There too, travelers would have to get out and deal with the rapids near the town of Canajoharie. There was also another village in that area, also called Kahnawà:ke. Travellers would have to stop there and our people once again knew who was passing through right up until Seneca country and Lake Erie, and this is why our ancestors decided to settle in this area."

(KahnawakeTV, 2012)

The name Kahnawà:ke is an example of the layers of meaning of place names which are not immediately noticeable to those not intimately connected with the culture and history of place namers. There are multiple uses of the name Kahnawà:ke, not only in Kanyen'kéha, but in other Rotinonhseshá:ka languages as well, as per Ingram (2018). Each Kahnawà:ke marks a location within an overall transportation network, of which the Kanyen'kéha took advantage in order to protect their boundaries. A "customs house" is traditionally a stop at a jurisdictional boundary where travelers are cleared to come and go from a territory (Merriam-Webster, 2019). Thus, through the cultural practice of waterway travel, *Kahnawà:ke* becomes not just the marker of a natural water feature, but rather, a marker of a location on a journey, together with what is done at that location, in this case, a portage, as well as a jurisdictional symbol to those whose territories house Kahnawà:ke.

In light of this information regarding the navigational nature of the name Kahnawà:ke, other names now take on different meanings. Another common nominal root, *-wehno-*, ‘island’ is potentially problematic as it may appear to be a landscape feature, fits very easily into a naming convention including water navigation when conceived of as a feature of a waterway used for navigational purposes. Yet another rather dramatic example lies with the root *-hent-*, ‘meadow’ or ‘field’. The name *Skahentowanen*²⁴ (‘across the big grassland’) at first appears to be a marker of a landscape feature, i.e., of a ‘grassland’ or ‘meadow’ or ‘prairie’. However, closer examination of this name using cartographic tools also reveals that not only is this a navigational name, but it is also a waterscape feature similar to the idea of *-wehno-*, ‘island’. When viewed on a topographical map, it becomes clear that both instances of *Skahentowanen* are significant not only because of the presence of grass, but also because they are both lowlands located in close proximity to a river. In the case of the first location, this lowland is likely visible from any point on the river in its proximity, while in the second location, it is unmistakable due to its size. Location 1 of *Skahentowanen* is given in Figure 37, and location 2 is given in Figure 38 below.

²⁴ The arguments presented here also likely apply to *Skahentowa* (‘across the really big grassland’), but this is not possible to prove without a more precise location.

Figure 37. One location of Skahentowanen.

Figure 38. Another location of Skahentowanen.

Adding the attestation of extensive water travel made by Mr. Two Rivers to the locations of Kanyen'kéha place names upon major water ways which the Rotinohseshá:ka were known to frequently travel (the Mohawk River and the Susquehanna River, respectively), these names make more sense as navigational names than they do as simply landscape terms. Repeated names, as outlined in 6.2.1, also coincide with these findings since the landscape features encoded within place names would also serve as navigational landmarks. This point seems to be corroborated through similarities with Inuit place names, as outlined in Canadian Geographic's Indigenous Peoples' Atlas of Canada, in which Lynn Peplinski of the Inuit Heritage Trust writes, "In many Indigenous cultures, place names are descriptive, but not necessarily unique, as is the case with western or European naming. For example, in the Sanikiluaq area, there are a dozen bays simply named 'Kangihsualuk' (large bay). While there may be one hundred bays without names, these dozen are significant enough to be named, perhaps due to their relative association with other geographical features along routes, but otherwise do not merit more descriptive, unique names. When these bays are spoken of, they are mentioned in context with other nearby named places, thus eliminating confusion" (Peplinski, 2019). If Kanyen'kéha place names are also utilized "in context with other nearby named places" (ibid), i.e., as part of the discourse of navigation, a grammatical analysis of Kanyen'kéha place names may provide further evidence of wayfaring and navigation within the Kanyen'kéha place naming convention.

A very general sketch of the semantic patterns of the names is given below in Table 24 based on "face-value" interpretation of the semantics. Table 25 follows in which speculative navigational names are given. Neither should be considered exhaustive nor definitive.

Table 24. Semantic Basis of Kanyen'kéha place names.

<u>Semantic Concept</u>	<u>Place Name</u>	<u>Relevant morphemes</u>	<u>Gloss</u>
Animal (7; 8%)	<i>Akwesashne</i>	<i>ahkwesas-</i>	'partridge, pheasant'
	<i>A'nowarake</i>	<i>a'nowar-</i>	'turtle'
	<i>Kentsenkowahne</i>	<i>kentsen-, -kowa</i>	'fish', 'big'
	<i>Nikentsiake</i>	<i>kentsen-,</i>	'fish'
	<i>Nikentsenkowa</i>	<i>kentsen-, -kowa</i>	'fish', 'big'
	<i>Ohskenonton</i>	<i>ohskenonton</i>	'deer'
	<i>Tawinehne</i>	<i>tawine</i>	'otter'
Season (1; 1%)	<i>Kohserake</i>	<i>-ohsera-</i>	'winter'
Constructed Feature (7; 8%)	<i>Ahskwake</i>	<i>-ahskw-</i>	'bridge'
	<i>Kanata</i>	<i>-nat-</i>	'settlement'
	<i>Kanatahkhwa'</i>	<i>-nat-, -hkhwa</i>	'settlement', 'spot'
	<i>Kanenhstakayenne</i>	<i>-nenhst-, -akayen</i>	'corn', 'ancient'
	<i>Skanatihson'</i>	<i>-nat-, -ihs-</i>	'settlement', 'complete'
	<i>Tkahwistaniyonte'</i>	<i>-hwist-, -ont(e)</i>	'metal, bell', 'attached'
	<i>Tsi kanatayen</i>	<i>-nat-, -yen-</i>	'settlement', 'lie'
Landscape Description (22; 20%)	<i>Tekaswen'karorens</i>	<i>-swen'kar-, unknown root</i>	'board', unknown root
	<i>Astenhroken</i>	<i>-stenhr-, -oken</i>	'stone', 'split'
	<i>Astenhrowanen</i>	<i>-stenhr-, -owanen</i>	'stone', 'large'
	<i>Kahnawerote'</i>	<i>-hnawer-, -t-/at-/ot-,</i>	'spring, well', 'stand'
	<i>Kana'tsyakowa</i>	<i>-na'tsy-, -kowa</i>	'cauldron', 'big'

Waterscape Description (33; 37.9%)	<i>Kanawa'tstakera's</i>	<i>-nawa'tst-, -akera'-</i>	'mud', 'stink'
	<i>Kanen'tote</i>	<i>-nen't-, -t-/at-/ot-</i>	'evergreen', 'stand'
	<i>Kanyatarosseres</i>	<i>-nyatar-, -ssere-</i>	'waterway', 'fall'
	<i>Kawehneske</i>	<i>-wehno-, -ehs/-es</i>	'island', 'long'
	<i>Kawehniyo</i>	<i>-wehno-, -iyo</i>	'island', 'beautiful'
	<i>Ohnawe'take</i>	<i>-(h)nawe't-</i>	'marsh'
	<i>Onyatarakwekon</i>	<i>-nyatar-, akwekon</i>	'waterway', 'all'
	<i>Skahentowa</i>	<i>-hent-, -owa</i>	'grassland', 'big'
	<i>Skanawe</i>	<i>-naw-</i>	'marsh'
	<i>Skanawehs</i>	<i>-naw-, -ehs/-es</i>	'marsh', 'long'
	<i>Skanen'tati</i>	<i>-nen't-, -ati</i>	'evergreen', 'be on a side'
	<i>Tnen'tahowa</i>	<i>-nen't-, -howa</i>	'evergreen', 'big'
	<i>Teyohahoken</i>	<i>-hah-, -oken</i>	'road', 'split'
	<i>Teyonontahowa</i>	<i>-nont-, -howa</i>	'hill', 'big'
	<i>Teyonontoken</i>	<i>-nont-, -oken</i>	'hill', 'split'
	<i>Itskarakon</i>	<i>itskara-</i>	'bitter'
	<i>Atstenke</i>	<i>-stenhr-</i>	'stone'
	<i>Kahyonhatatie</i>	<i>-hyonh-, -tatyes-</i>	'river', 'continues'
	<i>Kahnawà:ke</i>	<i>-hnaw-</i>	'current'
	<i>Kahnawatake</i>	<i>-hnaw-, -t-/at-/ot-</i>	'current', 'stand'
	<i>Kahnawataкта</i>	<i>-hnaw-, -t-/at-/ot-, -akta</i>	'current', 'stand', 'bent'
	<i>Kana'tsyóhare</i>	<i>-na'tsy-, -ohare</i>	'cauldron', 'wash'
	<i>Kanyatarahontsi</i>	<i>-nyatar-, -hontsi</i>	'waterway', 'dark-coloured'
	<i>Kanyatarakowa</i>	<i>-nyatar-, -kowa</i>	'waterway', 'big'
	<i>Kanyatarakaront</i>	<i>-nyatar-, -karont</i>	'waterway', 'wide'
	<i>Kanyatarakwaronte'</i>	<i>-nyatar-, -kwaronte'</i>	'waterway', 'bulge'
	<i>Kawehnehske</i>	<i>wehno-, -ehs/-es</i>	'island', 'long'
	<i>Kawehniyo</i>	<i>wehno-, -iyo</i>	'island', 'beautiful'
	<i>Kawehnoke</i>	<i>-wehno-</i>	'island'
	<i>Kawehnnote</i>	<i>-wehno-, -t-/at-/ot-</i>	'island', 'stand'

Cultural Practice (1; 1.1%) People (3; 3.4%)	<i>Kawechnowanenne</i>	-wehno-, -owanen	'island', 'large'
	<i>Nikahnawate</i>	-hnaw-, -t/-at/-ot-	'current', 'stand'
	<i>Nikahyonhakowa</i>	-hyonh-, -kowa	'river', 'big'
	<i>Ohrarho</i>	ohrarho	'landing'
	<i>Ohyonhke/Ohyonhyoke</i>	-hyonh-/ -hyonh-, -iyo	'river'/'river', 'beautiful'
	<i>Onyatariyo</i>	-nyatar-, -iyo	'waterway', 'beautiful'
	<i>Ohsweke</i>	-hsw-	'lip'
	<i>Oserake</i>	-ser-	'dam'
	<i>Osharhe'on</i>	-sharh-	'bullrush'
	<i>Skahentowanen</i>	-hent-, -owanen	'grassland', 'large'
	<i>Skanyatario</i>	-nyatar	'waterway', 'beautiful'
	<i>Skanyatarowanen</i>	-nyatar	'waterway', 'large'
	<i>Tkahnawate</i>	-hnaw-, -t/-at/-ot-	'current', 'stand'
	<i>Tyohnawatase</i>	-hnawatase	'whirlpool'
	<i>Tyohsahronati</i>	-hs-, -hr-	'lip', 'sitting'
	<i>Tewasentha</i>	Waterfall	waterfall
	<i>Tekahsoken</i>	-hs-, -oken	'lip', 'split'
	<i>Tekanyataroken</i>	-nyatar-, -oken	'waterway', 'split'
	<i>Tekanyatarikon</i>	-nyatar-, -rik-	'waterway', 'come together'
	<i>Teya'hon:wa'hkwat</i>	-hon:wa-, -hkw-	'canoe', 'lift'
	<i>Teyoken</i>	-y-, -oken	'it', 'split'
	<i>Teyohyonhoken</i>	-hyonh-, -oken	'river', 'split'
	<i>Tekahrarho</i>	tekahrarho	'landing', 'two landing'
	<i>Tonhnyata</i>	-onhnya-, -t/-at/-ot-	'point', 'stand'
	<i>Tsi kanyatarehske</i>	-nyatar-, -ehs/-es	'waterway', 'long'
	<i>Tsi kanyonwareskowa</i>	-nyonwareskowa	'bullthistles'
	<i>Tsi kanyataro'kte'</i>	-nyatar-, -o'kte	'waterway', 'finish'
	<i>Tsi owehnokwaronte'</i>	-wehno-, -kwaronte'	'island', 'bulge'
	<i>Tsi tewatehne'tarenyes</i>	-hne'tar-, unknown	'gravel', unknown
	<i>Kanonhwaro'hare'</i>	-nonhwar-, -ohar-	'head', 'attached'

Borrowing from other language (1; 1.1%)	<i>Kanyen'kehakarononitati</i>	<i>Kanyen'kehakaronon</i> , unknown	'Kanyen'kehá:ka people', 'unknown'
	<i>Ohkwahohake</i> <i>Tatyehronon</i>	<i>Ohkwaho</i> , -hake <i>Tatye</i> , -hronon	'wolf', 'people' 'Tutelo', 'people'
	<i>Oswegatchie</i>	N/A	
Folk Etymology (1; 1.1%)	<i>Rock Rogeo</i>	N/A	
Unknown (4; 4.5%)	<i>Kahenta</i>	-hent-	'grassland'
	<i>Kahnekatoton</i>	-hnek-, unknown	'liquid', unknown
	<i>Kanyatarake</i>	-nyatar-	'waterway'
	<i>Tekahentyento</i>	-hent-	'grassland'

Table 25. Possible Navigational Kanyen'kéha place names.

