Language Contact on Both Sides of the Bering Strait

A Comparative Study of Central Siberian Yupik-Russian and Central Alaskan Yupik-English Language Contact

Daria Morgounova

Supervisors: Peter Harder
            Michael Fortescue

Københavns Universitet
Det Humanistiske Fakultet
Engelsk Institut
May 2004
Abstract: Language Contact on Both Sides of the Bering Strait: A Comparative Study of CSY-Russian and CAY-English Language Contact

The Bering Strait region is a unique place within the Eskimo world as home for five Yupik Eskimo languages, which are found nowhere else but here. Central Alaskan Yup’ik (CAY) and Central Siberian Yupik (CSY) represent the two largest, in the terms of number of speakers, and best-preserved Yupik languages. Today, CSY is spoken on the Chukchi Peninsula, the Russian Far North (RFN) and on St. Lawrence Island, Alaska. CAY is spoken in southwestern parts of the Alaska Peninsula. Once a property of the Russian Empire, Alaska passed to the United States in the 1867. Since then, the Bering Strait became not only a geographical but also a political borderline between what once was a unified Yupik Eskimo territory. The political separation of the Yupik communities, followed by the invasion of the Americans into the CAY territory in the late 1880s and consolidation of the Soviet power in Chukotka in the early 1920s signaled a major turn in the evolution of the Yupik Eskimo languages. Over the past century, the contact of Yupik languages with English and Russian, on each side respectively, has been intense.

The time of the contact of CSY RFN with Russian and of CAY with American English as well as the cultural pressure imposed on the Eskimo people by the colonial groups has been approximately the same. Yet, the linguistic situation on both sides of the Bering Strait is not alike. Under the influence of Russian, CSY RFN has greatly declined. A great many Russian loanwords have entered the language, and there has been some phonological and syntactic interference from Russian into CSY RFN. The reopening of the Russian-American border in 1988 (completely closed in 1948) and reestablishment of visits between the ‘Russian’ and ‘American’ Eskimos have increased the use of Yupik by the Eskimo population. The research on CSY use among the Yupik population of the RFN that I carried out during my fieldwork in Chukotka in March-April 2003 showed that interference from Yupik into Russian and Russian-Yupik code-switching have become quite common, especially among those of 40 and above. However, the Russian influence in the area is still very strong. For many Yupik people today (especially those under the age of forty), Russian is the only well-known and regularly used language. In Alaska, the situation is somewhat different. The first seventy-five (or more) years of the CAY Eskimos contact with Americans have brought little change to the Yup’ik language. Until the last few decades, the majority of the Yup’ik population successfully spoke their native tongue along with English. While their English had some slight interference from Yup’ik, their Yup’ik remained rather pure, including only some sixty English words adapted into the language (approximately three times less than the amount of Russian loans adapted by the language during the period of Russian dominance in the area in 1830s-1880s). During the last few decades, however, the influence of the English language on CAY has increased and there has been a sharp decline of CAY and acceleration of the Yup’ik-English code-switching. As a result, a great many English words have entered the Yup’ik language.

This study puts CSY-Russian and CAY-English contacts into a comparative perspective and discusses different linguistic and non-linguistic (social, political, demographical, etc.) factors that have influenced the linguistic outcome of these contacts. The discussion is based upon the analytical framework proposed by Thomason and Kaufman (1988) and the principle that socio-linguistic constraints are more important for the study of language contact and language change than are linguistic constraints. It argues for the positive applicability of Thomason and Kaufman’s theoretical model, yet emphasises that some specific historical circumstances of the Bering Strait have had an effect that is not entirely predictable by their model.
# Contents

<table>
<thead>
<tr>
<th>Acknowledgements</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter 1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1. Central Siberian Yupik and Central Alaskan Yup’ik</td>
<td>1</td>
</tr>
<tr>
<td>1.2. Approach to the Study</td>
<td>4</td>
</tr>
<tr>
<td>1.3. Outline of the Chapters</td>
<td>7</td>
</tr>
<tr>
<td>1.4. Data and Field Methods</td>
<td>8</td>
</tr>
<tr>
<td>Chapter 2. The Yupik Languages</td>
<td>9</td>
</tr>
<tr>
<td>2.1. Genetic Relation</td>
<td>9</td>
</tr>
<tr>
<td>2.2. The Vocabulary</td>
<td>12</td>
</tr>
<tr>
<td>Chapter 3. The Yupik Typology and its Comparison with English and Russian</td>
<td>16</td>
</tr>
<tr>
<td>3.1. Phonology</td>
<td>17</td>
</tr>
<tr>
<td>3.1.1. Vowel System</td>
<td>17</td>
</tr>
<tr>
<td>3.1.2. Consonant System</td>
<td>18</td>
</tr>
<tr>
<td>3.1.3. Rhythmic Pattern</td>
<td>19</td>
</tr>
<tr>
<td>3.1.4. Syllable Composition</td>
<td>20</td>
</tr>
<tr>
<td>3.2. Morphology</td>
<td>20</td>
</tr>
<tr>
<td>3.2.1. Category of Number and Gender</td>
<td>22</td>
</tr>
<tr>
<td>3.2.2. Case Distinction</td>
<td>22</td>
</tr>
<tr>
<td>3.2.3. Adjectives</td>
<td>23</td>
</tr>
<tr>
<td>3.2.4. Verbal Morphology</td>
<td>23</td>
</tr>
<tr>
<td>3.2.4.1. Tense</td>
<td>24</td>
</tr>
<tr>
<td>3.2.4.2. Aspect</td>
<td>24</td>
</tr>
<tr>
<td>3.2.4.3. Mood</td>
<td>25</td>
</tr>
<tr>
<td>3.2.5. Personal Pronouns and Determiners</td>
<td>25</td>
</tr>
<tr>
<td>3.2.6. Definite/Indefinite Meaning</td>
<td>26</td>
</tr>
<tr>
<td>3.3. Syntax</td>
<td>26</td>
</tr>
<tr>
<td>3.4. Typological Distance</td>
<td>26</td>
</tr>
<tr>
<td>Chapter 4. Socio-Historical Aspects of CSY and CAY Contact with English and Russian</td>
<td>30</td>
</tr>
<tr>
<td>4.1. Prior to the 20th Century</td>
<td>31</td>
</tr>
<tr>
<td>4.1.1. The Chukchi Peninsula: CSY and its Contact with Chukchi</td>
<td>31</td>
</tr>
<tr>
<td>4.1.2. Russian Dominance in Alaska</td>
<td>33</td>
</tr>
<tr>
<td>4.1.3. The End of the Century: A Comparison</td>
<td>35</td>
</tr>
<tr>
<td>4.2. CSY-Russian and CAY-English Contact in the First half of the 20th century</td>
<td>36</td>
</tr>
</tbody>
</table>
4.2.2. Consolidation of the Soviet Power in Chukotka
4.2.3. Bilingualism-in-Formation
4.3. The 1950s-1970s: The Turning Point
4.3.1 Emergence of Bilingual Education in Alaska
4.3.2. Russification Policies in Chukotka
4.3.3. The Crucial Gap
4.4.1. Central Alaskan Yupik
4.4.2. The Revival of CSY RFN

Chapter 5. Outside Influence on CSY and CAY
5.1. Outside Influence on CSY
5.2. Outside Influence on CAY
5.3. Language Transformation
5.4. Mechanisms of Interference and Verbal Strategies

Conclusion

References

Supplementary Reading

Appendix I The Cyrillic Equivalents of the Latin Letter Orthography for Yupik
Appendix II Questionnaire Research
Appendix III Demography
Acknowledgements

This thesis was inspired by the research on the Chaplinski dialect of Central Siberian Yupik that I carried out during my fieldwork in Chukotka, the Russian Far North in March-April 2003. I am especially grateful to Ph.D. student Bent Nielsen at the department of Eskimology, University of Copenhagen, who has introduced me to the Eskimo culture and offered me an opportunity to go to Chukotka. It was due to him and the Third Danish Chukotka-Expedition that I was able to accomplish my research.

I would like to express my deepest gratitude to Professor Michael Fortescue who guided me during the preparation for the research and who has given generosity of his time and talent to supervise me in my study of the Yupik languages and language contact on both sides of the Bering Strait.

I am also grateful to Anna Berge and Professor Steven Jacobson at the Alaska Native Language Center, University of Alaska, who have been kind to provide me with supplemented up-to-date information on Central Alaskan Yup’ik.

My sincere thanks are to Professor Peter Harder and to my lector at the Department of Eastern-European Languages, Ph.D. student Jon Kyst. I would like to acknowledge their help in making a great deal of corrections and improvements in the revision of this paper.

It is also to the people of the villages of Novoe Chaplino and Sireniki who dedicated their time to long talks and interviews and provided me with some useful information on CSY, and to all the children in Novoe Chaplino who found time and patience to answer the questionnaires.

It is to my mother and father that this thesis is dedicated for the love, help and great support that they have given me, and to my grandparents, whose optimism and strength have helped me throughout my studies.

This thesis is most indebted to Professor Michael Fortescue. It is from his rich knowledge of the Eskimo languages and due to his great help and detailed comments that this thesis has benefited. I am deeply grateful for his supervision and his interest in my research on the Yupik languages, which have encouraged me throughout my work.

Daria Morgounova
Copenhagen, 2004
Map 1: The Bering Strait Region
Language Contact on Both Sides of the Bering Strait
A Comparative Study of CSY-Russian and CAY-English Language Contact

1. Introduction

This thesis provides a comparative study of the language contact of two Eskimo languages, in particular Central Alaskan Yup’ik and Central Siberian Yupik, with English and Russian, on each side of the Bering Strait respectively. This study has a dual purpose. The first aim is to provide a description of the change(s) that occurred in each of the two Eskimo languages as a result of their contact with English and Russian and investigate the causes of the linguistic outcome in each contact situation. The second purpose is to see if the analytical framework on contact-induced language change, proposed by Thomason and Kaufman (1988), can be applied to the situation I am describing in Alaska and Chukotka.

1.1. Central Siberian Yupik and Central Alaskan Yupik

Altogether the Eskimo languages are spoken by approximately 75,000 people (out of 90,000 Eskimos) in USA, Russia, Canada and Denmark (Greenland) occupying a territory of 3 000,000km² (Menovschikov 1983: 5, Krauss 1979: 38). All Eskimo languages fall into two main subgroups: Inuit-Inupiaq and Yupik. Inuit-Inupiaq is spoken in Greenland, Canadian Arctic and in Northern Alaska and comprises more than two thirds of all Eskimo speakers, ca. 66,000 (Krauss 1979: 38). The Yupik languages are spoken by some 12,000 speakers on the shores of the Chukchi Peninsula in the Russian Far East, in the southwestern parts of Alaska, on the southern coasts of the Alaska Peninsula and on St. Lawrence Island (Woodbury 1984: 49, Comrie 1981: 254).

The majority of the Central Alaskan Yup’ik (CAY) speakers live in the areas of Bristol Bay and in the Yukon-Kuskokwim Delta in Western Alaska. Central Siberian Yupik (CSY) is spoken on the shores of the Chukchi Peninsula, also known as Chaplinski dialect of CSY (CSY Chap.), and on St. Lawrence Island (SLI). From 1867, the time when the Americans purchased Alaska from the Russians, SLI officially forms part of Alaska, the U.S. (see map 1).

From a linguistic point of view, the situation of the Bering Strait region represents an extreme complexity. Here, the linguistic diversity of the Eskimo languages is by far the greatest. Furthermore, as it is pointed out by de Reuse, in the Bering Strait Region “contacts of Eskimo with non-Eskimo native languages (especially Chukotkan) as
well as with several Indo-European languages (especially English and Russian) have been extensive” (de Reuse 1994: 295).

The first Russian and European traders encountered the Eskimo population of Bering Strait region in the mid 18th century. However, before this time, much contact occurred between the CSY and neighbouring Chukchi. De Reuse points out that due to this contact “CSY has developed interesting syntactic differences from other Yupik languages” (1994: 8). Moreover, ironically, the Russians were the first to reach the CAY territory, while the Eskimo on the Russian mainland were first exposed to Americans. Consequently, CAY has loans from Russian while CSY has loans from English.

Divided by the waters of the Bering Strait, it was the political separation of the Yupik communities in 1867, followed by the consolidation of the Soviet power on the Russian mainland in the early 1920s, that signalled the major turn in the development of the Yupik languages of the Bering Strait Sea. Beginning from the early 20th century and continuing into the new millennium the contact of the Yupik languages with English and Russian, on each side respectively, has been intense.

Both colonial languages, each in its direction, have influenced the Yupik languages. Yet, the linguistic consequences of the contact on each side are not the same. On the American side, in Alaska, the language is maintained and despite a high degree of English-Yup’ik bilingualism among the speakers, the majority of the CAY population still speak their native language. According to Jacobson, in 1995 CAY was spoken by 10,500 people, which was about a half of the total Yup’ik population (ca. 20,000) in Alaska at that time. Moreover, in about one-third of the Yup’ik villages children still grew up speaking Yup’ik as their first language (1995: i). In addition, there are 1,200 Ypiks on St. Lawrence Island. Here, almost the entire population speaks the native language. This validity of CSY SLI is often attributed to the geographical and economical isolation of the island from the Alaskan mainland. CSY of St. Lawrence Island (CSY SLI) is in fact “the only Alaskan language which is still being learned by all the children” (Krauss 1980: 105, 47).

On the Russian mainland, on the Chukchi Peninsula, the situation is by far less promising. The research that I carried out in the area in May-April 2003 showed that the majority of the Eskimo population in the Russian Far North today use Russian for their everyday communication. In the last few decades, mostly due to the reopening of the Russian-American border in 1988, there has been an increase in the use of CSY by the native population. However, areas of its use are very limited and there are very few (almost
none under the age of forty) people that have a good command of the language, and no children (with the exception of few) are able to speak it.

The situation is almost ironical taking into account that English is the most widespread language in the world. It is spoken by 56 million people in the United Kingdom, three and a half million in Ireland, 17 million speakers in Australia and New Zealand, 232 million people in the United States with perhaps some 24 million additional speakers in Canada. It is the official language in more than two dozen other countries, and is used for the wider international communication by a vast majority of the world’s population. Russian in turn is a language of rather limited dominance in comparison to English and for the most part is used within internal geographical and political boundaries (not internationally). According to the 1979 census, Russian is spoken natively by 153.5 million people, and 61.3 million “claimed fluent command of Russian as a second language, giving a total number of 214.3 million first- and second-language speakers” (Comrie 1987: 66). Moreover, Russian represents an older, inflectional stage of Into-European and the complexity of its inflectional system makes it a rather difficult language to learn for foreign speakers. English, on the contrary, exhibits a remarkable inflectional simplicity. The far-reaching spread of English around the world is often ascribed to the simplicity of its inflectional system, the cosmopolitan character of its vocabulary and its social prestige and importance in technological development (Finegan 1987: 67-69).

Considering all that, one would expect that the effect of the English language on CAY would be higher than the influence of Russian on CSY. Yet, the situation is reversed. The degree of the Russian influence on CSY has been much greater than the influence of the English language on CAY, “going almost to the extreme of corrupting Yupik syntactic structure completely” (Vakhtin 1997: 173). There are over three hundred Russian loanwords in CSY RFN. In CAY, at least until very recently, there were only some sixty English loanwords. What is also interesting is that the amount of Russian loanwords in CAY, adapted into the language during some forty years of its contact with Russian, exceeds the amount of English loanwords in CAY, borrowed during the first 75 years (or more) of the American dominance in the CAY area.

The linguistic situation of the Bering Strait provides us with a perfect and almost unique case for the study of language contact and language change. CSY and CAY are very closely related languages (see chapter 2), yet because of the geographical and political separation of the communities and consequently their contact with different colonial languages, the languages have developed in different directions resulting in two different
linguistic outcomes, in particular language maintenance in Alaska and language shift in Chukotka. It is therefore extremely interesting to examine language contact on each side of the Bering Strait and, by comparing these two contact situations, determine the causes of language change that produced the dissimilarity in the linguistic outcome of each contact situation.

It is also an interesting testing ground for the principle that socio-linguistic constraints are more important than linguistic ones. Proponents of linguistic constraints claim that the most highly structured languages are the most stable ones, since the better-developed and organized systems show higher resistance to foreign influence than less internal structures (Thomason and Kaufman 1988: 14). According to this claim, the Yupik languages with their very tightly knit polysynthetic structure should be “relatively impervious to linguistic interference” (de Reuse 1994: 414). However, the degree of linguistic interference in CSY shows that the social factors did overcome this ‘resistance’, at least to some extent. In this study, I will show that the only way to explain degrees of contact influence in both Yupik languages is in external historical terms.

1.2. Approach to the Study

There are two main approaches to the study of language contact, sociolinguistics and historical linguistics. The majority of sociolinguistic studies have focused on the role of various external factors of language contact that influence a community’s transition to a new language. “A classical pattern is that a community which was once monolingual becomes transitionally bilingual as a stage on the way to the eventual extinction of its original language” and monolingualism in a new contact language (Romaine 1989: 39).

Historical linguistic studies focus “more specifically on what happens to the language that is undergoing attrition and may die out as a consequence of language shift” (Romaine 1989: 39). They are concerned with both the description and explanation of language change and investigate the way in which “languages change or maintain their structure during the course of time” (Bynon 1977: 1).

For a long time mainstream historical linguists applied pure linguistic constraints on the theory of contact-induced language change, and denied the possibility of external influence on the internal structure of the language(s). They believed that “external influences are insignificant when compared with internal change… and all we know about language history and language change, demand that… we seek explanations first on the

In Language Contact, Creolization and Genetic Linguistics Thomason and Kaufman (1988: 13-34) refute several linguistic constraints, including typological ones, implication universal constraints, and constraints based on naturalness, and point out that the structure of the language cannot determine what can happen to it as a result of outside influence. They (1988: 35) propose an analytical framework for the study of language contact and language change, based on the following principle:

*It is the sociolinguistic history of the speakers, and not the structure of their language, that is the primary determinant of the linguistic result of language contact. Purely linguistic considerations are relevant but strictly secondary overall.*

Thomason and Kaufman (1988: 50) distinguish three types of contact-induced language change: contact-induced language change in language maintenance, contact-induced language change in language shift, and pidginization.

Prediction about the type of contact-induced language change that will occur, they claim (1988: 36), is built upon a sharp distinction between two fundamental types of linguistic interference, *borrowing* and *shift-induced substratum interference*, or *interference through shift*. The main difference between these two main types of linguistic interference is that *substratum interference* is a subtype of interference that occurs in the target language (the language to which the group is shifting) as a result of “imperfect group learning during a process of language shift” (Thomason and Kaufman 1988: 38). *Borrowing* is “the incorporation of foreign features into a group’s native language by speakers of that language” (Thomason and Kaufman 1988: 37). Interference through shift usually results in the disappearance of the shifting group’s language(s) or in extreme mixture of both languages (pidgins and creoles). Borrowing, in turn, may take place without serious implications for the languages involved, e.g. French borrowing in English, though it may also lead to the attrition and death of a borrowing language (Thomason and Kaufman 1988: 50).

In the borrowing situation (discussed under language maintenance), the most common contact phenomenon (type of outside influence) is borrowing of words, i.e. loanwords. Some structural elements, however, such as phonological features, grammatical elements, and syntactic structures may be borrowed as well, usually under the condition that there is a strong long-term cultural pressure from the dominant-language group
In the ‘interference through shift’ situation structural borrowings (phonological and syntactical features) usually come first, though lexical items may be borrowed as well, for instance the native-language words for things the contact language has no words for, e.g. foods, cultural items, names for local animals, plants, etc. Note that both types of linguistic interference can occur in one context, or they can be found in different contexts, with borrowing usually having a history of several hundred years, and language shift taking as little as generation.

Thomason and Kaufman (1988: 47, 72) argue that the direction of interference and the extent of interference are socially determined. In particular, they are determined by the intensity of contact, which is dependent on various non-linguistic factors, such as length of time, number of speakers, level of bilingualism among the speakers, the socio-political dominance of one group over another and intimate contact in mixed households (interrmarriage) and/or other social settings.

They point out that intensity of contact is not the same for language maintenance and language shift. Thus, if the shifting group is small, it is more likely to learn the target language perfectly. In this case, a rapid shift will occur and there will be no interference in the target language as a whole. On the contrary, if the shifting group is large the possibility of imperfect learning is higher. If a group fails to learn the target language perfectly, there will be a moderate to heavy substratum interference, especially in phonology and syntax. The intensity of contact in language maintenance “crucially involves factors of time and level of bilingualism” (Thomason and Kaufman 1988: 47). For instance, if the speakers of the borrowing language are bilingual in the potential source language, borrowing is limited to words only, but if bilingualism is extensive and persists over a long period of time, then structural features may be borrowed along with words (Thomason and Kaufman 1988: 47-48).

Linguistic factors, such as universal markedness and typological distance can influence the kinds of features transferred from one language to another, but they are of secondary importance. According to their explanation (1988: 49-50), universally marked features are those that are harder to learn and therefore they are less likely to be transferred than unmarked features. However, markedness is less essential for borrowing than for interference through shift, since in maintenance situation with borrowing language group being bilingual, they claim, “marked features, at least in the phonology and syntax, can be
incorporated into the borrowing language as readily as unmarked features” (Thomason and Kaufman 1988: 51-52).

Typological distance is “a measure of structural similarity that applies to linguistic categories and their combinations, including ordering relations” (Weinreich 1974: 72). Unlike markedness, typological distance is important for borrowing, since foreign elements are easier to introduce into typologically similar structures than into typologically divergent structures and “the source language features that fit well typologically with functionally analogous features in the borrowing language tend to be borrowed first” (Thomason and Kaufman 1988: 72). However, Thomason and Kaufman (1988: 14-15) disagree with the structuralists believe that the most highly structured languages are the most stable ones and that the better developed and organized systems show higher resistance to foreign influence than less internal structures. They point out that “social factors can and very often do overcome structural resistance to interference at all levels” (1988: 15). Their hypothesis is that in slight to moderate structural borrowing (see Borrowing Scale in Thomason and Kaufman 1988: 74) “the transferred features are more likely to be those that fit well typologically with corresponding features in the recipient language”, while in heavy borrowing and shift interference this influence is limited (1988: 53-54).

Based on (1) a sharp distinction between the two fundamental types of linguistic interference, (2) knowledge about the intensity of contacts and (3) the linguistic criteria such as markedness and typological distance between the languages in contact, Thomason and Kaufman make a prediction about the types and extent of contact interference that can be expected to occur in a language. They propose a borrowing scale according to which the kinds of expected borrowing can be arranged (1988: 74-76).

Thomason and Kaufman’s analytical framework (1988: 35) has proven to be of much utility and influence in the general field of linguistic contact and change. In this study, I will apply their model and show how it works in the contact situations I am describing in Alaska and Chukotka.

1.3. Outline of the Chapters

The discussion is divided into five chapters with a conclusion. First, I will provide evidence for the genetic relation of Central Siberian Yupik and Central Alaskan Yup’ik and give the number of lexical items, ‘reconstructable’ for their hypothetical proto-language. This is designed to provide the background for the introduction of the Yupik
languages, and shows that the languages have a common ancestry language (normal transmission). Next, the typological classification of the languages is given. By comparing typological features of the Yupik languages, i.e. their phonological system, morphological structure and syntax with corresponding subsystems of English and Russian I will establish typological distance between the languages in contact. Chapter 4 discusses the historical emergence of the contact situation(s) in the Bering Strait area; it highlights social factors peculiar for the development of each contact situation and outlines resulting patterns of bilingualism and language interference in each. The last chapter describes the linguistic changes that occurred in each Yupik language as a result of their contact with English and Russian on each side respectively. This chapter demonstrates the nature and degree of linguistic interference and emphasises the main difference between the linguistic outcomes of the contact situations. The conclusion highlights the cause(s) from which the present linguistic situation has emerged and argues that in studying the linguistic situation of the Bering Strait, sociolinguistic constraints are more important than linguistic constraints. This discussion emphasises that the divergence in the linguistic outcome of language contact on each side of the Bering Strait is a result of some separate historical circumstances, and the only way to explain contact change(s) in CSY and CAY is in external historical terms.

1.4. Data and Field Methods

The main historical sources are Comrie (1981), Krauss (1979, 1980, 1992 and 1997), Vakhtin (1992, 1997), and Woodbury (1984). To gain information about the grammatical structure of the Yupik languages I have been using the following sources: Steven Jacobson’s grammatical description of CSY SLI (1979, 1990) and CAY (1995) and Willem J. de Reuse findings on CSY (1994). Various Eskimo dictionaries were a great help in defining the lexical borrowings found in the languages.

Several data on CSY were collected during my fieldwork in the villages of Novoe Chaplino and Sireniki, Chukotka Peninsula, Russian Far North, in March-April 2003. In obtaining these data, several methods have been used: personal observations, written notes made by the native speakers, face-to-face conversations with the locals and qualitative interviews with the villages’ inhabitants, which were recorded on a Mini disc, and later transcribed and analysed by me. The examples collected during my research on CSY will be used in this paper without references. In addition, some 80 questionnaires including information about the usage of CSY by schoolchildren were collected in the village of
Novoe Chaplino; questionnaire analysis helped to determine the use of CSY by the younger generation and is described in appendix 2. The examples from Russian dictionaries and personal fieldwork are transcribed into the Latin alphabet according to Jacobson’s (2001) table of the Cyrillic equivalents of the Latin letter orthography for Yupik (see appendix 1).