<u>Semantic Concept</u> Possible Navigational Names (42; 48.27%)	<u>Place Name</u>	<u>Relevant morphemes</u>	<u>Gloss</u>
	<i>Ahskwake</i>	-ahskw-	'bridge'
	<i>Astenhrowanen</i>	-stenhr-, -owanen	'stone', 'large
	<i>Atstenke</i>	-stenhr-	'stone'
	<i>Kana'tsyakowa</i>	-na'tsy-, -kowa	'cauldron', 'big'
	<i>Kana'tsyóhare</i>	-na'tsy-, -ohare	'cauldron', 'wash'
	<i>Kanyatarakowa</i>	-nyatar-, -kowa	'waterway', 'big'
	<i>Kanyatarakaront</i>	-nyatar-, -karont	'waterway', 'wide'
	<i>Kanyatarakwaronte'</i>	-nyatar-, -kwaronte'	'waterway', 'bulge'

<i>Kawehnehske</i>	<i>wehno-, -ehs/-es</i>	'island', 'long'
<i>Kawehniyo</i>	<i>wehno-, -iyo</i>	'island', 'beautiful'
<i>Kawehnote</i>	<i>-wehno-, -t/-at/-ot-</i>	'island', 'stand'
<i>Kawehnowanenne</i>	<i>-wehno-, -owanen</i>	'island', 'large'
<i>Nikahnawate</i>	<i>-hnaw-, -t/-at/-ot-</i>	'current', 'stand'
<i>Nikahyonhakowa</i>	<i>-hyonh-, -kowa</i>	'river', 'big'
<i>Ohrarho</i>	<i>ohrarho</i>	'landing'
<i>Ohyonhke/Ohyonhyoke</i>	<i>-hyonh-/hyonh-, -iyo</i>	'river', 'beautiful'
<i>Ohsweke</i>	<i>-hsw-</i>	'lip'
<i>Osharhe'on</i>	<i>-sharh-</i>	'bullrush'
<i>Rock Rogeo</i>	<i>N/A</i>	
<i>Skahentowa</i>	<i>-hent-, -owa</i>	'grassland', 'big'
<i>Skahentowanen</i>	<i>-hent-, -owanen</i>	'grassland', 'large'
<i>Skanawe</i>	<i>-naw-</i>	'marsh'
<i>Skanen'tati</i>	<i>-nen't-, -ati</i>	'evergreen', 'be on a side'
<i>Skanauehs</i>	<i>-naw-, -ehs/-es</i>	'marsh', 'long'
<i>Skanyatarario</i>	<i>-nyatar</i>	'waterway', 'beautiful'
<i>Skanyatarowanen</i>	<i>-nyatar</i>	'waterway', 'large'
<i>Tkahnawate</i>	<i>-hnaw-, -t/-at/-ot-</i>	'current', 'stand'
<i>Tyohnawatase</i>	<i>-hnawatase</i>	'whirlpool'
<i>Tyohsahronati</i>	<i>-hs-, -hr-</i>	'lip', 'sitting'
<i>Tewasentha</i>	<i>Waterfall</i>	<i>waterfall</i>
<i>Tekahsoken</i>	<i>-hs-, -oken</i>	'lip', 'split'
<i>Tekanyataroken</i>	<i>-nyatar-, -oken</i>	'waterway', 'split'
<i>Tekanyatarikon</i>	<i>-nyatar-, -rik-</i>	'waterway', 'come together'
<i>Teya'hon:wa'hkwat</i>	<i>-hon:wa-, -hkw-</i>	'canoe', 'lift'
<i>Teyoken</i>	<i>-y-, -oken</i>	'it', 'split'
<i>Teyonontahowa</i>	<i>-nont-, -howa</i>	'hill', 'big'
<i>Teyonontoken</i>	<i>-nont-, -oken</i>	'hill', 'split'
<i>Teyohyonhoken</i>	<i>-hyonh-, -oken</i>	'river', 'split'
<i>Tonhnyata</i>	<i>-onhnya-, -t/-at/- ot-</i>	'point', 'stand'
<i>Tsi kanyatarehske</i>	<i>-nyatar-, -ehs/-es</i>	'waterway', 'long'
<i>Tsi kanyonwareskowa</i>	<i>-nyonwareskowa</i>	'bullthistles'
<i>Tsi kanyataro'kte'</i>	<i>-nyatar-, -o'kte</i>	'waterway', 'finish'
<i>Tsi owehnokwaronte'</i>	<i>-wehno-, -kwaronte'</i>	'island', 'bulge'
<i>Tsi tewatehne'tarenyes</i>	<i>-hne'tar-, unknown</i>	'gravel', unknown

6.3 Answering the Research Questions

The initial research question, “What lexical roots are Kanyen’kéha place names based upon?” is explored throughout Chapters 5 and 6. Almost all of the research questions can also be answered based on the results of the analysis in these two chapters. These research questions, given in Section 2.8 are restated below together with their answers.

- “Are names based upon land features or water features?”

Around 20.6% of Kanyen’kéha place names are based upon descriptions of physical features of the landscape. Descriptions of waterscape features represent 37.9% of Kanyen’kéha place names. These two categories and/or certain place names within them may represent a separate navigational naming category.

- “Are they cultural activities?”

Some place names, such as *Kanonhwar’hare’* (‘head at the end of a pole’) are certainly references to cultural activities (see *Kanonhwar’hare’* for further discussion); other place names appear to be cultural references (for example, *A’nowarake* may be a reference to the Kanyen’kehá:ka origin story as per Ateronhiata:kon), but this information must be verified with Kanyen’kehá:ka.

- “Are these names ethnophysiographical terms?”

As stated in Section 6.2.2, only around 9% of place names appear to refer to constructed features, while descriptions of landscape and waterscape make up 58.5% of names. Since the majority of names are descriptive of physical features, ethnophysiography plays a role in Kanyen’kéha place names. Two examples of ethnophysiographical terms which are used within Kanyen’kéha names are *-nyatar-*, ‘waterway’ (as outlined in Section 1.4) and *-hnaw-*, ‘current’, (as defined throughout Chapter 5), but it is likely that all nominal roots encoding land- and waterscape features are ethnophysiographical in nature and therefore, require their own study.

- “Is this name based upon an event or occurrence?”

It appears that specific events are not coded within the place names presented here, although, again, this may change with further work with the Kanyen’kehá:ka.

- “Is this name an action?”

Teya'hon:wa'hwkat, ‘lifting the canoe’, is based on action as encoded within the English/French word “portage”, i.e., ‘lifting the boat from one place to another’ and *Tekaswen'karorens*, ‘splitting boards’, is based on the habitual action of creating boards. However, many names which appear to reflect some sort of action, such as *Kayaderosseras* (‘waterways fall’), *Onyatarikwekon* (‘all waterways’), and *Tekanyatarikon* (‘waterway comes back together’), can be said to describe states rather than actions. The answer to this question, as well as the final research question, “Given the meaning of these roots, do these place names appear to fit into previously-theorized place naming categories, or do they represent new categories?” is given in Section 6.4, below.

6.4 Discourse as a Place Name Category

At the beginning of this study, I was mainly focused on the lexical semantics of place names, rather than on their grammatical structure. I did not anticipate that an examination of place name structures would lead me to conclusions regarding discourse. However, Mithun and Corbett (1999) state that in Kanyen'kéha, “many grammatical choices are triggered by discourse factors” (p. 56), and therefore, it seems somewhat natural that the grammatical patterns found within place names would lead to conclusions regarding discourse, precisely because grammatical choices are shaped by discourse.

As a mediator of space, oral language allows spatial knowledge to be communicated from one person to another where spatial models like maps or alternative modes of communication such as writing are not used. Essentially, this involves the transmission of information regarding an individual's cognitive maps, “the internal representation of experienced external environments, including the spatial relations among features and objects” (Golledge, Jacobson, Kitchin, & Blades, 2000, p. 93). The transmission of this information through language is a type of discourse and is subject to the grammatical rules of that language that govern that specific category of discourse. These grammatical rules may include utilizing different techniques in order to

accurately relay spatial information. One of these techniques is spatial deixis, in which the spatial locations of both the speech participants as well as locations in relationship to the participants are referred to based upon the context of the time and location of the overall discourse act (see 2.6.2.5) In English, spatial deixis takes the form of “here” and “there”, “this” and “that”, “near” and “far”, etc. Thus, while giving navigational directions during a speech act, a person may utilize deixis to refer to a landmark “over there,” away from the speaker or listener at that location and at that moment in time. As outlined in Section 2.6.2.5, Kanyen’kéha spatial deixis utilizes a prepronominal prefix to perform this task, the cislocative *t-*, or translocative, *y-*. If these markers appear in the vicinity of Kanyen’kéha place names, it would stand to reason that they were being given as part of the discourse act of giving navigational directions, thereby indicating that the names are indeed navigational in nature.²⁵

In fact, this is the case. The cislocative prepronominal prefix appears on a total of 14.9 % of Kanyen’kéha place names. While the translocative is harder to identify because of its similarity to the pronominal prefix *yo-* and the nominal prefix *-o*, there may also be names utilizing this deictic marker. Chafe (2012) states that in the Onödowá’ga: language, “the cislocative prefix indicates presence at a specific location” (p. 19); if imparted during discourse, the cislocative prefix references a location which must already have been mentioned within the same discourse act, or there must be common knowledge of the location in question. In other words, the meaning of the cislocative prefix is dependent upon the context given throughout the act of the discourse, or somehow previously known. While there is the possibility that these prefixes are not part of a place name, but rather were mistakenly recorded during transmission as a misunderstanding, further evidence of names imparted during discourse is supplied by the subordinate particle *tsi*, which introduces a matrix clause as defined in the name entries in Chapter 6. The reference and scope of the matrix clause

²⁵ A second interpretation would simply be that the names are not necessarily navigational but were given as part of navigation. This may be the case; however, given the evidence of 6.2.7 and Mithun’s statement regarding discourse as the selector of grammatical features, I see no particular reason not to analyse deictic markers as part of the overall grammatical construction of a navigational name.

are both dependent upon a main clause, into which it is syntactically embedded, for its semantics to be fully interpreted. Therefore, both the cislocative and the use of the subordinate particle suggest that at least some Kanyen'kéha place names were imparted during discourse, which may have occurred during navigation itself.

In addition to spatial deixis as a marker of navigational discourse, noun incorporation, as outlined in section 2.6.2.2.2 (Verbs), is also a grammatical technique used within Kanyen'kéha discourse. Noun incorporation is a phenomenon in which a nominal is integrated into a verbal structure in order to form a syntactically new verbal structure (Mithun and Corbett, 1999); this structure may coexist with the non-incorporated form of the incorporated nominal and verbal, and Mithun and Corbett (ibid) suggests that these two combinations serve a different semantic and pragmatic functions. Incorporation, they state, "is done for two kinds of purposes, the creation of new labels and the regulation of information in discourse" (p. 52). In the latter case, "information that is already an established part of the scene, predictable, or incidental, may be carried along by an incorporated noun" (Ibid). Thus, if Kanyen'kéha place names are used within discourse, there should be some place names which utilize noun incorporation. Indeed, Mithun and Corbett suggest that incorporation in discourse is common with the class of verbs which appear frequently within the place names presented here, particularly *-yen-* ('lie', Ontario Ministry of Education, 2011, p. 84), *-t-* ('stand', Michelson, 1973, p. 177; Ontario Ministry of Education, 2011, p. 106), and *-hr-* ('sit on top of', Ontario Ministry of Education, 2011, p. 106). Names utilizing these nominally incorporating "positional verbs" (Ontario Ministry of Education, 2011) make up approximately 14.9% of Kanyen'kéha place names. However, this number may be higher when taking into account the fact that the morpheme *-iyo* ('beautiful') also acts as an incorporating verbal root (Mithun and Corbett, 1999, p. 54) in which case incorporated nominal names increase to 16.1%. There is also one name, *Teyoken* ('it splits') which utilizes only a pronominal rather than an entire nominal, indicating that that nominal has either already been mentioned, or is understood based upon context. Thus, the examples of deixis and noun incorporation demonstrate that the grammar of

place names also provides clues as to an overall naming convention, and therefore should be considered in conjunction with semantics for a well-rounded naming analysis.

Even though a complete Kanyen'kéha naming typology cannot be developed within the present study, the hypothesis presented here, i.e., that at least some Kanyen'kéha names are based upon navigation, is enough to demonstrate that naming categories such as those hypothesized by Stewart (1975) may be far more diverse than can be imagined by someone from outside the sociolinguistic naming group. Although a "navigational" category has been proposed (see Boas, 1934 and Afable and Beeler, 1996), the question arises as to whether Kanyen'kéha names could be considered to be "navigational" names, or whether a category of names based upon situational transmission should be proposed. It could also be argued that the names are navigational as a category, but are imparted during discourse meaning that place name studies should also consider the method of transmission (i.e., via written map, via mapping event, via navigation narrative, etc.); so much within the Kanyen'kéha naming convention appears to be dependent upon discourse that simply categorizing the names as "navigational" seems to detract from the fact that their interpretations are fundamentally context-dependent. An argument could possibly be made that "navigational" names are those names which have concretized and may be removed from an overall navigational context to be used in general discourse, but this would require further study. It may also be the case that some place names (perhaps including Kanyen'kéha place names) belong to multiple categories at the same time. For example, *Tekanyateroken* ('waterway splits') is certainly a description of the landscape; however, it could also be used in the course of navigation, as when giving directions. At the very least, it is clear that pragmatics and discourse within place naming also deserve more focus from the field of linguistics regarding place names.

6.5 Grammatical Analysis and Universality

Many Kanyen'kéha names do not utilize a verbal root, which would carry not only a basic semantic meaning (i.e., 'to run' or 'to sit'), but also specify grammatical information regarding whether the verbal root represents an action, an event, a state,

etc. In other words, many Kanyen'kéha place names do not utilize tense or aspect, or it is not possible to discern aspect from the given form. Only one name in this study demonstrates a tense affix, the name *Tsi tewaw'tehne'tarenyes* ('where the gravel was spreading out'), where *wa'*- is the aorist modal prefix and *-s* is the habitual aspectual suffix. However, aspect is possible to discern in approximately 64.5% of names, and so deserves some treatment here, although the topic of tense, aspect and mood in within Kanyen'kéha place names is one that deserves deeper and more rigorous study. Section 2.6.2.3 provides an overview of Kanyen'kéha tense and aspect.

The imperative aspect (which takes no affix) may be present in the verbal root names *Ohrarho* ('landing') and *Tekahrarho* ('landing' or 'two landing'). The habitual (or serial) aspect appears as the suffixes *-s* and *-as* in the names *Kanawa'tstakera's* ('mud stinks'), *Kanyaterosseras* ('waterway falls'), and *Tekaswen'karorens* ('splitting boards'). The perfective may be used in the names *Astenhrowanen* ('large stone') and *Tsi tewatehne'tareneyes* ('where gravel was spreading') although the absence of modal prefixes would suggest that they are actually statives, and may take the $\emptyset$ or *-'* stative suffixes as per Postal (1979, p. 81). The remote past suffix (*-ne*) is evident in the name *Kanenhstakayenne* ('ancient corn'), thus emphasizing the remoteness of the activity which took place there. The stative aspect appears in many Kanyen'kéha place names, which is unsurprising as statives describe an inherent state. As per Lukaniec (2018), Lounsbury's term "perfective" is the equivalent of stative²⁶ (p. 71). Thus, Lounsbury himself confirms that the *-e'* suffix of *Kanyatarakwaronte'* ('waterway bulges'), the *-e'* suffix of *Tsi kanyataro'kte'* ('where the waterway finishes') and the "absence of a suffix" in those names utilizing the root *-oken* ('split') are all "the perfective aspect", (which is to say, in modern terms, the stative aspect) and all belong to the class of verbal roots that utilize this aspect. Therefore, all names utilizing the roots *-kwaronte'* ('swell') *-o'kte* ('finish') and *-oken* ('split'), also utilize the stative aspect. In total, these include *Kanyatarakwaronte'* ('waterway bulges'), *Tsi owehnokwaronte'* ('where the island

²⁶ To complete the aspectual series, Lounsbury's "serial" is now known as the habitual and his "punctual" is the perfective.

bulges'), *Tsi kanyataro'kte'* ('where the waterway finishes'), *Astenhroken* ('split stone'), *Tekahsoken* ('lip splits in two'), *Tekanyataroken* ('waterway splits in two'), *Teyoken* ('it splits in two') *Teyonontoken* ('hill splits in two'), and *Teyohahoken* ('path splits in two'). Furthermore, so-called "positional verbs" (see Section 6.4), or which "specify the position in which the object designated by the noun is most often found" (Ontario Ministry of Education, p. 106) also utilize the stative aspect. Three of these verbs, *-ot/-at/-t-* ('stands'), *-yen-* ('lies'), and *-hr-* ('sits on top of') occur within place names, with *-ot/-at/-t-* being the most common, as given in Table 13. Two other verbal roots which utilize the stative aspect include *-owanen* ('be large') and *-iyo* ('be beautiful'), both of which are used within the place names outlined in Chapter 5. Thus, although only a partial analysis, out of all place names which utilize a verbal root, at least 32 (37%) make use of the stative aspect.

What is perhaps most interesting about Kanyen'kéha place names in the grammatical sense is that although the language does not possess a distinct adjective class according to Chafe (2012), it appears as though in many cases place names still align with a generic + specific structure as detailed by Stewart (1975). In the following names, a clear pattern emerges where the verbal root describes some aspect of the nominal root, thus acting as the specific to the nominal root's generic:

Table 26. Generic + Specific structure in Kanyen'kéha place names.

Name	Nominal Root (Generic)	Verbal Root (Specific)
<i>Kahyonhatatie</i>	<i>-hyonh-</i> , 'river'	<i>-tatyes-</i> , 'continues'
<i>Kana'tsyakowa</i>	<i>-na'tsy-</i> , 'cauldron'	<i>-kowa</i> , 'big'
<i>Kana'tsyóhare</i>	<i>-na'tsy-</i> , 'cauldron'	<i>-ohare</i> , 'wash'
<i>Kanawa'tstakera's</i>	<i>-nawa'tst-</i> , 'mud'	<i>-akera'</i> - 'stink'
<i>Kanehstakayenne</i>	<i>-nenhst-</i> , 'corn'	<i>-akayen</i> , 'ancient'
<i>Kanonhwarohare'</i>	<i>-nonhwar-</i> , 'head'	<i>-ohar-</i> , 'attached'
<i>Kanyatarahontsi</i>	<i>-nyatar-</i> , 'waterway'	<i>-hontsi</i> , 'dark-coloured'
<i>Kanyatarakowa</i>	<i>-nyatar-</i> , 'waterway'	<i>-kowa</i> , 'big'
<i>Kanyatarekaront</i>	<i>-nyatar-</i> , 'waterway'	<i>-karont</i> , 'wide'
<i>Kanyatarakwaronte</i>	<i>-nyatar-</i> , 'waterway'	<i>-kwaronte'</i> , 'bulge'
<i>Kanyatarosseres</i>	<i>-nyatar-</i> , 'waterway'	<i>-ssere-</i> , 'fall'
<i>Kawehnehske</i>	<i>-wehno-</i> , 'island'	<i>-ehs/-es</i> , 'long'

<i>Kawechniyo</i>	-wehno-, 'island'	-iyo, 'beautiful'
<i>Kawechnowanenne</i>	-wehno-, 'island'	-owanen, 'large'
<i>Kentsenkowahne</i>	kentsen-, 'fish'	-kowa, 'big'
<i>Nikahyonhakowa</i>	-hyonh-, 'river'	-kowa, 'big'
<i>Nikentsenkowa</i>	kentsen-, 'fish'	-kowa, 'big'
<i>Onyatarikwekon</i>	-nyatar-, 'waterway'	akwekon, 'all'
<i>Onyatariyo</i>	-nyatar-, 'waterway'	-iyo, 'beautiful'
<i>Skahentowa</i>	-hent-, 'grassland'	-owanen, 'large'
<i>Skahentowanen</i>	-hent-, 'grassland'	-owanen, 'large'
<i>Skanatihson'</i>	-nat-, 'settlement'	-ihs-, 'complete'
<i>Skanawehs</i>	-naw-, 'marsh'	-ehs/-es, 'long'
<i>Skanen'tati</i>	-nen't-, 'evergreen'	-ati, 'be on a side'
<i>Skanyatariyo</i>	-nyatar-, 'waterway',	-iyo, 'beautiful'
<i>Skanyatarowanen</i>	-nyatar-, 'waterway',	-owanen, 'large'
<i>Tnen'tahowa</i>	-nen't-, 'evergreen'	-howa, 'big'
<i>Tkahwistaniyonte</i>	-hwist-, 'metal, bell',	-ont(e), 'attached'
<i>Tyohsahronati</i>	-hs-, 'lip'	-hr-, 'sitting'
<i>Tekahsoken</i>	-hs-, 'lip'	-oken, 'split'
<i>Tekanyataroken</i>	-nyatar-, 'waterway',	-oken, 'split'
<i>Tekaswen'karorens</i>	-swen'kar-, 'board'	unknown root
<i>Tekyatonyatarikon</i>	-nyatar-, 'waterway'	-rik-, 'come together'
<i>Teya'hon:wa'hkwat</i>	-hon:wa-, 'canoe'	-hkw-, 'lift'
<i>Teyohahoken</i>	-hah-, -oken	'road', 'split'
<i>Teyoken</i>	-y-, 'it'	-oken, 'split'
<i>Teyonontahowa</i>	-nont-, 'hill'	-howa, 'big'
<i>Teyohyonhoken</i>	-hyonh-, 'river'	-oken, 'split'
<i>Tsi kanyatarehske</i>	-nyatar-, 'waterway',	-ehs/-es, 'long'
<i>Tsi kanyataro'kte'</i>	-nyatar-, 'waterway'	-o'kte, 'finish'
<i>Tsi owehnokwaronte</i>	-wehno-, 'island'	-kwaronte, 'bulge'
<i>Tsi tewatehne'tarenyes</i>	-hne'tar-, 'gravel'	Unknown

A total of 48% of all Kanyen'kéha place names very clearly demonstrate behaviour similar to the concept of generic + specific within the grammar by utilizing relationships between nominal and verbal roots and aspect. If it is true that verbal roots are acting as specifics in Kanyen'kéha place names, stative verbs may also be behaving in the same way. Accounting for stative verbs, such as the "position verbs" discussed in section 6.3 raises the total to 74.8%. However, this analysis fails to account for place names which

utilize only a nominal root together with a suffix such as a locative (14%). One way to account for this is to theorize that the locative in these situations is behaving as the generic as in Table 27:

Table 27. Generic + Specific structures utilizing the locative suffix.

Name	Nominal Root (Specific)	Locative Suffix (Generic)
<i>Akwesashne</i>	<i>akwesas-</i> , ‘partridge’	<i>-hne</i> , external locative suffix
<i>Ahskwake</i>	<i>ahskw-</i> , ‘bridge’	<i>-ake</i> , external locative suffix
<i>A’nowarake</i>	<i>a’nowar-</i> , ‘turtle’	<i>-ake</i> , external locative suffix
<i>Kahnawà:ke</i>	<i>-hnaw-</i> , ‘current’	<i>-ake</i> , external locative suffix

This analysis may even account for names which take a nominal root, a verbal root, and a locative suffix (of which there are a total of 7, or 5%) in that this could simply be considered an instance of a specific and a double generic, much like the English name Oxford Mills. Oxford Mills consists of the specific, “ox”, and the generics “ford” and “mills” where the initial specific and generic (ox + ford) were reanalysed as a single specific. It is possible that the same mechanism occurs in Kanyen’kéha and, indeed, in other languages.