2. The Yupik Languages

This chapter describes the Yupik languages from the point of view of historical linguistics. It has two purposes: to introduce the reader to the Yupik languages of the Bering Strait region and provide the context for the application of the comparative method in the implication of analytical framework for the analysis of the product of contact-induced language change. To a large extent, this chapter will be focusing on the genetic relation between three Yupik varieties, CSY RFN, CSY SLI and CAY. The first section of this chapter offers historical evidence for their common area of diffusion. The second section sets up the lexical correspondences between the languages. It establishes a number of lexical items reconstructable1 for their hypothetical proto-language and estimates the divergence of the languages.

2.1. Genetic Relation

Genetic classification categorises languages according to their ancestor language. Ancestor language can be confirmed by existence of an original ancient text, written in that language (as in the case of Latin, or English), or it may be a reconstructed hypothetical proto-language for which no original text exist (Steinbergs 1997: 373). Languages are said to be genetically related if they share a common (attested or hypothetical) ancestry, or proto-language. For instance, English and Russian both belong to the Indo-European language family, “a family of languages which by about 1000 BC were spoken over a large part of Europe and parts of Southern Asia” (Baldi 1987: 23). They are genetically related languages. However, English and Russian are very distantly related, and while English is a language of the Germanic branch, Russian belongs to the Slavonic branch of the Indo-European language family. All in all there are eleven major and a number of minor

---

1 The term reconstruction “implies the notion of regularity in the correspondences that are posited, because it is the regularity that permits the formulation of a specific set of diachronic rules for each language which will derive the phonological shapes of attested morphemes from reconstructed morphemes and attested grammatical rules from reconstructed ones” (Thomason and Kaufman 1988: 202).
branches of the Indo-European family, each comprising several languages (for further information see Baldi 1987: 23-33).

According to the genetic classification, all Yupik languages belong to the Eskimo branch of the Eskimo-Aleut language family. Although Eskimo relationships to other language families, as it is pointed by Fortescue, Jacobson and Kaplan in the introduction to the *Comparative Eskimo Dictionary* (1994), are open to question, the relation between Eskimo and Aleut is the one that is certain and well established.

Historically, all modern territorial dialects of Eskimo are believed to be derived from a single ancestor language, proto-Eskimo, and the proto-Eskimo homeland is to be located in western Alaska. Note that the term ‘proto-Eskimo’ is a hypothetical term that should be understood conventionally. It includes unified typological features of all territorial dialects of the Eskimo languages (Menovschikov 1980: 10).

The first split of the Eskimo continuum probably took place during the last centuries B.C. to the first few centuries of the Christian era when the Eskimo expanded westwards to the Chukotka coasts. About a thousand years later another expansion of Eskimo began, towards the east, and by the XII century of the Christian era the Eskimo settled in northern Canada, Labrador Island and Greenland (de Reuse 1994: 296, Menovschikov 1983: 6). Consequently, the proto-Eskimo language developed into two separate branches, Yupik and Inuit-Inupiaq, also known as Western and Eastern Eskimo respectively (Fortescue, Jacobson and Kaplan 1994: x). Today Inuit-Inupiaq is spoken in Greenland, Canadian Arctic and in Northern Alaska. Yupik is spoken on the shores of the Chukchi Peninsula in the Russian Far East, in south-western Alaska, on the southern coasts of the Alaska Peninsula and on St. Lawrence Island (Woodbury 1984: 49, Comrie 1981: 254).

The divergence within Yupik is quite large, and five mutually unintelligible language varieties (or languages) can be distinguished within the branch today: Sirenikski, Naukanski, Central Siberian Yupik, Central Alaskan Yupik, and Pacific Yupik (see map 2).

*Sirenikski* is more divergent from some Yupik languages than the latter are from the Inuit group. It has therefore sometimes been suggested as a third, separate branch of the Eskimo language (Vakhtin and Golovko 1987: 6. Fortescue, Jacobson and Kaplan 1994: x). Sirenikski was spoken on the shores of Chukchi Peninsula, but since the last speaker of Sirenikski has died (Fortescue, personal communication) it can now be considered a dead language.
Pacific Yupik (also known as Southern Alaskan Yupik, Sugpiaq, or Alutiiq) is spoken on the southern coasts of the Alaska Peninsula and on Kodiak Island by some 400 people, and is less homogeneous with the rest of the group.

Naukanski is spoken exclusively on the Chukchi Peninsula in the Russian Far East. Its mutually intelligibility is perhaps not higher with CSY than with CAY; it is considered to be linguistically intermediate between these two. It is difficult to calculate the total population of Naukanski speakers today, since they live separately in various parts of the region. According to de Reuse (1994: 5), the number of Naukanski speakers by their own account is 75, of whom none are children.

Finally, Central Siberian Yupik and Central Alaskan Yup’ik (the languages concerned in this paper) represent the two largest (in respect to the number of speakers) groups within the Yupik sub-branch. Central Alaskan Yup’ik (or simply Yup’ik) is spoken in the southwestern parts of the Alaska Peninsula. It comprises three dialectal areas, Bristol Bay, the Kuskokwim and the Yukon and has about 10,500 speakers. The vast majority of the CAY speakers today live in the Kuskokwim area (Krauss 1980: 45, Jacobson 1995: i).

Central Siberian Yupik is spoken on the shores of the Chukchi Peninsula in the Russian Far North (CSY RFN, also known as Chaplinski Yupik) and on St. Lawrence Island (CSY SLI). SLI Yupik is believed to be an offspring of Chaplinski and apart from some few phonetic, phonological, morphological, syntactical and lexical peculiarities is practically identical with it (Vakhtin and Golovko 1987: 7, de Reuse 1994: 5). There are approximately 1,300 CSY speakers, including almost the entire population of the St. Lawrence Island (ca. 1,000), and some 300 CSY speakers on the Russian mainland. The

---

2 Note, supposed to once be two thousands speakers, the population of St. Lawrence Island was tremendously reduced by famine and plague in 1878-1879 to approximately 300 speakers. There is a supposition that the growth of the population was due to the repopulation of the island by the Siberian Eskimo whose significant immigration from Chukotka to St. Lawrence Island continued until the late 1920s (Krauss 1980: 10-11, 46). On Siberian Eskimo contribution to Alaskan population recoveries, see Krupnik (1994: 49-80).
majority of Chaplinski (or CSY RFN) speakers live in the villages of Novoe Chaplino and Sireniki, on the coasts of the Chukchi Peninsula.

CSY and CAY are believed to be at one time connected by a continuous chain of Yupik dialects along the Steward Peninsula and across the Bering Strait, through St. Lawrence Island towards the opposing shore of the Chukchi Peninsula (Fortescue, Jacobson and Kaplan 1994: x; Krauss 1980: 9). With Naukanski being an intermediate between CAY and CSY, their relation is obvious.

2.2. The Vocabulary

One of the most definitive criteria for showing the genetic relation between languages is the basic vocabulary (Thomason and Kaufman 1988: 6). The following part of this chapter will therefore evaluate the vocabularies of three Yupik languages/dialects: SLI CSY, Chaplinski CSY and CAY (see table 1).

By comparing lexical items of the languages, I will show a degree of the lexical correspondence between them and hence estimate the degree of divergence within these three related Yupik language varieties. The data on CSY and CAY, offered in the table, are taken from an article by Vakhtin and Golovko (1987:8-11) and are based on the ‘100-word list’ by Morris Swadesh (1955)³, with some few changes made by the authors.

In addition, I have added the corresponding 100-word list of proto-Eskimo equivalents in order to demonstrate the pattern of internal relations of the languages with their hypothetical proto-language. The data on Proto-Eskimo are taken from the Comparative Eskimo Dictionary (Fortescue, Jacobson and Kaplan 1994). All words are phonemically transcribed according to the principle used in the Comparative Eskimo Dictionary and therefore do not fully correspond to the transcription given by Vakhtin and Golovko (1987). For the taxonomic phonemes of Yupik and the corresponding graphemes see de Reuse (1994: 18-19).

³ Morris Swadesh is an American linguist, who worked out a list of concepts for a basic vocabulary, i.e. a list of common words that are essential to most languages. This (originally 200-words) list was designed to estimate time of divergence of two related languages and its application is called the method of glottochronology. The method of glottochronology does not give absolute and exact figures, but provides only relative and approximate figures reliable enough “to provide a pattern of internal relationship within a language family” (Vakhtin and Golovko 1987: 4, for the definition see ‘Wikipedia’ Encyclopedia on www.en.wikipedia.org/wiki/Glottochronology).
Table 1: A Comparative 100-word list for CSY Chap., CSY SLI, CAY and proto- Eskimo