This analysis has specific implications for linguistic relativity and/or cognitive science in that the pattern of generic + specific may appear in place names across languages despite differences of syntactic and morphological typology. Kanyen’kéha expresses similar semantic patterns within its place names as other languages but does so utilizing its own grammatical tools. In English, grammatically the generic + specific “rule” presents as “noun + adjective” or “adjective + noun”. This presents a problem in that Kanyen’kéha grammar is somewhat more fluid in regard to categorization of nominals and verbals than in English (see, for example, the nominal variation as outlined in Section 2.6.2.2.1). In fact, Chafe (2012) argues against the existence of adjective classes entirely in the Onödowá’ga: language. On the surface it would appear as though Kanyen’kéha place names could be used as evidence for a strong version of the Sapir-Whorf Hypothesis in that the grammar of the language imposes the inability to encode an adjective class, which, in English, usually encodes the element of “specific” in a place name.

However, it is clear that Kanyen'kéha does encode "specific" elements utilizing verbal roots, similar to the way that English would in the term "split rock". Therefore, while Kanyen'kéha may not have a class that can be defined specifically as "adjectives", it simply utilizes other elements of its grammar to perform the same function as an adjective would in English. In other words, the generic + specific rule holds even in languages that appear to not use adjectives. This means that the way that we name landscape, at least in terms of descriptive place names, holds across linguistic and cultural boundaries. This would suggest that the pattern of naming place using generic + specific is an underlying element of human cognition, and the language makes use of the available grammar to achieve this. More work in this area, beginning with the issue of what constitutes a place name, as opposed to simply a description of place, may shed light on a number of linguistic phenomena.

6.2 Remaining Issues

In addition to some of the problems outlined above, other issues to be explored include the choice of verbal roots utilized in place naming. For example, there are two verbs which may be roughly interpreted as 'to be good'; the root *-yaner-* (Mithun and Corbett, 1999) is interpreted as 'be good', and the verbal root *-iyo* ('be beautiful') has a second interpretation as 'to be good'; *-iyo* obligatorily incorporates while *-yaner-* never incorporates (ibid). Only *-iyo* appears to be used within place names. Place names also use both the augmentative suffix (*-owa*) and the verbal root *-owanen* ('be large'). The reason for these differences in use the deeper semantic and grammatical implications of such could yield further insights into a number of the issues outlined throughout this dissertation including place naming practices, place naming grammar in Kanyen'kéha and Kanyen'kéha language use in general. In the conclusion that follows (Chapter 7), I discuss how the solutions to these problems, as well as the research outlined throughout this study, may be applied to a wide variety of future work of benefit to many different stakeholders.

Chapter 7. Conclusion and Future directions

This dissertation serves to demonstrate that the O'nonna Three-Sided philosophical framework in Figure 4, using elements from the fields of linguistics, geography and anthropology, is integral to a place name study. The framework requires several components to arrive at a robust and holistic analysis, and the integration of tools, views and methods from several different disciplines provide evidence of place naming practices, structures, and even patterns of thought which may not at first be apparent. Such methods include linguistic analysis, as outlined in sections 6.3 and 6.4, ethnographical collaboration with the place namers in order to understand cultural implications of place names, and finally, spatial tools and understandings, such as mapping, a general understanding of the landscape and environment under study, and ontology of ethnophysiological concepts. When applied to Kanyen'kéha place names, linguistic analysis provided semantic information leading to the conclusion that many of those place names are based on landscape description and navigation; ethnographical collaboration with Kanyen'kéha speakers aided in the linguistic analysis of historical place names and provide the cultural context to conclude that waterways were used as part of an extensive transportation network. This fact is reflected in Kanyen'kéha place names through semantic content as well as through the presence of translocatives, the subordinate particle and incorporation. Finally, spatial analysis helped to understand ethnophysiological features (such as *Skahentowanen* 'across the large grassland') which provided the hypothesis of navigational names, in turn allowing for a better interpretation of other place names and the overall naming convention.

One of the most important conclusions that can be drawn from the entirety of this work is that, in a very real sense, place names are a map of Kanyen'kehá:ka territory both in the symbolic sense, but also in the literal sense in the context of discourse. Kanyen'kéha knowledge of space is encoded in these place names, and language delivers the cognitive mental map from one person to another. As such, the value of Kanyen'kéha place names, and Indigenous place names in general, cannot be overstated. This should serve to as a call for more cross- and multidisciplinary research,

and a re-evaluation of what we think we “understand” and “know” in each of these disciplines. This re-evaluation is a part of understanding cross-cultural knowledge, the values, pedagogies and frameworks of that knowledge and how that knowledge is held: it is not compartmentalized into specific fields of study, and is not centralized into single authority figures, but is held collectively. IK has traditionally been undervalued outside of specific fields of study in academia, and this study is an attempt to underline its depth and its value.

Although I have begun to advocate for the documentation and preservation of place names as in Ingram (2018) and Ingram, Anonby and Taylor (2019), I believe this is an issue deserving of more attention by the academic community in general as guided by Indigenous communities, especially as it has particular implications for language endangerment and revitalization. Since landscape, language and culture are interconnected, a change to one implies a change to the others. The physical environment planet-wide is in a rapid state of flux due to industry, globalization and climate change and this may have a detrimental affect on Indigenous languages, a topic that Dr. Horn-Miller and I explore in Horn-Miller and Ingram (in press).

The future of this work, then, lies in collaborative mapping practices with place namers. Frameworks such as Nunaliit, developed at Carleton University’s Geomatics and Cartography Research Centre can aid in the preservation of Indigenous Environmental Knowledge and also provide unique spatial analyses in conjunction with Indigenous communities. One possible analysis is outlined in Ingram, Anonby and Taylor (2019) and, at the time of writing, the ideas from this chapter are being implemented into a community-engaged atlas project led by Dr. Kahente Horn-Miller. The initial phase of this work will seek to preserve and expand upon the work outlined here in this dissertation, while the secondary phase will seek to deepen community preservation efforts while outlining Kanyen’kéha-specific spatial patterns. A major advantage to the use of cybercartography is the integration of multimodal forms of spatial knowledge: if Kanyen’kéha place names are understood and shown to be based upon navigational discourse, that discourse can be recorded and preserved in a cybercartographic atlas,

meaning that the context of the knowledge can be documented more faithfully than with static methods. This may lead to entirely new developments in the understanding of space, place and language.

In regard to linguistic relativity, it must be noted that all humans, as well as many animals, create cognitive maps based in the hippocampus region of the brain (Manns & Eichenbaum, 2009); place is literally hard-wired into our brains. If we understand that this is a universal, then we enter the study of space, place and expressions of those aspects with the understanding that place acts as one of our common denominators. Some of our ideas about our surroundings and how we interact with them are expressed through language; thus, the study of language related to landscape can help us to examine different aspects of cognition, including how language shapes thought and vice versa.

We can better understand the connections between language and landscape, and this dissertation serves as a starting point for further investigation. The relationships between land loss and language loss are only now coming to the attention of academia. As a result, it is my opinion that we often do not understand the depth of meaning behind statements such as “the land and the language are connected”. Language loss and loss of biodiversity go hand-in-hand (see, for example, Maffi (2001)); therefore, research regarding language and landscape is critical in a time of climate change, environmental degradation, social upheaval and rapid language loss. The exact mechanisms of loss, of the landscape, of Indigenous place names, and of Indigenous languages, will need to be outlined and will prove useful for revitalization efforts for both the language and the landscape.

While avenues such as these should be pursued with all due haste, they should also be pursued humbly, with respect for the land and water which are under threat in different ways, and from different sources. We should also proceed with the utmost respect towards the original caretakers of the land, from whom there is, and always has been, much to learn. This takes the shape of true cooperation—in which we, as academics, listen with intent, build meaningful and life-long relationships, follow

traditional protocols, and become comfortable with the fact that some things are to know and understand, but not to study, and some things are not for us to know at all. In this way, different groups together can come together through this work, whether they be Indigenous and non-Indigenous, linguistic, geographical or cultural groups, or academic and non-academic. This work has the potential to unify and deepen our understandings of the world and each other, if we are willing to accept that challenge respectfully.

Appendix A. New York State Watersheds and Major Bodies of Water

Compiled via New York State Department of Environmental Conservation (2019)

Watershed	Major Bodies of Water	Source	Terminus
Allegheny River	Allegheny River Conewango Creek Cassadaga Creek Olean Creek Great Valley Creek French Creek Allegheny Reservoir Chautauqua Lake	Allegheny Plateau	Gulf of Mexico via Ohio and Mississippi Rivers
Atlantic Ocean	Bronx River Mamaroneck River Peconic River Kensico Reservoir Lake Ronkonkoma	Long Island and Hudson Highlands	Atlantic Ocean via Long Island Sound
Black River	Black River Moose River Beaver River Independence River Deer River Stillwater Reservoir Fulton Chain of Lakes Lake Lila Big Moose Lake Woodhull Lake	Western slope of the Adirondack Mountains and the eastern edge of the Tug Hill Plateau	Atlantic Ocean via Lake Ontario and St. Lawrence River
Chemung River	Chemung River Cohocton River Tioga and Canisteo Rivers Lamoka Lake and Mill Pond Waneta Lake	Allegheny Plateau	Atlantic Ocean via Chesapeake Bay and the Susquehanna River
Delaware River	Delaware River (East and West Branches) Neversink River Mongaup River	Catskill Mountains	Atlantic Ocean via Delaware Bay

Genesee River	Pepacton Reservoir	Allegheny Plateau	Atlantic Ocean via Lake Ontario and the St. Lawrence River
	Cannonsville Reservoir		
	Neversink Reservoir		
	Genesee River		
	Cassadaga Creek		
	Honeoye Creek		
	Oatka Creek		
Housatonic River	Black Creek	Taconic Mountains	Long Island Sound
	Conesus Lake		
	Hemlock Lake		
	Honeoye Lake		
	Housatonic River		
Lake Champlain	Tenmile River	The Adirondack Mountains and the Green Mountains in Vermont	Atlantic Ocean via the Richelieu River (Quebec) and St. Lawrence River
	Swift and Crane Ponds		
	Lake Champlain		
	Ausable River		
	Saranac River		
	Great Chazy River		
	Boquet River		
	Mettawee River		
	Ticonderoga Creek		
	Lake George		
Minor Tributaries of Lake Ontario	Upper Saranac Lake	Tug Hill Plateau and Allegheny Plateau	Atlantic Ocean via Lake Ontario and St. Lawrence River
	Lower Saranac Lake		
	Lake Placid		
	Salmon River		
	Oak Orchard Creek		
	Irondequoit Creek		
	Sandy Creek		
	Salmon River		
	Reservoir		
	Sodus Bay		
Hudson River Estuary (From Troy, NY to Manhattan, NY; affected by Atlantic tides)	North Pond	Upper Hudson River, Catskill Mountains and Taconic Mountains	Atlantic Ocean
	Irondequoit Bay		
	Perch Lake		
	Hudson River		
	Mohawk River		
	Rondout Creek		
	Wallkill River		
	Stockport Creek		
	Kinderhook Creek		
	Catskill Creek		

	Esopus Creek		
	Croton River		
	Ashokan Reservoir		
	Rondout Reservoir		
	New Croton		
	Reservoir		
	Alcove Reservoir		
	Cross River		
	Reservoir		
	Muscoot Reservoir		
	Upper New Croton		
	Reservoir		
Mohawk River	Schoharie Creek	Western	Atlantic Ocean via
	West Canada Creek	Adirondacks and the	the Hudson River
	East Canada Creek	Tug Hill Plateau	
	Hinkley Reservoir		
	Delta Reservoir		
	Peck Lake		
Niagara River	Tonawanda Creek	Lake Superior, Lake	Atlantic Ocean via
	Cattaraugus Creek	Michigan, Lake	Lake Ontario and
	Buffalo River	Huron and Lake Erie	the St. Lawrence
	Attica Reservoir		River
	Lime Lake		
Oswego River and	Oneida River	Southwestern	Atlantic Ocean via
Finger Lakes	Clyde River	Adirondack	Lake Ontario and
	Oneida Lake	Mountains and	the St. Lawrence
	Cayuga Lake and	Allegheny Plateau	River
	Tributaries		
	Seneca Lake and		
	Tributaries		
	Keuka Lake		
	Canandaigua Lake		
	The Finger Lakes		
Ramapo River	Ramapo River	Manhattan Prong	Atlantic Ocean via
	Hackensack River		Passaic and
	Greenwood Lake		Hackensack Rivers
	DeForest Lake		

St. Lawrence River	St. Lawrence River Oswegatchie River Raquette River Saint Regis River Grass River Indian River Black Lake Cranberry Lake Raquette Lake Tupper Lake Long Lake	Adirondack Mountains and St. Lawrence Lowlands	Atlantic Ocean
Susquehanna River	Susquehanna River Chenango River Tioughnioga River Unadilla River Owego Creek Otsego Lake Canadarago Lake Whitney Point Reservoir	Allegheny Plateau	Atlantic Ocean via Chesapeake Bay
Upper Hudson River	Hudson River Sacandaga River Schroon River Fish Creek Hoosic River Batten Kill Great Sacandaga Lake Indian Lake Schroon Lake Saratoga Lake	Adirondack Mountains, Greek Mountains (VT), Taconic Mountains	Atlantic Ocean via Hudson River Estuary

Appendix B. Geographic Area under study.

Figure 39. Overall geographic area under study. (c) Rebekah R. Ingram

Figure 40. Kanyen'kehá:ka and Onyota'a:ka Trails within geographic boundaries of this study. (c) Rebekah R. Ingram

Appendix C. Kanyen'kéha Morphological Template (from Mithun, 2000).

CONTRAST				FUTURE											FACILIT		PERF	PAST
COINC	TRANSLOC	FACTUAL	DUPLIC	OPTATIVE	CISLOCAT					INCHOAT								
PART						PRON.PREF	REFLEXIVE/ MIDDLE	NOUN.STEM	VERB.ROOT		CAUSATIVE	INSTRUMENTAL	BENEFACTIVE	DISTRIBUT	EVENT	PURPOSIVE	IMPERF	CONTIN
										REVERSIVE					INTENS		STAT	PROGR
NEGATIVE					REPETITIVE													

Appendix D. Meme on the Pronunciation of *Ohswéken*.

© Jeff Durnin, p.c., (November 10, 2019) via Facebook.

References

- Aa, P. (1714). *Canada, ou Nouvelle France: suivant les nouvelles observations de Mess'rs. de l'Academie Royale des Sciences, etc.* [map] Accessed at <http://digitalarchive.mcmaster.ca/islandora/object/macrepo%3A31398>
- Académie française. (2019). *Aperçu historique*. Accessed at Académie française: <http://www.academie-francaise.fr/linstitution/apercu-historique>
- Afable, P., & Beeler, M. (1996). "Place names". In I. Goddard (Ed.), *Handbook of North American Indians*, 17. Washington, D.C.: Smithsonian Institution.
- AkwesasneTV. (2016, December 22). *Ionkwaká:raton (Our stories)*. [Web Series] Accessed at YouTube: <https://www.youtube.com/watch?v=4dBvllhobyg>
- American Whitewater. (2019). *Nowadaga Creek*. Accessed at American Whitewater: <https://www.americanwhitewater.org/content/River/detail/id/5034/>
- Amherst, J. (1760). *Plan de la riviere et des Forts de Chvagen*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:hx11z129m>
- Anonymous. (1720). *N.W. parts of New York, no. 156*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:q524nj568>
- Anonymous. (1756). *A colored map of the route between Albany and Oswego; drawn about 1756, on a scale of 2 miles to an inch*. [map] (King George III, Compiler) Accessed at <https://collections.leventhalmap.org/search/commonwealth:hx11z321t>
- Anonymous. (1758). *Map of the northern parts of New York*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:q524nj525>
- Anonymous. (1759). *A map of Lake Champlain and Lake George, showing the route from Fort Edward to Montreal*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:hx11z330s>
- Assembly of First Nations. (2015). *First Nations ethics guide on research and Aboriginal Traditional Knowledge*. Ottawa, ON: Assembly of First Nations.
- Ayres-Bennett, W. (2004). *Sociolinguistic variation in seventeenth-century France*. Cambridge: Cambridge University Press.
- Baker, M. C. (1996). *The polysynthesis parameter*. New York, NY: Oxford University Press.
- Bartram, J. (1751). *Observations on the inhabitants, climate, soil, rivers, productions,*

- animals, and other matters worthy of notice*. [map] London: J. Whiston & B. White.
Accessed at https://archive.org/details/cihm_11915/page/n5/mode/2up
- Basso, K. (1984). "Stalking with stories: Names, places and moral narratives among the Western Apache". *Text, play and story: The construction and reconstruction of self and society* (pp. 19-53). Washington, D. C.: American Ethnological Society.
- Beatty, J. (1974). "Mohawk morphology". *Occasional publications in Anthropology, 2, Linguistic Series*. Greeley, Colorado: Museum of Anthropology, University of Northern Colorado.
- Beauchamp, W. (1905). *A history of the New York Iroquois*. Albany, NY: New York State Education Department.
- Beauchamp, W. (1907). *Aboriginal place names of New York*. Albany, NY: New York State Department.
- Beauchamp, W. M. (1893). *Indian names in New-York: with a selection from other states, and some Onondaga names of plants, etc*. Fayetteville, NY: H.C. Beauchamp.
- Bellin, J. (1755). *Partie occidentale de la Nouvelle France ou du Canada*. [map] Accessed at <https://www.loc.gov/resource/g3310.ar001900/>
- Bergs, A., & Brinton, L. (2017). "Introduction". In A. Bergs, & L. Brinton (Eds.), *Early Modern English*. Accessed at <http://ebookcentral.proquest.com/lib/oculcarleton-ebooks/detail.action?docID=5116128>.
- Berleth, R. (2009). *Bloody Mohawk: The French and Indian War & American Revolution on New York's frontier*. Delmar, NY: Black Dome Press Corp.
- Bickerton, L. (Director). (2016, August 11). "Tasmanian tiger". [Television Series] *Strange world*. (A. Zikking, Ed.) Off the Fence Productions for Insight.
- Bloomfield, L. (1930/1980). *Language*. Chicago: University of Chicago Press.
- Boas, F. (1934). *Geographical names of the Kwakiutl Indians*. New York: Columbia University Press. Accessed at <https://babel.hathitrust.org/cgi/pt?id=inu.39000005878918;view=1up;seq=7>
- Bohnemeyer, J., Burenhult, N., Enfield, N., & Levinson, S. (2004). "Landscape terms and place names elicitation guide". *Field manual, volume 9*. (A. Majid, Ed.) Nijmegen: Max Planck Institute for Psycholinguistics.
- Bonvillain, N. (1973). *A grammar of Akwesasne Mohawk*. Mercury Series. Ottawa, ON: National Museum of Man, National Museums of Canada.

- Bonvillain, N. (1981). "Locative semantics in Mohawk: Time and space". *International Journal of American Linguistics*, 47(1), 58-65.
- Booij, G. (1999). *The phonology of Dutch*. Oxford: Oxford University Press.
- Bowen, E. (1796). *An accurate map of North America: describing and distinguishing the British, Spanish and French dominions on this great continent: according to the definitive treaty concluded at Paris 10th Feb. 1763*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:0r96fq64d>
- Bright, W. (2004). *Native American placenames of the United States*. Norman, OK: University of Oklahoma Press.
- Brinton, D. G. (1888). *A Lenâpé-English dictionary: From an anonymous ms. in the archives of the Moravian church at Bethlehem, PA*. Philadelphia: The Historical Society of Pennsylvania.
- Brodnig, G., & Mayer-Schönberger, V. (2000). "Bridging the gap: the role of spatial information technologies in the integration of traditional environmental knowledge and western science". *Electronic Journal of Information Systems in Developing Countries*, 1-15.
- Bromhead, H. (2011a). "Ethnogeographical categories in English and Pitjantjatjara/Yankunytjatjara". *Language Sciences*, 33(1).
- Bromhead, H. (2011b). "The bush in Australian English". *Australian Journal of Linguistics*, 445-471.
- Bruyas, J. (1863). *Radices verborum Iroquaeorum*. New York: Cramoisy Press.
- Buccini, A. F. (1995). "The dialectal origins of New Netherland Dutch". *The Berkeley Conference on Dutch Linguistics 1993* pp. 211-263. Lanham, MD: University Press of America.
- Buccini, A. F. (1996). "New Netherland Dutch, Cape Dutch, Afrikaans". In P. van Reenen, H. den Besten, F. Ponelis, & J. Goossens, *Taal en Tongval: Afrikaans en varieteiten van het Nederlands*, 9, 35-51. Accessed at <https://anthonybuccini.files.wordpress.com/2016/06/buccini-1996-nnd-cape-dutch-afrikaans.pdf>
- Burenhult, N., & Levinson, S. (2008). *Language and landscape: A cross-linguistic perspective*. *Language Sciences*, 30(2-3), 135-150.
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada. (2014). *Tri-council policy statement: Ethical conduct for research*

- involving humans*. Accessed at <http://www.pre.ethics.gc.ca/eng/policy-politique/ini>
- Casey, E. S. (2013). *The fate of place: A philosophical history*. Berkley and Los Angeles, California: University of California Press. Accessed at <https://ebookcentral-proquest-com.proxy.library.carleton.ca/lib/oculcarleton-ebooks/detail.action?docID=1215498>
- Chafe, W. (1967). "Seneca morphology and dictionary". *Smithsonian Contributions to Anthropology*, 4.
- Chafe, W. (2012). "Are adjectives universal? The case of Northern Iroquoian". *Linguistic Typology*, 16(1) 1-39. Accessed at DOI 10.1515/lingty-2012-0001
- Chelliah, S., & de Reuse, W. (2011). *Handbook of descriptive linguistic fieldwork*. Heidelberg: Springer Netherlands.
- Cherniak, D. (2005). *Ebenezer Emmons (1799-1863) Rensselaer Class of 1826*. Accessed at Rensselaer Polytechnic Institute Department of Earth & Environmental Science: <http://ees2.geo.rpi.edu/History/emmons.html>
- Cobb, S. H. (2006). *The Story of the Palatines: An episode in Colonial history*. London: Forgotten Books.
- Coronelli, V. (1689). *Partie orientale du Canada ou de la Nouvelle France où sont les provinces ou pays de Saguenay, Canada, Acadie etc.* [map] Accessed at <http://gallica.bnf.fr/ark:/12148/btv1b6700079r/f1.item.zoom>
- Cuoq, J. A. (1886). *Lexique de la langue Algonquine*. Montreal: J. Chapleau.
- Day, G. M. (1981). "Abenaki place-names in the Champlain Valley". *International Journal of American Linguistics*, 143-171.
- Day, G. M. (1998). *In search of New England's Native past: Selected essays*. (M. K. Foster, & W. Cowan, Eds.) Amherst, MA: University of Massachusetts Press.
- De l'Isle, G. (1703). *Carte du Canada ou de la Nouvelle France et des decouvertes qui y ont été faites....* [map] Accessed at <http://gallica.bnf.fr/ark:/12148/btv1b84933987/f1.item.zoom>
- Devereaux, A. (2017, January 30). "Atlantic Canadian places now easier to name in sign language". *CBC Nova Scotia*. Accessed at <https://www.cbc.ca/news/canada/nova-scotia/120-atlantic-canadian-places-now-easier-to-name-in-sign-language-1.3958591>
- DeWitt, S. (1792). *De Witt's State-map of New-York, 1st sheet*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vg68n>

- Dieskau, J. (1755). *Fort Edward to Crown Point*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:q524nd90r>
- Donehoo, G. P. (1928/2018). *A History of the Indian villages and place names in Pennsylvania*. Williamsport, PA: Wennawoods Publishing.
- du Chesnoy, M. (1778). *Carte du théâtre de la guerre dans l'Amérique Septentrionale, pendant les années 1775, 76, 77, et 78: où se trouvent les principaux camps avec les différentes places et époques des batailles qui se sont données pendant ces campagnes*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vt68q>
- Duvall, C. S. (2011). "'Land' and life': Ethnoecology and ethnogeography as complementary approaches to the analyses of landscape perception". In D. Mark, A. G. Turk, N. Burenhult, & D. Stea (Ed.), *Landscape in language: Transdisciplinary perspectives* pp. 122-141. Amsterdam: John Benjamins Publishing Company.
- Eberhard, D. M., Simons, G. F., & Fennig, C. D. (2019). *Ethnologue: Languages of the World*. (22nd ed). Dallas, TX: SIL International. Accessed at <http://www.ethnologue.com>
- Ekwall, E. (1960). *The concise Oxford dictionary of English place names*. Oxford: Clarendon Press.
- English Place Name Society. (1924) *The chief elements used in English Place-Names*. Mawer, A. (Ed.)
- English Place Name Society. (1924) *Introduction to the survey of English place-names*. Mawer, A. & Stenton, F. (Eds.)
- Evans, L. (1749). *A map of Pensilvania, New-Jersey, New-York, and the three Delaware counties*. [map] Accessed at <https://www.loc.gov/resource/g3790.ar103500/>
- Fenton, W. (1989). *The Great Law and the Longhouse: A political history of the Iroquois Confederacy*. Norman, OK: University of Oklahoma Press.
- First Nations Information Governance Centre. (2020). *OCAP*. Accessed at First Nations Information Governance Centre: <https://fnigc.ca/ocap>
- First Peoples' Cultural Council. (2018). *About the Kwakwaka'wakw people*. Accessed at First Voices: <http://www.firstvoices.com/en/Kwakwala>
- First Peoples' Cultural Council. (2019). *Kanien'kéha (Mohawk)*. Accessed at First Voices: [https://www.firstvoices.com/explore/FV/sections/Data/Kanehsat%C3%A0:ke/Mohawk/Kanien'k%C3%A9ha%20\(Mohawk\)%20\[Eng\]](https://www.firstvoices.com/explore/FV/sections/Data/Kanehsat%C3%A0:ke/Mohawk/Kanien'k%C3%A9ha%20(Mohawk)%20[Eng])