<table>
<thead>
<tr>
<th>English</th>
<th>CSY Chaplinski</th>
<th>CSY SLI</th>
<th>CAY</th>
<th>Proto-Eskimo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. all</td>
<td>tamar-</td>
<td>tama-</td>
<td>tamar-</td>
<td>tamar-</td>
</tr>
<tr>
<td>2. ashes</td>
<td>(wallqa)</td>
<td>araq-</td>
<td>ara-</td>
<td>aro-</td>
</tr>
<tr>
<td>3. belly</td>
<td>qaygu</td>
<td>qaygu</td>
<td>qəltə</td>
<td>qilu-</td>
</tr>
<tr>
<td>4. (be) big</td>
<td>aŋə-</td>
<td>aŋə-</td>
<td>aŋə-</td>
<td>aŋə-</td>
</tr>
<tr>
<td>5. bird</td>
<td>(qawak)</td>
<td>təŋmiəq</td>
<td>təŋmi(C)ar</td>
<td></td>
</tr>
<tr>
<td>6. bite</td>
<td>(amqəɣi-)</td>
<td>koŋə-, kəŋə-</td>
<td>kəŋə-</td>
<td></td>
</tr>
<tr>
<td>7. black/dark blue</td>
<td>təŋə-</td>
<td>təŋə-</td>
<td>təŋu-</td>
<td>təŋu-</td>
</tr>
<tr>
<td>8. blood</td>
<td>aawk</td>
<td>auk</td>
<td>aduy</td>
<td></td>
</tr>
<tr>
<td>9. bone</td>
<td>naxqwaq</td>
<td>nanəq, (nənuəq)</td>
<td>nanəq</td>
<td></td>
</tr>
<tr>
<td>10. branch</td>
<td>avayaq</td>
<td>avayaq</td>
<td>avayaq</td>
<td>avayaq</td>
</tr>
<tr>
<td>11. breast</td>
<td>mamaq</td>
<td>aamaq</td>
<td>mamar (-)</td>
<td></td>
</tr>
<tr>
<td>12. burn</td>
<td>kumaŋ-</td>
<td>κομαν-, κουμα-</td>
<td>κομα-</td>
<td></td>
</tr>
<tr>
<td>13. cloud/sky</td>
<td>qilaxlluk, kilak</td>
<td>qilawaq, qila (amirlu)</td>
<td>qilaylluy</td>
<td></td>
</tr>
<tr>
<td>14. come</td>
<td>təyi-</td>
<td>təyi-</td>
<td>tay-, taa-</td>
<td>tayyir-</td>
</tr>
<tr>
<td>15. die</td>
<td>tuqu-</td>
<td>tuqu-</td>
<td>tuqu(-)</td>
<td></td>
</tr>
<tr>
<td>16. dog</td>
<td>qikmiq</td>
<td>qimuhta</td>
<td>qikmiq</td>
<td></td>
</tr>
<tr>
<td>17. drink</td>
<td>məʁ-</td>
<td>məʁ-</td>
<td>məʁ-</td>
<td>məʁ(-)</td>
</tr>
<tr>
<td>18. dry</td>
<td>kinrəŋə-</td>
<td>kinər-</td>
<td>kĩnər-, kĩnər-</td>
<td>kĩnər-</td>
</tr>
<tr>
<td>19. ear</td>
<td>siyun</td>
<td>ciun</td>
<td>ciun</td>
<td></td>
</tr>
<tr>
<td>20. earth</td>
<td>nuna</td>
<td>nuna</td>
<td>nuna</td>
<td></td>
</tr>
<tr>
<td>21. eat</td>
<td>nar-</td>
<td>nar- (ə)-</td>
<td>narə-</td>
<td>nəɾə-</td>
</tr>
<tr>
<td>22. egg</td>
<td>manik</td>
<td>manik</td>
<td>manik</td>
<td>maniiŋ</td>
</tr>
<tr>
<td>23. eye</td>
<td>iya</td>
<td>ii, iŋəq</td>
<td>eðə</td>
<td></td>
</tr>
<tr>
<td>24. (be) fat</td>
<td>uŋuk</td>
<td>uŋuk</td>
<td>uŋuk</td>
<td>uŋuk</td>
</tr>
<tr>
<td>25. feather</td>
<td>siluk</td>
<td>culuk</td>
<td>culuk</td>
<td></td>
</tr>
<tr>
<td>26. fire</td>
<td>kənəq</td>
<td>kənəq</td>
<td>kənəq</td>
<td>ək(ə)ŋər</td>
</tr>
<tr>
<td>27. fish</td>
<td>iqalluk</td>
<td>iqalluk</td>
<td>iqalluk</td>
<td></td>
</tr>
<tr>
<td>28. fly</td>
<td>təŋ-</td>
<td>təŋ-</td>
<td>təŋ-</td>
<td>təŋ-</td>
</tr>
<tr>
<td>29. give</td>
<td>tun-</td>
<td>tun-, tunə-</td>
<td>tunə-</td>
<td>tunə-</td>
</tr>
<tr>
<td>30. (be) good</td>
<td>(pinirli)</td>
<td>asisr-</td>
<td>asir-</td>
<td></td>
</tr>
<tr>
<td>31. hair</td>
<td>nuyat</td>
<td>nuyaq</td>
<td>nuyaq</td>
<td>nuyar</td>
</tr>
<tr>
<td>32. hand/arm</td>
<td>tallik</td>
<td>tallik</td>
<td>tallik</td>
<td>tallir</td>
</tr>
<tr>
<td>33. head</td>
<td>naasquq</td>
<td>naasquq</td>
<td>(iingaraq), nasquq</td>
<td>nay(ə)qr</td>
</tr>
<tr>
<td>34. hear</td>
<td>nayaq-</td>
<td>nayato-</td>
<td>nii-</td>
<td>naya(t)-</td>
</tr>
<tr>
<td>35. heart</td>
<td>iy’saquq</td>
<td>iy’saquq</td>
<td>iy’caquq</td>
<td>ircaquqr</td>
</tr>
<tr>
<td>37. hom</td>
<td>sirunəq</td>
<td>sirunəq</td>
<td>curunəq</td>
<td>cirunəq</td>
</tr>
<tr>
<td>38. I</td>
<td>hwana</td>
<td>hwana</td>
<td>wii, wiiña</td>
<td>uvana</td>
</tr>
<tr>
<td>39. ice</td>
<td>siku</td>
<td>siku</td>
<td>ciku</td>
<td>ciku</td>
</tr>
<tr>
<td>40. kill</td>
<td>tuqut-</td>
<td>tuqutə-</td>
<td>tuqutə-</td>
<td>tuqut-</td>
</tr>
<tr>
<td>41. knee</td>
<td>(kanayqaq)</td>
<td>əvəsqaq</td>
<td>ciisqaq</td>
<td>ciyədur</td>
</tr>
<tr>
<td>42. know</td>
<td>nalluŋənri-</td>
<td>nallu-</td>
<td>nalluŋənə</td>
<td>nallu-</td>
</tr>
<tr>
<td>43. lake</td>
<td>nayvaq</td>
<td>nayvaq</td>
<td>nanvaq</td>
<td>nanvar</td>
</tr>
<tr>
<td>44. laugh</td>
<td>nəŋlar-</td>
<td>nəŋlar-</td>
<td>nəŋlar-</td>
<td>nəŋlar-</td>
</tr>
<tr>
<td>45. leaf</td>
<td>ququeenəq</td>
<td>ququeenəq</td>
<td>cuyaq</td>
<td>ququeenəq</td>
</tr>
<tr>
<td>46. leg</td>
<td>یرu</td>
<td>یرu</td>
<td>یرu</td>
<td>niru</td>
</tr>
</tbody>
</table>
| 47. lie | ɪŋャx-
  ɪŋⱡar-
  ɪŋャxə-, ɪŋⱡar | ɪŋⱡar- |
| 48. liver | təŋuk | təŋuk | təŋuk | təŋuŋ |
| 49. (be) long | takə- | tak- | takə- | takə- |
| 50. louse | kumak | kumak | kumak | kumaɣ |
| 51. man | yuk | yu(u)k | əŋun, yuk | əŋun |
| 52. (be) many | uyła- | uyla-
  (amllər-) | uyla-
  (amllər-) |
| 53. meat (food) | ənqa | ənqa | (kənək), ənqa | ənqa |
| 54. moon | tanqiq | tanqiq | tanqiq | tanqir, tanqiy |
| 55. mountain | nayraq | nayraq | ıŋriq | ıŋriŋ |
| 56. mouth | kanak | qanəq | qanəq | qanər |
| 57. nail | stuk | əstuk | catuk | cituk |
| 58. name | ataq | ataq | ataq | ator |
| 59. neck | uyaquq | uyaquq | uyaquq | uya(ɬur) |
| 60. (be) new | nutaraq | nutaraq | nutaraq | nutaraŋ |
| 61. night | unuk | unuk | unuk | unnuɣ |
| 62. nose | qənaq | qənaq | qənaq | qənar |
| 63. (be) old | utuqa | utuqa | utuqa- | utuqqar |
| 64. one | ataaasiq | ataaasiq | ataucuq | atarucir |
| 65. other | ilanga | alla | alla | atlə |
| 66. person | yuk | yuk | yuk | ιŋuy, inuy |
| 67. rain | (ə)slalluk | əslalluk | (ə)slalluk | cilalluy |
| 68. (be) red | kaviq | kavir-
  kavir- | kavir-
  kavir- |
| 69. river | kiwək | kiikʷ | kiik | kiuŋ |
| 70. road (track) | tuma | tuma | tuma | tuma |
| 71. root | awkuq | akuq | acilquq | aku(r) |
| 72. salt | taryuq | taryuq | taryuq | tar (ə)yur |
| 73. sand | ənaaq | ənaaq | kawyaq | qavəyar |
| 74. see | (əsyər-+) | (əsyər-) | taŋər- | taŋər- |
| 75. sew | (ukini-) | (ukini-) | miŋə-, miŋə- |
| 76. sit | aqumə- | aqumə- | aqumə- | aqumə- |
The data in table 1 show that there are a good number of lexical correspondences between the three Yupik languages. To be more precise, 25 words out of the 100-word list(s) are completely identical in all three varieties of Yupik (see above). 63 words of SLI Yupik and Chaplinski Yupik are entirely similar. The number will increase if we add words with slight variation, for example an additional final /-ə/ in SLI Yupik verbs like in /puɣim/- /puɣimə/ “swim”, /tuqut/- /tukut/ “kill”, or an initial /-ə/ in words like /stuk/- /stuk/ “nail”, /llpək/- /lpək/ “thou”, interchange between /q/- /r/ as in /kaviq/- /kavir/ “red”, between /q/- /k/ as in /uquq/- /uquk/ “fat”, and between /t/- /q/ as in /nuyat/- /nuyaq/ “hair”, etc. Consequently, of the total number of SLI Yupik words presented in the table, 85 words are related to Chaplinski Yupik.

The difference between the former two and CAY is much bigger, and it can be observed that a large number of stems which exist in CSY do not exist in CAY and vice
versa (out of the 100-word list only 37 CAY words match with SLI or/and Chaplinski Yupik). Yet, again, when we consider those CAY words for example which differ from CSY by keeping the proto-Eskimo final /-ə/ in verbs like /nər/- /nərə/ “eat”, /tun/- /tunə/ “give”, /tən/- /tənə/ “fly”, by the replacement of the initial /c/ with /s/ like in /ciku/- /siku/ “ice” or of final /q/ with /k/ like in /talliq/- /tallik/ “hand” and of /t/ with /k/ as in /əlpət/- /əlpək/ “thou”, as well as words derived from the same proto-Eskimo root, then the amount of recognizable words shared between CSY (SLI and/or Chaplinski) and CAY would be approximately 60-70%.

The number of correspondences between CSY Chapl., CSY SLI and CAY lexical items and the number of stems ‘reconstructable’ for their hypothetical proto-language provide evidence for their single ancestor language and point to their close genetic relation. Moreover, as we have seen the divergence between CSY SLI and CSY RFN is minimal, they are practically identical languages and the degree of mutual intelligibility between them is very high.

3. The Yupik Typology and Its Comparison with English and Russian

This chapter describes the languages involved in the language contacts from the point of view of linguistic typology. Linguistic typology categorises languages according to their structural characteristics; it classifies languages on the basis of similarities in their phonological system, morphological structures, and syntax (word order pattern), without regard for genetic relation (Steinbergs 1997: 374). This is designed for several purposes: (1) to provide a description and highlight structural characteristics of the Yupik languages, (2) establish correspondences between various grammatical subsystems of CSY and CAY and (3) determine the typological distance between the Yupik languages and English and Russian.

In the previous chapter, I have shown that CSY RFN and CSY SLI are practically identical languages; they are two mutually intelligible varieties of the same language. In the discussion of typological features of CSY, I will be relying on Jacobson’s description of CSY SLI grammar (1979, 1990). By a means of the comparative method, I will establish differences and similarities between the phonological, morphological and syntactical structures of the Yupik languages with the corresponding grammatical subsystems of English and Russian, and hence determine the typological distance between the languages in contact.
3.1. Phonology

Phonology classifies languages according to their system of vowels and consonants, their stress pattern and their composition of speech sounds. The comparison of CAY and CSY lexical items offered in the previous chapter (see table 1) illustrates some of the phonological correspondences between CSY and CAY. This in turn provides us with the necessary basis for making a comparison of the phonological structures of CAY and CSY with English and Russian.

3.1.1. Vowel System

To begin with, SCY and CAY both have a four vowel system and distinguish between simple vowels /i/, /u/, /a/ and /ə/ (schwa), which have a phonemic length distinction, i.e. distinction between short and long vowels. Each Yupik vowel stands for a single segment, and while vowels i, u, a can occur double, the vowel /ə/ (represented by the letter /e/) can neither occur double nor appear as a final sound. One of the main differences between SCY and CAY is the presence in CSY of a vowel assimilation which is absent in CAY: CSY /ata(a)siq/ - CAY /ataaucuq/ “one” (table 1) (Jacobson 1979: 97).

All four Yupik vowels are found in English and Russian. In English however each orthographic vowel can represent several different sounds: cp. cake [keik] – cat [kæt] - calf [ka:f] - call [kɔ:l]. All in all there are fourteen to sixteen phonemic vowels today in different regional varieties of Standard English (Finegan 1987: 79). English has also a series of clusters of two unlike vowels, called diphthongs: /ay/, /aw/, /oy/. In CSY diphthongs are absent. In CAY diphthongs exist, or to be more precise they have developed as a result of the loss of an intervocalic fricative: cp. CSY /si¢un/ - CAY /ciun/ “ear” (Bergsland 1997: 8).

Russian distinguishes only six vowels in stressed syllables. Yet, the vowel system in unstressed syllables is radically different and each vowel can represent a different sound, almost like in English but to a lesser degree (Comrie 1987: 67-68). The quality of a vowel in unstressed syllables is dependent both on the consonants (or consonant clusters) by which it is surrounded as in часы (časí) ‘watch’ [čisí] – жарá (žará) ‘heat’ [žará], and on the position of an unstressed vowel regarding stress, e.g. глаз (gláź) ‘eye’ [glás]– глазá ‘eyes’ (glázá) [glázá] – глазомёр (glazomjér) ‘estimate by the eye’ [glazamjér]. The process shown in these examples is called vowel neutralisation. In Russian, vowel
neutralisation occurs in most unstressed syllables and is thus one of the main characteristics of Russian phonology (Comrie 1987: 67-68).