- First Peoples' Cultural Council. (2019). *Kwak'wala*. Accessed at First Voices:
<https://www.firstvoices.com/explore/FV/sections/Data/Kwak'wala/Kwak%CC%93wala3wala/Kwak%CC%93wala>
- Franquelin, J. (1688). *Carte de l'Amerique Septentrionale: depuis le 25, jusqu'au 65° deg. de latt. & environ 140, & 235 deg. de longitude/par lean Baptiste Louis Franquelin, hydrographe du roy, à Québec en Canada*. [map] Accessed at
<https://www.loc.gov/resource/g3300.ct000668/?r=0.544,0.323,0.106,0.042,0>
- Frege, G. (1892/1952). "In sense and reference". In P. Beach and M. Black (Eds.), *Translations from the philosophical writings of Gottlob Frege*, pp. 36-56. Oxford: Blackwell. Accessed at <http://www.scu.edu.tw/philos/98class/Peng/05.pdf>
- French, J. (1860). *Gazetteer of the state of New York, embracing a comprehensive view of the geography, geology, and general history of the state, and a complete history and description of every county, city, town, village and locality: With full table of statistics*. Syracuse, NY: R. Pearsall Smith.
- Ganong, W. (1896). "A monograph of the place-nomenclature of the Province of New Brunswick". *Transactions of the Royal Society of Canada, contributions to the history of New Brunswick*, 4.
- Gehring, C., & Starna, W. (1988). *A journey into Mohawk and Oneida country, 1634-1635: The journal of Harmen Meynderts van den Bogaert* (1st ed.). Syracuse, N.Y: Syracuse University Press.
- Gelling, M. (1978). *Signposts to the past. Place-names and the history of England*. London: J.M. Dent & Son.
- Gelling, M. (1984). *Place-names in the landscape*. London: J.M. Dent & Sons, Ltd.
- Gess, R., Lyche, C. & Meisenburg, T. (2012). *Phonological variation in French: Illustrations from three continents*. Amsterdam/Philadelphia: John Benjamins.
- Gibson, J. (1762). *An accurate map of the British, French & Spanish settlements in Nth. America and the West Indies*. [map] Accessed at
<https://collections.leventhalmap.org/search/commonwealth:z603vp431>
- Goddard, C. (2019). "The natural semantic metalanguage approach". In B. Heine, & H. Narrog (Eds.) *The Oxford handbook of linguistic analysis* Oxford, UK: Oxford University Press.
<http://oxfordhandbooks.com/view/10.1093/oxfordhb/9780199544004.001.0001/oxfordhb-9780199544004-e-018>

- Golledge, R., Jacobson, D., Kitchin, R., & Blades, M. (2000). "Cognitive maps, spatial abilities, and human wayfinding." *Geographical Review of Japan*, 73(2), 93-104. doi:10.4157/grj1984b.73.93
- Google Maps. (2019). "Kykotsmovia, AZ to Oraibi, AZ". [map] Accessed at Google Maps: <https://goo.gl/maps/Ee9gBqTed762>
- Google Maps. (2019a). "Rochester, NY to Peoria, IL". [map] Accessed at <https://www.google.com/maps/dir//Rochester,+NY,+USA/@40.1026721,-90.510778,6.02z/data=!4m9!4m8!1m0!1m5!1m1!1s0x89d6b3059614b353:0x5a001ffc4125e61e!2m2!1d-77.6088465!2d43.1565779!3e0>
- Google Maps. (2019b). "Vischer Ferry to Scotia". [map] Accessed at Google Maps: <https://www.google.com/maps/place/Vischer+Ferry,+NY+12148,+USA/@42.7973572,-73.9685342,11z/data=!4m5!3m4!1s0x89de12a4acd3fbdb:0xfeb392d122edd5a9!8m2!3d42.7972995!4d-73.8284549>
- Government of Canada. (2019). *Treaty of Paris*. Accessed at The National Battlefields Commission - The Plains of Abraham: <http://bataille.ccbn-nbc.gc.ca/en/traite-de-paris.php>
- Government of Ontario. (2004). *The Mohawk language standardisation project*. Queen's Printer for Ontario.
- Hackett Fischer, D. (2008). *Champlain's dream*. New York, NY: Simon & Schuster.
- Hale, H. (1883). The Tutelo tribe and language. *Proceedings of the American Philosophical Society*, 21(114), 1-47.
- Hale, H. (1883/1989). *The Iroquois book of rites*. Ohsweken, ON: Irocrafts.
- Hall, N. (2011). "Vowel epenthesis". In M. Oostendorp, C. Ewen, E. Hume, & K. Rice (Eds.), *The Blackwell Companion to Phonology*. doi:10.1002/9781444335262.wbctp0067
- Halsey, F. (1901). *The old New York frontier*. New York: Charles Schribner's Sons.
- Harrington, J. (1916). *The ethnogeography of the Tewa Indians*. Washington, D.C.: Government Printing Office.
- Hart, J. P. (2008). "Evolving the Three Sisters: The changing histories of maize, bean, and squash in New York and the greater Northeast". In J. P. Hart (Ed.), *Current Northeast Paleoethnobotany II* (Ed.) New York State Museum Bulletin Series 512. Albany, NY: New York State Department of Education. DOI: [10.13140/2.1.1677.5362](https://doi.org/10.13140/2.1.1677.5362)

- Hayes, B. (2009). *Introductory phonology*. Chichester, UK: Blackwell & Wiley.
- Heckewelder, J. (1881). *History, manners, and customs of the Indian nations who once inhabited Pennsylvania and the neighbouring states*. Philadelphia: Historical Society of Pennsylvania.
- Hicks, D. (2013). "Four-field anthropology: Charter myths and time warps from St. Louis to Oxford". *Current Anthropology*, 54(6), 753-763.
- Hill, R. (2013, March). "Talking points on history and meaning of the Two Row Wampum Belt". Ohsweken, ON: Deyohahá:ge: Indigenous Knowledge Centre.
- Hill, S. (2017). *The clay we are made of*. Winnipeg: University of Manitoba Press.
- Hilliard d'Auberteuil, M.-R. (1782). *Carte de la Nouvelle York, y-compris les terres cédées du N. Hamp-Shire, sous le nom d'état de Vermont*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:6t053q22f>
- Hinton, J. (1780). *An Accurate map of New York in North America, from a late survey*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:6t053q240>
- Homann, J. B. (1763). *Amplissima regionis Mississipi*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vg948>
- Horn, K. (2018, July 3). "Tekarontakeh words to The Hague". Accessed at *Mohawk Nation News*: <https://mohawknationnews.com/blog/2018/07/03/tekarontakeh-words-to-the-hague/>
- Horn-Miller, K. (2013). "What does Indigenous participatory democracy look like: Kahnawa:ke's community decision making process". *Review of Constitutional Studies*(18), 111-132.
- Horn-Miller, K. and Ingram, R. (To appear). "Land and language: The O'nonna model for language revitalization". Presented at *FEL XXIII (2019) Causes of Language Endangerment: Looking for answers and finding solutions to the global decline in linguistic diversity*; University of Sydney, Sydney, Australia.
- Huden, J. C. (1957, January). *Iroquois place-names in Vermont*. *Vermont History*, 25(1). 66-80.
- Huden, J. C. (1959). *Some early maps depicting the Lake Champlain area, 1542-1792*. Self-published by author.
- Indian Time. (2008, November 20). "TAUNY Heritage Award to Akwesasne man". Akwesasne, NY.

- Ingram, R. R. (2018). "Mapping Indigenous landscape perceptions". *Endangered languages and the land: Mapping landscapes of multilingualism; Proceedings of FEL XXII/2018 (Reykjavík, Iceland)* pp. 6–32. London: EL & EL Publishing.
- Ingram, R., Anonby, E., & Taylor, D. (2019). "Mapping Kanyen'kéha (Mohawk) ethnophysiographical knowledge". In D. Taylor, E. Anonby, & K. Murasugi, *Further developments in the theory and practice of cybercartography* pp. 475-506. Cambridge: Elsevier.
- International Phonetic Association. (1999). *Handbook of the International Phonetic Association: A guide to the use of the International Phonetic Alphabet*. Cambridge, UK: Cambridge University Press.
- InterTribal Council of Arizona. (2011). "Hopi tribe". Accessed at InterTribal Council of Arizona: http://itcaonline.com/?page_id=1162
- Isachsen, Y., Landing, J., Lauber, L., & Rogers, W. (2000). *Geology of New York: A simplified account*. Albany, NY: New York State Museum/Geological Survey, State Education Dept., University of the State of New York.
- Jacobs, J. (2009). *The colony of New Netherland: A Dutch settlement in seventeenth-century America*. Cornell, NY: Cornell University Press.
- Jaenen, C. (1966). "Problems of assimilation in New France, 1603-1645". *French Historical Studies*, 4(3), 265-289. Accessed at <https://www.jstor.org/stable/28590>
- Jett, S. (2001). *Navajo placenames and trails of the Canyon de Chelly System, Arizona*. New York, NY: Peter Lang, Inc.
- Johnson, B. (2019). "Winchester, ancient capital of England". Accessed at *Historic UK*: <https://www.historic-uk.com/HistoryMagazine/DestinationsUK/Winchester-Ancient-Capital-of-England/>
- Johnson, K., Kang, S., & Cibelli, E. (2013). "Perceptual compensation with familiar and unfamiliar rounding coarticulation". *The Journal of the Acoustical Society of America*, 134. doi:10.1121/1.4830721
- Johnston, J. (1916). *The place names of England and Wales*. New York, NY: E. P. Dutton and Co.
- Julian, C. (2010). "A history of the Iroquoian languages". Winnipeg, MB: University of Manitoba.