3.1.2. Consonant System

While the Yupik system of vowels is very simple, the Yupik consonant system embodies some intricacy. The CSY and CAY consonant systems are not completely identical (see tables below):

Table 2a: CSY Consonant system

<table>
<thead>
<tr>
<th>palatal</th>
<th>dental</th>
<th>palatal</th>
<th>retroflex</th>
<th>front</th>
<th>front</th>
<th>back</th>
<th>back</th>
<th>laryngeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>t</td>
<td>k</td>
<td>kw</td>
<td>q</td>
<td>qw</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plosives/ Stops

<table>
<thead>
<tr>
<th>voiced fricatives</th>
<th>v</th>
<th>l</th>
<th>z/y</th>
<th>r</th>
<th>g</th>
<th>w</th>
<th>gh</th>
<th>ghw</th>
</tr>
</thead>
<tbody>
<tr>
<td>voiceless fricatives</td>
<td>vv(f)</td>
<td>ll</td>
<td>s</td>
<td>rr [R]</td>
<td>gg</td>
<td>wh</td>
<td>gh</td>
<td>ghw</td>
</tr>
</tbody>
</table>

| voiced nasals | m | n | ng | ngw |
| voiceless nasals | mm | nn | ngng | ngngw |

(Jacobson 1990: 1)

Table 2b: CAY Consonant system

<table>
<thead>
<tr>
<th>palatal</th>
<th>dental</th>
<th>palatal</th>
<th>retroflex</th>
<th>front</th>
<th>front</th>
<th>back</th>
<th>back</th>
<th>laryngeal</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
<td>q</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plosives/ Stops

<table>
<thead>
<tr>
<th>voiced fricatives</th>
<th>v</th>
<th>l</th>
<th>s (z) / y</th>
<th>g</th>
<th>ŋ</th>
<th>r</th>
<th>ŋr</th>
</tr>
</thead>
<tbody>
<tr>
<td>voiceless fricatives</td>
<td>vv(f)</td>
<td>ll</td>
<td>ss</td>
<td>gg</td>
<td>w</td>
<td>rr [R]</td>
<td></td>
</tr>
</tbody>
</table>

| voiced nasals | m | n | ng |
| voiceless nasals | mm | nn | ngng |

(Jacobson 1995: 1-3)
As we can see, the CAY consonant system has an additional phoneme /c/. This phoneme does not exist in CSY, and CSY /s/ corresponds to CAY /c/ as well as to CAY /s/, e.g. CAY /ciku/ - CSY /siku/ “ice” (see table 1). At the same time, CAY does not have labialized consonants, except for some labialized front velar fricatives. Labialization in CSY in turn can be explained in terms of vowel assimilation (Jacobson 1979: 93). Another aspect that differentiates CAY from CSY is the loss of the intervocalic velar fricative in CAY: cp. CSY /siyun/ - CAY /ciun/ “ear” (see table 1). Jacobson points out, that vowel assimilation in CSY and intervocalic deletion of front velars fricatives in CAY are “the most noticeable phonological differences” between these two languages (1979: 98).

The Yupik consonant system is fairly divergent from the English and Russian consonant systems. For instance, both CSY and CAY have a set of voiceless nasals /mm/, /nn/, /ngng/, /ngngw/ which are not found in Indo-European languages such as English and Russian. In addition to the voiced palato-alveolar fricative /r/ (found in CSY and pronounced as in English “measure” or French “je”) both languages have a voiced uvular fricative /ʁ/. /ʁ/ is found in all Eskimo languages but not in Indo-European languages. Finally, the most noticeable difference between the Yupik consonant system and these of English and Russian is the absence of the contrast between voiced and voiceless plosives (or stops) in Yupik. Yupik stops are voiceless like English and Russian stops /p/, /t/, /k/, but at the same time they are unaspirated like English and Russian /b/, /d/, /g/. Thus, Yupik /p/ is like English “p” in /spy/ (Jacobson 1995: 2) or Russian “b” in /grib/ “mushroom”. Consequently, Yupik distinguishes only one set of stops which are voiced but unaspirated /p/, /t/, /k/, while English and Russian have two series of stops: /b/-/p/, /d/-/t/, /g/-/k/. It is necessary to mention that Russian generally exhibits an extreme richness of consonants, mostly because of the opposition between palatalised and non-palatalised consonants: with few exceptions, all Russian consonants have a palatalised counterpart (Comrie 1987: 67).

3.1.3. Rhythmic Pattern

Both CSY and CAY have a relatively similar rhythmic stressing pattern for alternating non-final single-vowel open syllables. This means that typically every other vowel of a word, apart from the final one, is stressed (Jacobson 1990: 6, Jacobson 1979: 94, Kaplan 1990: 147). The primary stress in both languages is assigned to syllables containing two simple vowels or one long vowel (in CAY also to closed word-initial syllables). Then, rhythmic stress is given to every second syllable after this or after the first
syllable if not long, and the vowel of a stressed simple open syllable is lengthened unless
this vowel is /ə/ (Jacobson 1979: 94, Jacobson 1995: 8-9).

Rhythmic vowel stress, which is one of the main characteristics of Yupik phonology, does not occur in either English or Russian. The stress in Russian is free and mobile, which means that different forms of the same word can have different stress. At the same time a word with the same form but a different syllable stress can have different meanings, e.g. мукá [muká] “flour” - мұқа [múkə] “torment” (Comrie 1987: 67, Steinbergs 1997: 379). English has a large stock of monosyllabic words. In words with two or more syllables some syllables are more salient than others, i.e. stressed. The stress occurs as a result of “the combined effect of pitch, loudness, and length - the result of which is syllabic segment prominence” (Dobrovolsky and Katamba 1997: 48).

3.1.4. Syllable Composition

The last characteristic to be considered is the composition of speech sounds into
longer sound units. In Yupik the syllable structure is usually CV(V)C (or V(V)C at the
beginning of a word) where C stands for consonant and V for vowel. Clusters of two
consonants do occur internally within a Yupik word, but they are limited in type. Note that
voiced fricatives written doubled like ‘gg’ are single voiceless equivalents, not geminates
(Fortescue, personal communication). In Indo-European languages consonant clusters are
widespread. In English clusters of two or three consonants are frequent. Russian commonly
uses clusters of two, three or even four consonants (also word-initially and finally).

3.2. Morphology

Morphology characterises languages according to their word structure, or the way
they form morphemes into words. Russian for example is a synthetically structured
language where grammatical relations among sentence constituents are indicated
morphologically, i.e. by means of affixation (suffixed as well as prefixed) and
compounding. The morphology of the language is characterised by having a complex
system of declension and conjugation types with several inflectional categories usually
being encoded by a single portmanteau morpheme⁴. Old English is also considered a
synthetic language and, like Russian, “relies chiefly on inflexional morphology to indicate

⁴ Portmanteau morpheme is a morpheme that combines parts of the forms and meanings of two or more
distinct forms, without a clear boundary between them (The American Heritage Dictionary of the English
the grammatical relations among sentence constituents” (Finegan 1987: 87). However, Modern English has developed into an analytical language. In analytical languages, most grammatical relations are expressed syntactically, i.e. through sentence structure, with word order being “a chief signal of grammatical relation” (Finegan 1987: 87-88). English has developed its word stock chiefly by compounding, and secondarily by prefixing and suffixing.

All Eskimo languages are polysynthetic languages. The term polysynthetic is applied to languages with “a process of word formation in which a single word contains grammatical and semantic information that would be in a sentence” (Silver and Miller 1997: 20). In polysynthetic languages, all grammatical functions are expressed by bound morphemes, or suffixes. Such languages allow the formation of long words from a single base by means of extensive affixation (Kaplan 1990: 144, Vakhtin 1989: 16). Consequently, derivation in CSY and CAY consist of a large number of suffixes (or postbases), which can be added to a single base in sequences and are, in de Reuse words, “most often productive and semantically transparent” (1994: 53).

A Yupik word consists of a base or stem, which is followed by postbases, endings, and enclitics. Bases and postbases can be either nominal or verbal, or even both, and when postbases are added to either kind of stems they can result in “an expanded stem which is either noun or verb” (Kaplan 1981: 18, Jacobson 1979: 2). In CSY there are usually two or three postbases that can be added to each other in sequences, in CAY there are words with more than six postbases, and some words contain up to a dozen postbases (Woodbury 1981: 30, Jacobson 1984: 423). There is number of lexical dissimilarities between CSY and CAY bases and postbases (see table 1). Yet, what is important from the typological point of view is that base classes such as Noun base, Verb base, and Particle base “identified on morphological and syntactic criteria” are the same for both CAY and CSY (de Reuse 1994: 28).

CSY and CAY have four inflexional categories: person, number, case and mood. The category of person is represented by 1st and 2nd person indicator, 3rd person possessor and 3rd person reflexive possessor (3R). The difference between the latter two is that reflexive possessive person (3R) refers back to the subject of the clause. Translated into English this difference would be as followed: cp. He visited his (own) sister - He visited (another’s) sister, or He came from his (own) house - He came from (another’s) house (Jacobson 1990: 42).
3.2.1. Category of Number and Gender

The Yupik category of number distinguishes singular, plural, and dual. The Yupik singular and plural function as the singular and plural in English and Russian. The Yupik dual number is used to indicate two things (as compared to three or more). It can also be used to denote things with two equivalent sides, for example the word *kiiwek* which means both “a river” and “the river”. In English and Russian only a “conventional dual” remains: words like “pants”, “eyeglasses”, and “scissors” which occur as a pair in nature and therefore never appear in the singular form. The conventional duals in Yupik are much more common than in English and Russian (Jacobson 1990: 12-13).

In contrast to English and Russian, which distinguish between feminine, masculine and neutral genders, Yupik does not have a category of gender, so that “the same ending which indicates “he” also indicates “she” or “it”” (Jacobson 1990: 15).

3.2.2. Case Distinction

Yupik has a complex system of cases and distinguishes between five oblique cases and two syntactic cases. The oblique cases are not tied to the verb and make a distinction between *ablative-modalis* (a place from which an action occurs), *localis* (a place at which an action occurs), *terminalis* (a place to which an action occurs), *vialis* (a place through which an action occurs) and *aequalis* (to make a comparison, “like a”). The oblique cases correspond roughly to English prepositions. The two syntactic cases, *absolutive* and *relative*, on the contrary, agree with verb endings. The relative case is also used in the possessive construction in Yupik, and corresponds to both the apostrophe plus “s” construction and the “of” prepositional phrase in English. In Yupik, both syntactic and oblique cases can combine with possessor marking (Jacobson 1990: 26-36).

The Yupik case system is probably closer to Russian than to English. In English there are only two cases, common and genitive. Moreover, the genitive case is the only productive category still present in Modern English. Thus, pronouns in the genitive have the forms “hers”, “his”, “mine”, “ours”, etc. and nouns are either marked by the apostrophe plus “s” construction or take the of-genitive construction (Finegan 1987: 82). In Russian, case is one of the major categories of noun and adjective declension. Six cases are found in Russian: Nominative, Genitive, Dative, Accusative, Instrumental and Locative (also called Prepositional). Nominative signifies the subject of an action and Accusative the object, while the other four cases indicate basically spatial relations, like in Yupik, from, to, through, etc., a person, thing or place. However, in Russian it is not possible to break down
an inflection into one part encoding number and another part encoding case since the
categories of number, gender, and case are usually expressed in a single portmanteau
inflection (Comrie 1987: 71-72). Yupik too has portmanteau inflections of this kind
(whereas all other suffixes are agglutinative⁵).

3.2.3. Adjectives

Yupik does not have a distinct class of adjectives, apart from participial forms of
static verbs like /suka-Ingquq/ "(the) fast (one)" from /suka-/ "be fast". These follow the
head noun. It has also a number of nominal suffixes corresponding to English adjectives.
Thus for example the postbase -ghllak in CSY means “big N” (N stands for noun), e.g.
meaning is thus largely concentrated within the word itself and expressed through noun-
elaborating postbases.

Typologically this is very distant from English, where adjectives are distinct from
both nouns and verbs and occur in a single and invariable form, regardless of the number,
case, etc. The relationship between adjective and noun is determined by word order, with
the order of elements being usually determiner-adjective-noun, e.g. “the good man”
(Finegan 1987: 87). In Russian as well as in English adjectives are separate from nouns.
Moreover they have a complex system of inflections of their own and must agree with the
noun in number, gender and case. On the other hand, there is also a possibility of
expressing the adjectival meaning within a noun by means of diminutives or augmentatives
suffixes which are added to the word base, e.g. word стół /stól/ means “table” while
столик /stólık/ means “little table” and столище /stólǐše/ means “big table”. In other
words, Russian has both nominal suffixes with adjectival meaning like Yupik, and separate
adjectives like English.

3.2.4. Verbal Morphology

Yupik verbal morphology represents a certain complexity when compared to such
languages as English and even Russian. In English and Russian the grammatical categories
of tense, mood, aspect, etc. are expressed by grammatical means, i.e. through morphemes
like prefixes and suffixes. In Yupik, as we have seen, grammatical meanings are

⁵ Agglutinative suffixes are formed from morphemes that retain their original forms and meanings with little
change during the combination process (The American Heritage Dictionary of the English Language, 4th ed.
concentrated within the word and most grammatical functions are expressed by postbases which are bound to the word. Furthermore, CSY and CAY verb bases cannot stand alone like noun bases. The verbal base must be followed by a transitivity/mood marker, as opposed to case/person/number markers which can be added to nominal bases (Jacobson 1990: 14).

3.2.4.1. Tense

Yupik only distinguishes past and present time meanings of verbs by context and does not have a separate past tense marker. To be more precise, Yupik verbs that are used without a marker (unmarked verbs) generally imply a past-time action, while the expression of a future action requires a postbase of futurity (Jacobson 1990: 24, Fortescue, personal communication). Russian and English are different in that respect. English is the most developed language regarding tense distinctions. It marks both present and past tense: English regular finite verb has the present tense 3rd person singular marker –s, e.g. I/they work - She works, and past tense marker –ed, e.g. I/we work – I/she/we worked, as well as many other tense distinctions. Russian distinguishes past time meaning from non-past by adding a past tense suffix ‘-l’ to the verb base. In the non-past Russian verbs agree with their subject in person and number; in the past, they agree in gender and number (Comrie 1987: 74-75).

3.2.4.2. Aspect

Whereas CAY and CSY verbs do not have an aspectual contrast in their inflection (though there are many aspectual postbases), English and Russian do. English distinguishes between two basic types of aspect, the perfective and the progressive (or continuous), which are used in all tenses. These forms are built with the help of auxiliary verbs “have” and “be” respectively and the non-finite forms of the verb: present participle (-ing) for the progressive, past participle (-ed) for the perfective. Non-finite verbs do not express contrast of tense, mood, person and number. In Russian which distinguishes between perfect and imperfect aspect of verbs, this category is of great importance. Russian is an aspect-dominated language (as compared to English, a tense-dominated language), and while tense locates a situation in time, aspect “is concerned rather with the subjective way of viewing the internal temporal constituency of the situation” (Comrie 1987: 75). In Russian almost every imperfect verb has its perfect counterpart which is either formed by prefixing, e.g. писать /pisát’/ “to write” – написать /napisát’/ “have written”, or marked by a suffix, e.g. решать /rešát’/ “decide” – решит /rešít’/ “have decided”. According to Comrie, the opposition between imperfect and perfect aspect can
be compared to English progressive vs. non-progressive aspectual opposition (1987: 74-75). That is a very superficial observation, but I guess Comrie is to blame for that.

3.2.4.3. Mood

Yupik has a very complex system of moods and makes a distinction between at least eleven different moods: four independent moods (indicative, interrogative, optative, and participial), six dependent or connective moods (precessive, concessive, consequential I and II, conditional, and contemporative) and a subordinative mood. Yupik indicative and interrogative moods correspond to English and Russian indicative, and are used for statements and questions respectively. However, in contrast to English where a question can be made by changing the word order, and Russian where a question can be indicated by intonation, the Yupik interrogative mood must be used with question words (or bases), such as who, what, where, when etc. The Yupik optative mood is used for commands and suggestions. English and Russian both have an imperative mood. The Yupik participial mood is formally almost like the indicative, but more limited in function. The dependent verb moods “cannot be the main verb or the only verb of the sentence”, and perform the same role as certain English and Russian coordinate conjunctions such as “before”, “although”, “when”, “if”, etc. (Jacobson 1990: 64, 40-64). Thus, in comparison to Russian, which marks indicative and imperative moods of the finite verb, and English, which has indicative, imperative and subjunctive mood forms, Yupik mood inflexions are considerably more complex. CAY and CSY use identical means for indicating moods, and the only difference which is found between these two languages is the treatment of “yes”/“no” questions: CAY uses the indicative mood, with a certain added particle for “yes”/“no” questions (Jacobson 1990: 40), rather than the interrogative.

3.2.5. Personal Pronouns and Demonstratives

Personal pronouns are of less importance in Yupik than they are in English and Russian, and are mainly used for emphasis. Demonstratives are on the contrary more complex and differentiated in Yupik than they are in English and Russian. In English this category includes very few words, demonstrative pronouns “this” and “that” (and their plural forms, “these” and “those”), and demonstrative adverbs “here” and “there” which have only one form each. Russian has a few other demonstratives as well; Russian demonstrative pronouns take case, number, person, and gender markers. Yupik demonstratives fall into three groups: extended, restricted and obscured. Demonstrative pronouns act like nouns: they can stand in the singular, plural or dual number, can act as
subject, object and possessor, and can be used in absolutive, relative and oblique cases. Demonstrative adverbs do not act in this way, and can only be used in the oblique cases (Jacobson 1990: 80-81).

3.2.6. Definite/Indefinite Meaning

Yupik does not have articles, and the definite/indefinite meaning in the language is expressed through two different types of constructions: transitive verb with an object in the absolutive case (correspond to “the”) and intransitive verb with an indefinite object in the instrumental case (corresponds to “a”) (Jacobson 1990: 34). Thus, the difference between definite and indefinite meaning in Yupik is determined by case. English has a sharp distinction between definite article “the” and indefinite articles “a/an”. Russian completely lacks this distinction.

3.3. Syntax

The syntactical structures of CAY and CSY are similar, with word order in both languages being quite free. Though the default (or neutral) structure of the Yupik clause (at least in CSY) is defined as SOV, clauses which contain both subject and object are not widespread, and structures VS and VO are both very common. According to de Reuse the word order in Yupik is primarily determined by discourse considerations (1994:25). The word order in Russian is relatively free and therefore not significant for the grammatical meaning. In English on the contrary most of the grammatical relations are determined by word order. It is an SVO language, with subject preceding verb preceding object (Finegan 1987:87-88).

3.4. Typological Distance

In the introduction to this paper, I have pointed out that the typological distance between the languages in contact can influence the extent and kind of interference that will occur in the language(s). The analysis of the structural characteristics of the languages offered in this chapter and displayed in the table below allows us to establish typological distance between the languages concerned.

The main typological characteristics of the languages concerned can be demonstrated in a following way:
Table 3: A Comparison of Typological Features of CSY, CAY, English and Russian

<table>
<thead>
<tr>
<th>Lang. structure</th>
<th>CSY</th>
<th>CAY</th>
<th>English</th>
<th>Russian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>polysynthetic</td>
<td>polysynthetic</td>
<td>analytic</td>
<td>synthetic</td>
</tr>
<tr>
<td>Word-formation</td>
<td>extensive suffixation</td>
<td>extensive suffixation</td>
<td>mainly compounding</td>
<td>affixation (suffixes + prefixes) and compounding</td>
</tr>
<tr>
<td>word structure</td>
<td>complex (words with 3 to 6 syllables)</td>
<td>complex (words with 6 and more syllables)</td>
<td>simple (many monosyllabic words)</td>
<td>relatively simple (2-3 syllables words are most common)</td>
</tr>
<tr>
<td>uninflected words</td>
<td>quite a few (mostly loans from Chukchi)</td>
<td>very few the majority</td>
<td>many</td>
<td></td>
</tr>
<tr>
<td>Grammatical relations expressed</td>
<td>within a single word (by bound suffixes, polysynthesis)</td>
<td>within a single word (by bound suffixes, polysynthesis)</td>
<td>syntactically (determined by word order)</td>
<td>morphologically (affixation)</td>
</tr>
<tr>
<td>Phonology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) vowels</td>
<td>four vowel system (no diphthongs)</td>
<td>four vowel system (some diphthongs)</td>
<td>many vowels and diphthongs</td>
<td>relatively many vowels</td>
</tr>
<tr>
<td>b) plosives</td>
<td>voiceless</td>
<td>voiceless</td>
<td>voiced/voiceless</td>
<td>voiced/voiceless</td>
</tr>
<tr>
<td>c) uvular cons.</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>d) prosody</td>
<td>Rhythmic (every second vowel is stressed)</td>
<td>rhythmic (every second vowel is stressed)</td>
<td>fixed stress on prominent syllable</td>
<td>stress is mobile</td>
</tr>
<tr>
<td>e) syllabic structure</td>
<td>CV(V)C (few consonant clusters)</td>
<td>CV(V)C (few consonant clusters)</td>
<td>C(C)V(C)(C) (relatively many consonant clusters)</td>
<td>C(CC)V(C(CC) (many consonant clusters)</td>
</tr>
<tr>
<td>Morphology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal inflection</td>
<td>portmanteau inflections for: -number -person (possessor) -case</td>
<td>portmanteau inflections for: -number -person (possessor) -case</td>
<td>inflection for: -number -case (only pronouns)</td>
<td>complex inflexional system, portmanteau morphemes for: - number - gender - case</td>
</tr>
<tr>
<td></td>
<td>a) number</td>
<td>b) case</td>
<td>c) gender</td>
<td>Verbal inflection</td>
</tr>
<tr>
<td>---</td>
<td>-----------</td>
<td>---------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a)</td>
<td>number</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>b)</td>
<td>case</td>
<td>complex (7 noun cases)</td>
<td>complex (7 noun cases)</td>
<td>simple (only one case is marked)</td>
</tr>
<tr>
<td>c)</td>
<td>gender</td>
<td>absent</td>
<td>absent</td>
<td>3 genders in pronouns</td>
</tr>
<tr>
<td>Verbal inflection</td>
<td>mood-dominated</td>
<td>mood-dominated</td>
<td>tense-dominated</td>
<td>aspect-dominated</td>
</tr>
<tr>
<td>a)</td>
<td>tense</td>
<td>simple (future vs. non-future)</td>
<td>simple (future vs. non-future)</td>
<td>very developed (infecting past, and present tense)</td>
</tr>
<tr>
<td>b)</td>
<td>aspect</td>
<td>derivational only</td>
<td>derivational only</td>
<td>little developed (perfective and progressive aspect)</td>
</tr>
<tr>
<td>c)</td>
<td>mood</td>
<td>very developed</td>
<td>very developed</td>
<td>less developed</td>
</tr>
<tr>
<td>Adjectives</td>
<td>absent (adjectival meaning expressed by stative verbs or through noun-elaborating postbases)</td>
<td>absent (adjectival meaning expressed by stative verbs or through noun-elaborating postbases)</td>
<td>developed (separate from nouns and verbs, simple invariable form)</td>
<td>very developed (separate from nouns and verbs complex inflexional forms; adjectival meaning can also be expressed within nouns)</td>
</tr>
<tr>
<td>Demonstratives</td>
<td>very developed</td>
<td>very developed</td>
<td>little developed</td>
<td>little developed</td>
</tr>
<tr>
<td>Definiteness</td>
<td>marked on nominal objects</td>
<td>marked on nominal objects</td>
<td>always marked in noun phrases by articles</td>
<td>not marked (article is absent)</td>
</tr>
<tr>
<td>Syntax</td>
<td>word order</td>
<td>relatively free (SOV, SV, OV)</td>
<td>relatively free (SOV, SV, OV)</td>
<td>determined (SVO)</td>
</tr>
<tr>
<td>congruence</td>
<td>subject/pronoun dropping is widespread under certain conditions</td>
<td>subject/pronoun dropping is widespread under certain conditions</td>
<td>cannot drop the subject</td>
<td>subject can be dropped, but seldom</td>
</tr>
</tbody>
</table>
As we can see, CSY and CAY are typologically very similar. They are both polysynthetic languages that form their words by extensive suffixation. They have a complex word structure with grammatical means being concentrated within words (‘head marked’). They also have rather similar phonological systems, and identify the same morphological and syntactic categories. A comparison between CSY and CAY matches the first category of the possible outcome of a comparison between two languages, proposed by Thomason and Kaufman (1988:205): “vocabulary matches and permits phonological reconstruction, and all grammatical subsystems match and permit grammatical reconstruction” – the languages are genetically related.

On all structural levels, CSY and CAY share typological features that Indo-European languages, such as English and Russian, completely lack. There are no correspondences between Yupik and English. English is an analytical language that has a large stock of uninflected monosyllabic words and a very simple system of inflections, with grammatical relations in the language being determined by word order. There are a few structural correspondences between Yupik and Russian on the morphological and syntactic levels. For instance, both languages have a complex category of case, can express adjectival meanings within words and have free word order, and while in Yupik most suffixes are clearly agglutinative, its inflectional morphemes combine several grammatical categories as in Russian, both languages displaying portmanteau inflections. According to the linguistic constraints, it should be easier to introduce the source language features into the borrowing language if they “fit well typologically with functionally analogous features in the borrowing language” (Thomason and Kaufman 1988: 72).

However, as I have already mentioned, Russian is a very complex language. It represents an older, inflectional stage of Into-European, and its morphology has a complex system of declension and conjugation types with several inflectional categories being fixed by a single portmanteau morpheme. Thomason and Kaufman point out that “affixes in a flexional language (such as Russian) are more closely bound to their surroundings than are affixes in an agglutinative morphology”, and therefore harder to borrow (1988: 73). Thus, despite some correspondences in their morphology, most suffixes in Yupik are clearly agglutinative, while in Russian the majority of suffixes are fixed by a single portmanteau morpheme and it is therefore not likely that Eskimo would borrow this type of morphological features from Russian. Moreover, the corresponding structural features between the two languages are not analogous in function. As it is pointed out by de Reuse, “the ‘internal syntax’ of Eskimo has more connections with the ‘external syntax’ of
separate words...[and] describing Eskimo in terms of morphology and syntax is rather unrevealing, since so much of what is syntax in [more] analytical languages takes place in the morphology” (1994: 414).