- KahnawakeTV. (2012, May 1). "Pre-contact". *Seigneurie of Sault St. Louis land grievance*. [Web Series] Accessed at You Tube:
<https://www.youtube.com/watch?v=QhGwvKDZbxs&list=PLA0F250E2011FB964>
- Kelsay, I. T. (1984). *Joseph Brant, 1743-1807, Man of two worlds*. Syracuse, NY: Syracuse University Press.
- Kincade, M., & Powell, J. (1976). "Language and the Prehistory of North America". *World Archeology*, 8(1), 83-100.
- Kitchin, T. (1756). *A map of the eastern part of the province of New York with part of New Jersey, & c.* [map] Accessed at
<https://collections.leventhalmap.org/search/commonwealth:z603vq348>
- Kitchin, T. (1778). *Part of the counties of Charlotte and Albany, in the province of New York*. [map] Accessed at
<https://collections.leventhalmap.org/search/commonwealth:wd376841x>
- Kytö, M. (2004). "The emergence of American English". In R. Hickey (Ed.), *Legacies of colonial English* pp 121-157. New York: Cambridge University Press.
- Laboratoire de Linguistique Formelle. (2015). "Abbreviation of morphological glosses". Université de Paris. Accessed at
http://www.llf.cnrs.fr/sites/llf.cnrs.fr/files/statiques/Abbreviation_gloses-eng.pdf
- Leavitt, J. (2008). "Linguistic relativities". In C. Jourdan, & K. Tuite (Eds.), *Language, culture and society: Key topics in linguistic anthropology* pp. 47-81. Cambridge: Cambridge University Press.
- Lee, J., Seo, S., & Lee, C. (2015). "Geotechnical and geophysical characteristics of muskeg samples from Alberta, Canada". *Engineering Geology*, 195, 135-141.
- Levinson, S. (2008). Landscape, seascape and the ontology of places on Rossel Island, Papua New Guinea. *Language Sciences*, 30(2-3), 256-290.
- Lexico.com (2019). "Cow". Oxford University Press. Accessed at
<https://www.lexico.com/en>
- Lodge, J. (1778). *An exact map of New England, New York, Pensylvania & New Jersey, : from the latest surveys*. [map] Accessed at
<https://collections.leventhalmap.org/search/commonwealth:z603vg37n>
- Long, J. (1791). *Voyages and travels of an Indian interpreter and trader*. London: Robson. Accessed at <https://archive.org/details/voyagestravelsof00long>

- Longmore, P. K. (2007). "Good English without idiom or tone: The colonial origins of American Speech." *Journal of Interdisciplinary History*, 37(4). Accessed at muse.jhu.edu/article/210263
- Loring, J. (1756). *A draught of Lake George, and part of Hudsons River taken September 1756*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:q524n816n>
- Lotter, T. (1748). *Pensylvania, Nova Jersey et Nova York cum regionibus ad Fluvium Delaware in America sitis*. [map] <https://www.loc.gov/resource/g3820.ct003451/?r=-0.049,0.078,0.495,0.195,0>
- Lotter, T. C. (1756). *Pensylvania Nova Jersey et Nova York cum regionibus ad Fluvium Delaware in America sitis*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:8049g9694>
- Louis, R. P. (2007). "Can you hear us now? Voices from the margin: using Indigenous methodologies in geographic research". *Geographical Research*, 45(2), 130-139.
- Louis, R. P. (2011). "Hawaiian storied place names". In D. M. Mark, A. G. Turk, N. Burenhult, & D. Stea (Eds.), *Landscape in Language: Transdisciplinary perspectives* pp. 169-18. Amsterdam: John Benjamins Publishing Company,.
- Lounsbury, F. (1960). *Iroquois place-names in the Champlain Valley*. Report of the New York-Vermont Interstate Commission, University of the State of NY, State Education Department, Albany.
- Lucy, J. (2015). "Sapir-Whorf hypothesis". In *International Encyclopedia of the Social & Behavioral Sciences* pp. 903–906. Accessed at <https://doi.org/10.1016/B978-0-08-097086-8.52017-0>,
- Lukaniec, M. (2018). *The elaboration of verbal structure: Wendat (Huron) verb morphology*. Accessed at <https://escholarship.org/uc/item/2ss758h8>
- Maffi, L. (2001). *On biocultural diversity: Linking language, knowledge, and the environment*. Washington, D.C.: Smithsonian Institution Press.
- Malinowski, B. (1922/2015). *Argonauts of the Western Pacific*. New York: Routledge.
- Manns, J., & Eichenbaum, H. (2009). "A cognitive map for object memory in the hippocampus". *Learning and Memory*, 16(10), 616–624.
- Maracle, D. (1992). *One thousand useful Mohawk words*. San Mateo, CA: MPS Multimedia, Inc.
- Maracle, D. (2003). *Kanyen'keha tewatati*. London, ON: University of Western Ontario.

- Maracle, D. K. (2001). *Karoron ne owennahshonha: A Mohawk thematic dictionary*. London, ON: Kenyen'keha Books.
- Marcoux, J. (n.d.). Mohawk dictionary. *Unpublished manuscript*. (M. Smith, Ed.)
- Mark, D., & Turk, A. G. (2017). "Ethnophysiography". In D. Richardson, N. Castree, M. F. Goodchild, A. Kobayashi, W. Liu, & R. Marston (Ed.), *International encyclopedia of geography: People, the Earth, environment and technology*. doi:10.1002/9781118786352.wbieg0349
- Martin, S. (1939). "Indian derivations of Connecticut place-names". *New England Quarterly*, 12(2), 364-369.
- Matthiessen, P. (1980, September 14). "The siege of the Mohawks". *Washington Post*. Washington, D.C. Accessed at <https://www.washingtonpost.com/archive/opinions/1980/09/14/the-siege-of-the-mohawks/dc8afb36-fc06-473d-a7c2-fa5be6821cbc/>
- Medcalfe, M. (1777). *Lake Champlain and Lake George, and the country between the Hudson and the lakes on the west, and Connecticut River on the east*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:q524n8143>
- Metro-Roland, M. (2014). "Habits of interpretation: The semiotics of place names". *Sea, sea names and peace in East Asia: Proceedings of the 20th International Seminar on Sea Names, Gyeongju, Korea, 26-29 October 2014* pp. 79-91. Seoul: The Society for East Sea.
- Metz, E. R. (1995). *Sainte Marie among the Iroquois: Guide and history*. Syracuse, NY: Midgley Printing, Inc.
- Meyer, J. (2015). *Whistled languages*. Berlin: Springer.
- Michelson, G. (1973). *A thousand words of Mohawk*. Ottawa: National Museum of Man, National Museums of Canada.
- Michelson, K. (1989). "Invisibility: Vowels without a timing slot in Mohawk". In D. Gerds, & K. Michelson (Eds.), *Theoretical perspectives on Native American languages* pp. 38-69. New York: SUNY Press.
- Milone & MacBroom, Inc. (2014). *Emergency transportation infrastructure recovery water basin Assessment and flood hazard mitigation alternatives*. Accessed at https://wri.cals.cornell.edu/sites/wri.cals.cornell.edu/files/shared/documents/2014_Nowadaga%20Basin.pdf

- Merriam-Webster. (2019). "Customhouse". Accessed at Merriam-Webster:
<https://www.merriam-webster.com/dictionary/customhouse>
- Mitchell, J., Kitchin, T., Jeffreys, T., & Fadden, W. (1774). *A map of the British and French dominions in North America, with the roads, distances, limits, and extent of the settlements*. [map] Accessed at <https://www.loc.gov/resource/g3300.ar004200/>
- Mithun, M. (1984). "Principles of naming in Mohawk". *Proceedings of the American Ethnological society*, 4, 40-53.
- Mithun, M. (1996). "The Mohawk Language". In J. Maurais, *Quebec's Aboriginal languages: History, planning and development* pp. 159-173. Clevedon, Avon, England: Multilingual Matters
- Mithun, M. (2000). "Incorporation". In G. Booij, C. Lehmann, & M. Joachim (Eds.), *Morphologie/Morphology: A handbook on inflection and word formation: Ein internationales Handbuch zur Flexion und Wortbildung*, 1, pp. 916-928. Berlin: Walter de Gruyter,
- Mithun, M. (2000a). "Noun and verb in Iroquoian languages: Multicategorisation from multiple criteria". In B. Comrie, & P. Vogel (Eds.) *An anthology of word classes* pp. 379-420. Berlin: Mouton de Gruyter.
- Mithun, M. (2004). "Mohawk and the Iroquoian languages". In *Routledge Encyclopedia of Linguistics* pp. 1-4. New York: Routledge.
- Mithun, M. (2006). "Voice without subjects, objects or obliques: Manipulating argument structure in Agent/Patient systems". In T. Tsunoda, Y. Nishimitsu, & T. Kageyama, (Eds.) *Voice and grammatical Relations* pp. 213-236. Amsterdam: Johns Benjamins.
- Mithun, M., & Corbett, G. (1999). "The effect of noun incorporation on argument structure". In L. Mereu (Ed.), *The Boundaries of Morphology and Syntax*. Amsterdam: Johns Benjamins pp. 49-71.
- Miyamoto, Y. (2013). "Culture and analytic versus holistic cognition: Toward multilevel analyses of cultural influences". In *Advances in Experimental Social Psychology*, 47. Accessed at <http://dx.doi.org/10.1016/B978-0-12-407236-7.00003-6>
- Mohawks of the Bay of Quinte. (2019). "Home". Accessed at <https://mbq-tmt.org/>
- Montrésor, J. (1777). *A map of the province of New York, with part of Pensilvania, and New England: from an actual survey by Captain Montresor, engineer, 1775*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vq40d>

- Morgan, L. (1851). *League of the Ho-dé-no-sau-nee, or Iroquois*. Rochester, NY: Sage & Brother.
- Morin, Y. C. (2009). "Histoire des systèmes phonique et graphique du français". In E. Gerhard, M.-D. Gleßgen, C. Schmitt, & W. Schweickard (Ed.), *Romanische Sprachgeschichte / Histoire linguistique de la Romania – Ein internationales Handbuch zur Geschichte der romanischen Sprachen / Manuel international d'histoire linguistique de la Romania*, 3 pp. 2907–2926. Berlin/New York: Mouton de Gruyter.
- Morin, Y.-C. (1996). "The origin and development of the pronunciation of French in Quebec". *The Origins and Development of Emigrant Languages* pp. 243-275. Odense: Odense University Press,
- Nash, D., & Simpson, J. (2012). "Toponymy: recording and analyzing placenames in a language area". In N. Thieberger (Ed.), *The Oxford Handbook of Linguistic Fieldwork* pp. 392-404. Oxford: Oxford University Press.
- Nature Conservancy. (2019). "Creating a climate-resilient forest on Tug Hill". Accessed at The Nature Conservancy: <https://www.nature.org/en-us/about-us/where-we-work/united-states/new-york/stories-in-new-york/creating-a-climate-resilient-forest-on-tug-hill/>
- New York State Department of Health. (2006). "Vital statistics". Accessed at New York State Department of Health: https://www.health.ny.gov/statistics/vital_statistics/2006/table02.htm
- New York State Department of Transportation. (2013). "Geology of New York state". In *Geotechnical Design Manual*. Accessed at https://www.dot.ny.gov/divisions/engineering/technical-services/geotechnical-engineering-bureau/geotech-eng-repository/GDM_Ch-3_Geology_of_NY.pdf
- New York State Museum. (2019). "Not just another pretty place: The landscape of New York". Accessed at New York State Museum: <http://www.nysm.nysed.gov/exhibitions/not-just-another-pretty-place-landscape-new-york>
- Noah Webster House. (2019). "Noah Webster history". Accessed at <https://noahwebsterhouse.org/noahwebsterhistory/>
- Norman, J. (1785). *An accurate map of the four New England states*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:3f462x889>

- NY State Department of Environmental Conservation. (2018). "Watersheds". Accessed at Department of Environmental Conservation: <https://www.dec.ny.gov/lands/26561.html>
- O'Callaghan, E. (1849). *The documentary history of the state of New-York*, Vol. 1. Albany, NY: Weed, Parsons & co.
- O'Callaghan, E. (1850). *The documentary history of the state of New-York*, Vol. 4. Albany, NY: Weed, Parsons & Co.
- O'Callaghan, E. (1853). *Documents relative to the colonial history of the state of New-York: procured in Holland, England, and France*. Albany, NY: Weed, Parsons. Accessed at <https://lccn.loc.gov/01022114>
- O'Driscoll, J. (2017). "Landscape prominence: Examining the topographical position of Irish hillforts using a cumulative viewshed approach". *Journal of Archaeological Science*, 16, 73-89. Accessed at <http://www.sciencedirect.com/science/article/pii/S2352409X17302742>
- Oneida Nation on the Thames. (2016). "No title". Accessed at Oneida Nation on the Thames: <https://oneida.on.ca/>
- Onondaga Nation. (2018). "About Us". Accessed at Onondaga Nation: www.onondaganation.org/aboutus/
- Onondaga Nation. (2018). "Language." Accessed at Onondaga Nation: <https://www.onondaganation.org/culture/language>
- Onondaga Nation. (2019). "Hiawatha Belt". Accessed at Onondaga Nation: <https://www.onondaganation.org/culture/wampum/hiawatha-belt/>
- Ontario Ministry of Education. (2011). "A support document for the reaching of language patterns: Oneida, Cayuga and Mohawk". *Native Languages Resource Guide*. Ontario: Ontario Ministry of Education. Accessed at http://www.edu.gov.on.ca/eng/curriculum/secondary/NativeLangs_OneidaCayugaMohawk.pdf
- Palmer, P. (1866). *History of Lake Champlain: from it first exploration by the French in 1609, to the close of the year 1814*. Albany: J. Munsell.
- Parkman, F., & Levin, D. (1983). *France and England in North America: Pioneers of France in the New World*. New York: Literary Classics of the United States, Inc.
- Parmenter, J. (2007, January). "After the Mourning Wars: The Iroquois as allies in Colonial North American campaigns, 1676-1760". *The William and Mary Quarterly*, 64(1), 39-76.