Finally, “the morphological and syntactic systems of Eskimo are much more highly interrelated than in Indo-European languages or other more analytical languages” (de Reuse 1994: 414). It can therefore be assumed (from the point of view of linguistic constraints) that the Yupik languages with their very tightly knit polysynthetic structures would be highly resistant to linguistic interference. Moreover, for CSY and CAY, typologically relatively homogeneous polysynthetic languages, this ‘resistance’ should be similar.

4. Socio-Historical Aspects of CSY and CAY Contact with English and Russian

In the previous two chapters, I have provided the linguistic information about the languages involved in the contacts I am describing. I have also pointed out that the typological distance between the languages in contact does not presuppose that the Yupik languages would be more vulnerable to outside interference from Russian than from English. Having relatively similar tightly knit polysynthetic structures, both languages would be virtually impervious to linguistic interference.

According to Thomason and Kaufman (1988: 35), the structure of the language does not determine what might happen to it as a result of language contact, since both the direction of interference and the extent of interference are socially determined. In particular, they are determined by the intensity of contact, which is dependent on various non-linguistic factors (physical, demographical, socio-political, etc.). Length of time, number of speakers, level of bilingualism among the speakers, the socio-political dominance of one group over another and intimate contact in mixed households (intermarriage) and/or other social settings are the major factors that influence the intensity of contact (1988: 47, 72).

The purpose of this chapter is to provide a historical description of CAY-American and CSY-Russian contact and outline resulting patterns of bilingualism and language interference in each. The emphasis will be on the social setting of CAY-English and CSY-Russian contacts, but the earlier pattern of CSY contact with Chukchi and English and CAY contact with Russian will also be described since they prove to be of significance for our discussion of linguistic interference. The first section of this chapter covers the earlier pattern of CSY and CAY contact with other native and non-native
languages. The following sections describe CSY-Russian and CAY-English contact in chronological order. The discussion is divided into three major periods. Section 4.2 describes the emergence English into CAY and Russian into CSY and the early governmental policies on each side. Section 4.3 comprises the period of crucial changes that caused the divergence in the development of the languages. Section 4.4 gives a picture of the present socio-linguistic situation in the Bering Strait. This chapter provides a historical background to chapter 5, which shows the degree of outside influence on CSY and CAY.

4.1. Prior to the 20th Century
4.1.1. The Chukchi Peninsula: CSY and its Contact with Chukchi

Before the Russian and American traders encountered the Eskimo population of the Bering Strait region, the dominating ethnic group in the region was the Chukchi. It is likely that the Chukchi reached the Eskimo territory (the Anadyr River basin) in the fourth to fifth centuries A.D. and that there was armed confrontation between these two in the 12th to 16th centuries A.D. By the 19th century, the relations between Chukchi and Eskimo were quite peaceful. According to de Reuse, it was “dictated by economic necessity rather than by personal relations” (de Reuse 1994: 296; see also Pika, Terentyeva and Bogoyavlensky 1993: 9-13). However, there are some evidences that point to their close kin relations as well, e.g. Chukchi clan names and personal names in CSY, and to some extent place names (de Reuse 1994: 306).

It should be also pointed out that beginning from the mid 17th century the Chukchis, who were more than willing to trade, have also been in economic relations with the Russian traders. It is therefore possible that some earlier interaction between the Eskimos and the Russians occurred via Chukchi. However, Chukchi successfully kept their own economic as well as linguistic independence at the time, and preferred to speak Chukchi to their Russian and Eskimo trading partners (de Reuse 1994: 296). Consequently, all patters spoke Chukchi. The Russian presence on Chukotka during the time of the Tsarist Russia was limited, and the Eskimo languages of the Russian Far North remained intact of the Russian influence until the consolidation of the Soviet power in the area in the early 1920.

6 Note that this paper does not include the discussion of the inter-continental pre-contact trade via Bering Strait that existed prior to the Europeans arrival on the North Pacific. It was linked to aboriginal Siberian trade routes with China and Japan and is a matter of separate discussion (for further information on the subject see Black 1984: 21-39).
The American and European traders arrived on Chukotka in 1850s. By that time, Chukchi was the dominant language, “a kind of lingua franca” for the whole region of the Bering Sea with the Chukchi-Eskimo bilingualism being required of the Eskimo but not of the Chukchi (Vakhtin 1997: 169). Moreover, by that time, Chukchi occupied many of the coastal areas and it is possible that the contact of the American traders with the Eskimo people of the RFN occurred via Chukchi, at least to some extent. De Reuse mentions cases of “pidginized Chukchi or Eskimo” in the Chukotka area and gives evidence for several simplified trade languages that existed in the area during the whaling period (de Reuse 1994: 319-329). According to the source, it is possible that Eskimo used the Eskimo-Chukchi jargon to communicate not only with Chukchi, but also with other foreigners. The English-speaking whalers, in turn, who came to Chukotka coasts during the summer to trade for ivory, skin and baleen, might have taught a variety of Pidgin English to the Chukotka natives. De Reuse gives some examples of so-called “broken English” uttered by Chukotka natives, which show features typical of many varieties of pidgin English (1994: 320-321, 326-327).

In 1867, Alaska passed to the United States. The U.S. government undertook several actions, including establishment of a cruise patrol that regulated and safeguarded the coastline of Alaska against the poaching ships of hunters and whalers. As a result, the ships sailed closer to the Chukotka coast, which increased the American activity in the area. Beginning from 1867 and continuing for some forty years the rate of contraband trade, poaching and conflicts between the American whalers and Chukotkan people was high (Pika, Terentyeva and Bogoyavlensky 1993: 15-17).

The interaction between the American traders and whale-hunters and Chukotkan people was irregular. Moreover, the barbaric character of this interaction as well as the economic superiority of the Chukchi, who distributed imported goods (liquor, weapons, gunpowder, ironware, etc.) all across the tundra, tied up the Chukchi-Eskimo relations and increased Chukchi’s dominance in the area.

---

7 Simplified trade language (or trade jargons) refers to semicodified linguistic system that is nobody’s first language and that has often been called a “trade jargon”. Well-known example of such trade jargon is Russenorsk, based on Norwegian and Russian. As far as Eskimo is concerned, a form of jargon has been documented for North Alaska Inuit, Western Canadian Inuit, Eastern Canadian Inuit, Southern Labrador Inuit, and for Greenlandic (de Reuse 1994: 319).
4.1.2. Russian Dominance in Alaska

The Alaskan mainland was only indirectly known by Chukotkan people at the time and remained intact of the Chukchi influence (de Reuse 1994: 298), and the Americans did not make their presence felt in Alaska until the late 1880s. Yet, in contrast to Chukotka, the Russian influence in Alaska during this period was very strong.

The Russians invasion of Alaska began as early as 1741 with arrival of the first Russian traders, whalers and fur hunters to the North Pacific. Yet, in contrast to other natives, for instance Aleuts, the Yup’ik population was not affected by the Russians during the first eighty years of Russian contact with Alaska’s natives. The significant Russian impulsion into the Yup’ik territory began after 1818, when the first complex expedition of the Russian Navy set off in the area. Followed by several other expeditions in 1820s-1930s and by costal exploration of the Russian-American Company throughout 1830s and 1840s, CAY territory finally came within the orbit of the Russian activity (see Black 1984: 28-29).

Resembling the American-Eskimo contact on the Russian mainland, the major factor that structured the interaction between the Russians and the Yup’iks in Alaska was trade, most often in the form of barter. The Eskimo exchanged items valuable on the European and Asian market (such as furs, ivory, skin clothes) for manufactured goods (iron, copper, beads, advanced whaling equipment) and food products (tea, flour, salt, sugar, alcohol, coffee, etc.) brought by the Russian traders (Black 1984: 30). The relationship between the Natives and the Russian traders was, in Krauss’ words, “mere enslavement and exploitation” (1980: 14). However, personal friendship and kinship with local men achieved through long-term residence and marriage alliances were profitable and strengthened their business relationships. Consequently, intermarriages between the Russians and the Yup’iks were quite common (Black 1984: 32).

Another factor that governed the interaction between the Russians and the Alaska’s Natives was the Russian Orthodox Church. The first Russian missionaries arrived

---

8 Due to the Russian invasion, the Aleut population was reduced from 16,000 to about 1,600 during the first forty years of their contact with the Russians (Krauss 1980: 14, Krauss 1979: 39).
9 The Russian American Company (RAC), established in 1780s under Shelekov at Kodiak where the first long-term Russian-Eskimo contact took place, became the representative of the Russian crown, an instrument by which the region was governed until 1867. In 1867, U.S. purchased Alaska and thereby also lands and properties of the RAC in the North America (Krauss 1979: 39; Pika, Terentyeva and Bogoyavlensky 1993: 15; see also Pierce 1976).
10 Note that the use of the term “the Russians” does not refer to the ethnic Russians alone, but includes the whole (for the most part Russian-speaking) population of the Russian Empire, which already during the time of the Tsarist Russia included different ethnic groups, for instance Cossacks.
in Alaska, on Kodiak in 1794. Their purpose was “to educate and convert Alaskans to Russian culture and religion” (Krauss 1979: 39). Orthodoxy that has a tradition of using a native language to communicate its message did not attempt to eliminate native languages, but rather favoured and supported their development. Many Russian missionaries learned the native language, and children in church schools of both sexes were instructed in both the Russian and native languages.

In 1824, the Russian Orthodox priest Ioann Veniaminov (later Metropolit of the entire Russian Church, and now St. Innokenty) began a remarkable mission school system that included written use of Aleut, Pacific Gulf Yupik, and Central Alaskan Yupik, adapting the Cyrillic alphabet rather well to the sounds of these languages. He spent ten years in the Aleutians working on the creation of religious literature in Aleut. By 1826, he had produced a manuscript catechism in Aleut, and printed the first book in Aleut in 1834. His work was exceptional at the time, providing beginnings of literary tradition in the Native languages and he is said to have brought with him “a period of enlightenment and benign Russian influence in the colony” (Krauss 1979: 39). The first Orthodox priests in the CAY territory were Iakov Netsvetov and Illia Petelin. They were both of Aleut origin and arrived into CAY territory, in the Yukon area in 1945. Religious works in CAY appeared between the 1840s and 1850s (Krauss 1980: 15, Kraus 1979: 39-40, Fienup-Riordan et al. 2000: 14, Black 1984: 34).

It should be emphasised that the Bering Sea coast “is notoriously lacking in the commercial resources – gold, sea otters, bowhead whales – that drew non-Native entrepreneurs to other parts of Alaska” (Fienup-Riordan et al. 200: 13). Consequently, until the coastal exploration of CAY territory by the Russian-American Company in the 1930s and introduction of orthodoxy in the area in the 1940s, CAY was less affected by Russian than some other native languages, for instance Aleut. However, beginning in the 1930s and continuing until the late 1880s (almost twenty years after Alaska had passed to the U.S., in 1867) the Russian influence in the CAY territory was very strong, with the Russian Church remaining the only cultural and educational institution in the area (Krauss 1979: 45). The Americans did not make their presence really felt until the last decade.

---

11 The Russians were few in numbers and often used their Yup’ik-speaking Creoles (people of mixed Alaska Native and Russian ancestry) members to spread their activity across the whole North Pacific, including the introduction of Christianity to the native people (Fienup-Riordan et al. 2000: 14, Black 1984: 34).
4.1.3. The End of the Century: A Comparison (Linguistic implications)

By the end of the 18th century, the linguistic situation on both sides of the Bering Strait can be described as followed.

Due to the Yup’ik interaction with the Russians through trade, intermarriage and the Church, the majority of the Yup’ik population in CAY territory had learned an amount of Russian and could speak it along with their native language. Yet, the position of CAY was very strong. Note that despite forty years of the Russian dominance in the CAY area, the ethnic Russians were a minority and within the Russian-American Company often subordinate to creoles (the offspring of Russian hunters and native women) in terms of number and power (see Black 1984: 32). Moreover, establishment of the Orthodox Church and introduction of church education in the area were beneficial for CAY. Krauss points out that by providing the beginnings of literary tradition for Alaska’s Natives the Russian Orthodox Church had greatly strengthened the status of their native languages (1979: 40)\(^\text{12}\). During the Russian period, CAY has borrowed some Russian words (ca. 200)\(^\text{13}\), yet the grammatical structure of the language per se remained “intact and pure”. The Russian element in CAY today, as Krauss points out, is “much smaller than the foreign element in any European language” (1980: 17).

On the Russian mainland, the dominant language was Chukchi. The Eskimos were subordinate to the Chukchis numerically, economically and linguistically for over a hundred years, and by the end of the century the majority of the Eskimo population of the RFN spoke Chukchi along with their native language. CSY had borrowed numerous lexical items from Chukchi, including part of the Chukchi tundra vocabulary. What is more significant from the linguistic point of view is that due to the existence of Chukchi-Eskimo trade language continuously used by the Eskimos for their interaction with Chukchis and foreigners, the Eskimo language had borrowed some structural elements from Chukchi, i.e. sentence adverbs, conjunctions, and interjections\(^\text{14}\).