- Parmenter, J. (2010). *The Edge of the Woods: Iroquoia, 1534-1701*. East Lansing: Michigan State University Press.
- Pearson, J. (1883). *A history of the Schenectady patent in the Dutch and English times*. Albany, NY: J. Mansell's Sons. Accessed at <https://play.google.com/books/reader?id=tEYIAAAAQAAJ&hl=en&pg=GBS.PP1>
- Peplinski, L. (2019). "Place names". In Canadian Geographic (Ed.) *Indigenous Peoples' Atlas of Canada*. Accessed at: <https://indigenouseoplesatlasofcanada.ca/article/place-names/>
- Pfister, F. (1759). *A Map of the province of New-York & part of New England with a part of New France the whole composed from actual surveys*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:hx11z315p>
- Popple, H. (1733). *A Map of the British Empire in America. (Sheet 6)*. [map] Accessed at <https://www.davidrumsey.com/luna/servlet/s/k555k7>
- Porter, T. S. (2006). *Kanatsiohareke: Traditional Mohawk Indians return to their ancestral homeland*. Columbus, Ohio: Bowman Books.
- Postal, P. (1979). *Some syntactic rules in Mohawk*. New York: Garland Publishing.
- Prince, J. D. (1900). "Some forgotten Indian place-names in the Adirondacks". *The Journal of American Folklore*, 13(49), 123-128.
- Radding, L. & Western, J. (2010). "What's in a name? Linguistics, geography, and toponyms". *The Geographical Review*, 100(3), 394-412.
- Randall, R. (2001). *Place names: How they define the world—and more*. Lanham, MD: The Scarecrow Press, Inc.
- Rayburn, A. (1997). *Place names of Ontario*. Toronto: University of Toronto Press.
- Rayburn, A. (2001). *Naming Canada: stories about Canadian place names*. Toronto: University of Toronto Press.
- Rogers, R. (1756). *A map of Lake George from Fort William Henry to Ticonderoga*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:hx11z337q>
- Russell, J. (1795). *Map of the northern, or, New England states of America, comprehending Vermont, New Hampshire, District of Main, Massachusetts, Rhode Island, and Connecticut*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:j3860823c>

- Ruttenber, E. (1906). *Footprints of the red man: Indian geographical names in the valley of Hudson's river, the valley of the Mohawk, and on the Delaware, their location, and the probable meaning of some of them*. Newburgh, NY: New York State Historical Association.
- Ruttenber, E. (1872). *History of the Indian tribes of Hudson's River*. Accessed at <https://archive.org/details/ruttenberindians00ruttrich/page/n12/mode/2up>
- Sainte-Marie among the Hurons. (2019). "The Sainte-Marie story". Accessed at Sainte-Marie among the Hurons: <http://www.saintemarieamongthehurons.on.ca/sm/en/HistoricalInformation/TheSainteMarieStory/index.htm>
- Sanson, N. (1656). *Le Canada, ou Nouvelle France, &c.* [map] Accessed at <http://digital.library.mcgill.ca/pugsley/IMAGES/3%20-%20300%20DPI%20JPGs/pugs05.jpg>
- Sanson, N. (1696). *Le Canada, ou, Partie de la Nouvelle France : contenant la terre de Labrador la Nouvelle France, les isles de Terre Neuve, de Nostre Dame, &c. A Amsterdam, chez Pierre Mortier, avec privilege.* [map] Accessed at <http://digital.library.mcgill.ca/pugsley/IMAGES/3%20-%20300%20DPI%20JPGs/Pugs20.jpg>
- Sapir, E. (1921). *Language*. New York: Harcourt. Accessed at <https://www.ugr.es/~fmanjon/Sapir,%20Edward%20-%20Language,%20An%20Introduction%20to%20the%20Study%20of%20Speech.pdf>
- Saussure, F. (1966). *Course in General Linguistics*. (C. Bally, & A. Sechehaye, Ed.) New York: McGraw-Hill.
- Sauthier, C. (1778). *Mappa geographica provinciæ Nova Eboraci ab Anglis New-York*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vq42z>
- Sauthier, C. J. (1779). *A chorographical map of the Province of New-York in North America, divided into counties, manors, patents and townships*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vs06h>
- Sauthier, C. J., & Faden, W. (1776). *A map of the Province of New-York, reduc'd from the large drawing of that province, compiled from actual surveys by order of His Excellency William Tryon, Esqr. Captain General & Governor of the same*. [map] London: W. Fadden. Accessed at <https://www.loc.gov/resource/g3800.ar104703/>

- Sauthier, C. J., & Lotter, M. A. (1777). *A map of the provinces of New-York and New Jersey, with a part of Pennsylvania and the province of Quebec*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:9s161b886>
- Sauthier, C. J., Fadden, W., & Ratzer, B. (1776). *A map of the province of New-York, reduc'd from the large drawing of that province, compiled from actual surveys by order of His Excellency William Tryon, Esqr. Captain General & Governor of the same*. [map] Accessed at <https://www.loc.gov/resource/g3800.ar104703/>
- Schlüter, J. (2017). "Phonology". In A. Bergs, & L. Brinton (Eds.), *Early Modern English*. De Gruyter, Inc. pp. 27-46. Accessed at <http://ebookcentral.proquest.com/lib/oculcarleton-ebooks/detail.action?docID=5116128>
- Schoolcraft, H. (1875). *Report on Aboriginal names and the geographical terminology of New York*. New York, NY: New York State Historical Society.
- Scott, D. (1997). *Ontario place names*. Edmonton: Lone Pine Publishing.
- Secretariat of the Convention on Biological Diversity. (2007). *Article 8(j): Traditional Knowledge and the Convention*. Accessed at <https://www.cbd.int/traditional/>
- Seutter, M. (1750). *Partie orientale de la Nouvelle France ou du Canada avec l'Isle de Terre-Neuve et de Nouvelle Ecosse, Acadie et Nouv. Angleterre avec fleuve de St. Laurence*. [map] Accessed at <http://digital.library.mcgill.ca/pugsley/IMAGES/3%20-%20300%20DPI%20JPGs/Pugs29.jpg>
- Shirley, W., & Webb, D. (1758). *The course of the Wood Creek from the Mowhock River at the Onoida or Great Carrying Place to the Onoida Lake. Representing the forts built on the Carrying Place by order of General Shirley: and afterwards destroyed by Major General Webb*. [web] Accessed at <https://collections.leventhalmap.org/search/commonwealth:hx11z347z>
- Shorto, R. (2004). *The island at the center of the world: The epic story of Dutch Manhattan and the forgotten colony that shaped America*. New York: Doubleday.
- Six Nations Council. (2008). "The Haldimand Treaty of 1784". Accessed at Six Nations Lands & Resources: <http://www.sixnations.ca/LandsResources/HaldProc.htm>
- Six Nations Polytechnic. (2019). "Speakers". Accessed at Six Nations Polytechnic: <https://www.snpolytechnic.com/c4c/speakers>
- Skenandoah. (1847). "Letters on the Iroquois". *American Whig Review*, 5. (G. Colton, & J. Whelpley, Eds.) New York: George H. Colton. Accessed at

https://books.google.ca/books?id=o2lCAAAAIAAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

- Smith, C., Reid, J., & Wayland, L. (1796). *An accurate map of the United States of America: According to the Treaty of peace of 1783*. [map] Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vg930>
- Snow, D. (1996). *The Iroquois*. Malden, MA: Blackwell Publishing.
- Snow, D. R., Gehring, C. T., & Starna, W. A. (Eds.). (1996). *In Mohawk country: Early narratives about a Native People*. Syracuse, NY: Syracuse University Press.
- Stewart, G. (1945). *Names on the land: a historical account of place-naming in the United States*. New York: Random House.
- Stewart, G. (1975). *Names on the globe*. Oxford: Oxford University Press.
- Stirling, M. (1963). "John Peobody Harrington". *American Anthropologist*, 65. Accessed at <https://anthrosource.onlinelibrary.wiley.com/doi/pdf/10.1525/aa.1963.65.2.02a00110>
- Tarr, R. (1902). *The physical geography of New York state*. New York: The Macmillan Co.
- Thornton, T. (1997). "Anthropological studies of Native American place naming." *American Indian Quarterly*, 21(2), 209-228.
- Tirion, I. (1769). *Nieuwe kaart van Kanada: de landen aan de Hudsons-Baay en de noordwestelyke deelen van Noord-Amerika*. [map] Accessed at <http://www.swaen.com/zoomV2.php?id=31263&referer=antique-map-of.php>
- Trumbull, J. (1870). *The composition of Indian geographical names: illustrated from the Algonkin languages*. Hartford: Lockwood & Brainard.
- Tryckeriet, K. (1777). *Krigs theatren i America*. [map] Stockholm: Kungliga Tryckeriet. Accessed at <https://collections.leventhalmap.org/search/commonwealth:z603vv46w>
- Turk, A., Mark, D., O'Meara, C., & Stea, D. (2012). "Geography: Documenting terms for landscape features". In N. Thieberger (Ed.), *The Oxford handbook of linguistic fieldwork* pp. 368-391. Oxford: Oxford University Press.
- Tuscarora Nation of North Carolina. (2019, April). "Tribal history". Accessed at Tuscarora Nation of North Carolina: <https://tuscaroranationnc.com/tribal-history>

- U.S. Board on Geographic Names. (2019). *Geographic Names Information System (GNIS)*. Accessed at U.S. Board on Geographic Names: <https://geonames.usgs.gov/apex/f?p=138:1:5716050197231>
- UNESCO. (2017). *"What Is local and Indigenous Knowledge"*. Accessed at <http://www.unesco.org/new/en/naturalsciences/>
- University of Nottingham. (2019). *"Key to English place names"*. Accessed at Key to English Place Names: <http://kepn.nottingham.ac.uk/#>
- University of Oxford. (2019). *"History"*. Accessed at University of Oxford: <https://www.ox.ac.uk/about/organisation/history?wssl=1#>
- van den Bogaert, H. M. (1988). *A Journey into Mohawk and Oneida country, 1634-1635*. (C. T. Gehring, & W. A. Starna, Eds.) Syracuse, NY: Syracuse University Press.
- van der Sijs, N. (2009). *Cookies, coleslaw, and stoops: The influence of Dutch on the North American languages*. Amsterdam: Amsterdam University Press.
- Van Loon, J. (1986). *Historische fonologie van het Netherlands*. Leuven: Acco.
- Vaugondy, G. (1758). *Partie de l'Amérique septent. Qui comprend la Nouvelle France ou le Canada*. [map] Accessed at <https://www.geographicus.com/P/AntiqueMap/CanadaGreatLakes-vaugondy-1778>
- Ville de Montréal. (2007). *"Ville-Marie 1642-1665"*. Accessed at Montréal, 500 Years of History in Archives: http://www2.ville.montreal.qc.ca/archives/500ans/portail_archives_en/rep_chapitre2/chapitre2-1.html
- Walker, D. (1984). *The pronunciation of Canadian French*. Ottawa: University of Ottawa Press.
- Wallace, P. (1965). *Indian paths of Pennsylvania*. Harrisburg: Pennsylvania Historical and Museum Commission.
- Waterman, T. T. (1922). *"The geographical names used by the Indians of the Pacific Coast"*. *Geographical Review*, 12(2) 175-194.
- West, R. (1954). *"The term 'bayou' in the United States: A study in the geography of place names"*. *Annals of the Association of American Geographers*, 14(1), 63-74.
- Whitbeck, R. (1911). *"Regional peculiarities in place names"*. *Bulletin of the American Geographical Society*, 42, 273-28.

- Whiteley, P. (1992). "Burning culture: Auto-da-fé a Oraibi". *History and Anthropology*, 6(1), 46-85.
- Williams, K. (2018). *Kayanerenkó:wa: The Great Law of Peace*. Winnipeg: University of Manitoba Press.
- Williams, S. (1906). "The organization of Sullivan's expedition". In *Footprints of the Red Man* pp. 30-37. Newburgh: Newburgh Journal Print.
- Williamson, R. (2007). "Otinontsiskiaj ondaon". In R. Chacon, & D. Dye, *The taking and displaying of human body parts as trophies by Amerindians* pp. 190-221. Boston: Springer.
- Wolfram, W., & Schilling, N. (2015). *American English: Dialects and variation*. John Wiley & Sons. Accessed at <https://ebookcentral-proquest-com.proxy.library.carleton.ca/lib/oculcarleton-ebooks/detail.action?docID=4042995>.
- Woodbury, H. (1981). "The Loss of a Phoneme". *International Journal of American Linguistics*, 47(2), 103-120.