Most of these particles are also found in CSY SLI, e.g. particles *elngaatatll*, *enkaam*, and *iwormga* (de Reuse 1994: 362). The presence of Chukchi borrowings in CSY

---

\(^{12}\) Even after 1867, when Alaska passed to the U.S., literacy in CAY continued to flourish. The tradition of literacy in the native language initiated by the Russian Church is still kept today. In the mid 1980s, there were 32 Yup’ik Orthodox parishes, encompassing over 4000 persons, or over a quarter of the whole Yup’ik population at the time (Black 1984: 22).

\(^{13}\) Note that the amount of Russian loans is not the same in different CAY vernaculars (dialects), with their estimates varying between 65 and 190 (Krauss 1980: 16).

\(^{14}\) According to de Reuse, the only way to explain CSY’s richness in Chukchi particles is through the existence of Chukchi-Eskimo trade jargon, which “facilitated the adoption of Chukchi loanwords into CSY” (1994: 452).
SLI points to the linguistic contact of the Chukchi with the Eskimo of St. Lawrence Island. This contact was more indirect and it is possible that Chukchi influence on CSY SLI was caused by the influx of CSY population onto St. Lawrence Island between the 1880s-1920s (de Reuse 1994: 298). This linguistic evidence, however, gives us the reason to believe that until the end of the 19th century, the history of the CSY RFN and CSY SLI developed in the same direction. It was probably at that point of time that the first split between these two took place: while the Eskimo on the Russian mainland continued to use Chukchi, the Eskimo of St. Lawrence Island began to use more English for the trading purposes (de Reuse 1994: 303).

The contact of Eskimo with the American traders on the Russian mainland was neither beneficial nor harmful for the Eskimo languages of the RFN. Due to the irregularity of the American-Eskimo interaction, as well as the economic superiority of the Chukchis, the Americans did not have a profound effect on the Eskimo people and their languages, but rather increased Chukchis dominance in the area. It is evident that Eskimo population of the RFN learned the amount of English words necessary for trading. Precisely, there are thirty-four English loanwords found in CSY of the Russian Far North (also in Chukchi).

4.2. CSY-Russian and CAY-English Contact in the First half of the 20th Century


In 1867, Alaska (including St. Lawrence Island) passed to the United States. However, during the first two decades the American administration did not interfere in the culture of the Natives and literature in CAY continued to develop under the influence of the Russian Orthodox Church were about to end. These initial twenty years of American presence (1867-1887) are known as “period of neglect” (Krauss 1979: 45).

At the end of the 1880s the fishing industry, growing canning and mining industries, gold and commercial whaling brought large influxes of outsiders to the Arctic coasts of Alaska, and already by the beginning of the 1890s “some segments of the Native population counted 902 speakers. There is a supposition that the growth of the St. Lawrence population was due to the repopulation of the island by the Siberian Eskimo whose significant immigration from Chukotka to St. Lawrence Island continued until the late 1920s (Krauss 1980: 46, Krupnik 1994: 56).”

Apart from English loanwords found in the Eskimo languages of the RFN today, discussed in the following chapter, some of the harbours on the Chukotka mainland still use the English names, for instance Plover Bay, Emma Harbour, Little Max Bay, and San Marcos Bay (de Reuse 1994: 199). The CSY songs recorded at that time often “contained English words, either swearwords or meaningless sequences of English words put in for fun” (de Reuse 1994: 300).
The year 1900 constituted “a major demographical marker in the region”: influenza epidemic in Yukon and Kuskokwim area and a sharp increase of the white population (the Cossacks) matched the decline of the Native population (see appendix 3a). The Nome gold rush has “spawned a largely fruitless effort to locate mineral deposits along the Upper Yukon and middle Kuskokwim and a lucrative commercial salmon fishery beginning to take place in Bristol Bay (Fienup-Riordan et al. 2000: 14).

At the same time, American church missions began schools for the Native Alaskans. The Roman Catholics and the Protestant Moravian churches were established in CAY territory in the late 1880s. The Moravian mission was first founded at Bethel, along the Kuskokwim River in 1885. Three years later, in 1888, a Jesuit mission was established on Nelson Island and a year later in the Yukon (Fienup-Riordan et al. 2000: 14). Both churches accepted the native languages and supported the older educational policy of the Russians. The Moravians, in fact, did learn some Yup’ik and produced some significant literary works in the native language, including a complete New Testament. Moreover, by providing a competition to the Russian Orthodox Church, they motivated the Church to begin publishing. Between 1893 and 1902, the Russian Orthodox Church has printed 14 books in the Native languages. Toward the end of the 19th century, vernacular literacy was very much a part of the native culture (Krauss 1980: 20-21).

However, the older educational policy of the Russians, Moravians and Catholics was predominated by the anti-Native language policy of the Presbyterians missionaries under the head of the minister of education Sheldon Jackson. It was, in Krauss’ words, “ultimately a tragic turning point in the history of Alaska Native languages” (1980: 21). The aim of the Presbyterians was to convert all the Natives to the “white man’s religion”, assimilate to his culture and his language (Krauss 1980: 22). Their policy towards Native languages, which they found inadequate to express Christian thoughts, was clear:

“...let the old tongues with their superstition and sin die – the sooner the better – and replace these languages with that of Christian civilization, and compel the natives in all our schools to talk English and English only. Thus we
would soon have an intelligent people who would be qualified to be Christian citizens...” (Yung 1927: 259-260)\textsuperscript{17}.

Note that it was not only their policy, but rather “the national American social philosophy at the time, the ideal of the ‘melting pot’, of assimilationism, assimilation of immigrant peoples and ‘inferior races’ (including indigenous races), to the vigorous and dominant white protestant Anglo-Saxon culture” (Krauss 1979: 41).

The United States Bureau of Education, which administrated most schools for Alaska Natives at that time, supported this policy. As a result, all instruction in schools was given in English, children were required to speak and write English exclusively, and parents were encouraged to speak English to their children. The anti-native language policy was officially enforced in 1910. From about 1910, the federal Bureau of Indian Affairs\textsuperscript{18} carried out the active anti-native language policy, accompanied by heavy suppression of the Native languages. The native language education and literacy development ceased. Children were forbidden to use their native language and were punished for using it in schools. Even some churches that previously used native languages increasingly began to use English (Krauss 1979: 41-42). The federal assimilation policies officially ended with the Indian Reorganization Act in the 1930s. However, the active anti-native language policy in Alaska continued until the late 1960s (almost 60 years), and the value of the Native tongues was not officially recognised by the educational system until the early 1970s (Fienup-Riordan et al. 2000: 23, Krauss 1979: 41).

By the end of the suppression period, the position of the Yup’ik language in CAY territory was seriously weakened. Majority of the CAY population spoke English along with their native language and many young children in many Yupik areas did not speak the Yup’ik language (Krauss 1979: 46). An exception was the Kuskokwim area and, in some part, the Yukon. During the times of heavy suppression of the native languages, Moravian Kuskokwim and the Catholic Yukon churches were less affected by the Anglicisation process and continued periodic religious publications in Yup’ik. After World War II, the

\textsuperscript{17} S. Hall Young was one of the initiators of the anti-Native language policy in Alaska, perhaps even before S. Jackson. In his autobiography, written for about 1880, he expresses Presbyterian thinking concerning a native language policy and educational system in Alaska (Krauss 1980: 23).

\textsuperscript{18} The Bureau of Indian Affairs (BIA) responsibility is the administration and management of 55.7 million acres of land held in trust by the U. S. for American Indians, Indian tribes, and Alaska Natives. In addition, BIA provides education services to approximately 48,000 Indian students. Since its inception on March 11, 1824 and until the passage of landmark legislation in 1975, the Bureau of Indian Affairs has been the principle player in the history of federal-tribal relations, an instrument of federal policies to subjugate and assimilate American Indian tribes and their peoples (Bureau of Indian Affairs web page http://www.doi.gov/bureau-indian-affairs.html, 1.05.04).
Catholics in the Yukon area began to use English increasingly. In the Kuskokwim area, mainly “because with a dense and increasing population, almost entirely Yup’ik, the Yupik language remained so strong that the missionaries at least admitted it was necessary to use the language” (Krauss 1979: 45-46). As a result, the acquisition of the English language in the Kuskokwim area was slow and majority of the Yup’ik population still spoke their native language. The different position of CAY in various CAY areas is also reflected in the amount of lexical items borrowed by the language. The amount of loanwords in different CAY dialectal areas is not the same, being smaller in the Yukon and Upper Kuskokwim areas (see chapter 5.2).

4.2.2. Consolidation of the Soviet Power in Chukotka

The Russians were more merciful to the Eskimo languages than the Americans were, at least in the first half of the century. Until the October Revolution 1917, the Eskimo population of the RFN remained ‘unnoticed’ by the Russians, and the Russian presence on Chukotka was not really felt until the consolidation of the Soviet power in the area in 1923.

The early Bolshevik policy differed from that of the American government between 1910s-1960s, rather resembling the policy of the Russian Orthodox Church in Alaska in 1824-1867, i.e. “favouring the creation of an alphabet and the establishment of literacy in an effort to educate, whether for Christianity or for Communism” (Krauss 1979: 40). Part of the early Soviet social policy was “a commitment to the equality of all peoples and of all languages”, a society where everyone had the right to use her/his own language in different context of social life and the right to receive education in her/his mother tongue (Comrie 1981: 22). In 1924, the government established the Committee of the North, a special governmental agency (the supreme governmental body of the U.S.S.R. until 1936) responsible for the Russian Arctic and Siberian minorities and preservation of their culture and way of life. ‘Culture bases’ which combined economic, educational, medical, veterinary and research activities and school system were established, followed by the development of alphabetization of Northern Minority languages between 1930-1936 (Vakhtin 1992: 10-13). Already in 1930, the Institute of Northern Peoples in Leningrad created an alphabet for CSY, based on Roman script. Soon after, a literary norm for the

---

19 In the early 1930s there were some talks about converting Russian to the Latin alphabet. Therefore, the establishment of literacy for most minority languages of the RFN used the Latin alphabet (Skorik 1990: 78-79, Kaplan 1990: 149, Comrie 1981: 23).
Eskimo languages of the RFN, based on the Chaplinski dialect as an official standard, was developed\textsuperscript{20}. Several Russian teachers were trained in CSY and sent to Chukotka to introduce schooling and literacy to the Yupik people. The first schoolbook in Chaplinski dialect appeared in 1932, followed by some 50 more between 1935 and 1959 (Vakhtin 1997: 164, Menovschikov 1983: 10-12, Comrie 1981: 22-23, Krauss 1980: 48).

Yet, by the end of the 1930s, the course of the Soviet government began to change. In 1935, the Committee of the North was dismantled and “the whole country slid into massive political and cultural repression and economic upheaval” (Vakhtin 1992: 16). Forced collectivisation and enormous industrialisation, supplemented by the overall ambition of the Soviet government to unify all nations of the Soviet Union and to facilitate communication between different ethnic groups by using a common language (Russian), began to affect the Eskimo population of the RFN.

Following the primary goal of the educational system, i.e. to teach Yupik children to speak, read and write Russian, Russian was introduced as a compulsory subject in all schools (Vakhtin 1997: 165, Comrie 1981: 22, 32). In 1937, the Latin alphabet initially used by the language was replaced with the Russian (Cyrillic) alphabet. The Cyrillic alphabet allowed the expression of Russian sounds that did not exist in Yupik and enabled children to master Russian far more quickly. In order to indicate Yupik sounds that did not exist in the Russian language special signs (or letters) were created (see Comrie 1981: 32-33, Menovschikov 1983: 10-12, Menovschikov 1990: 72). At the same time, to facilitate the development of Yupik vocabulary – small minority groups were not assimilated to western technology and culture and the corresponding vocabulary to the same extent as Russian - the emphasis was placed on borrowing rather than on coinage words from the language’s own stock of morphemes. The words were to be borrowed directly from Russian and taken into the language in their Russian orthographical form (Comrie 1981: 34).

All this speeded up the Russian language acquisition by the Eskimo population and facilitated Russian influence onto CSY. By 1950 (only some thirty years after the consolidation of the Soviet power in the area), practically all Yupik population of Chukotka could speak, read and write Russian (Vakhtin 1997: 165). CSY has borrowed

\textsuperscript{20} The policy of the Committee of the North was based on “one nation – one language” principle, i.e. regardless of local tribal and dialectal distances. Following this policy one dialect, the Chaplinski, was chosen as an official standard for all Eskimo languages of the RFN (Krupnik 1992: 193-195). While it was beneficial for CSY of the RFN, it had had a rather negative effect on the other two Eskimo languages of the RFN, Sirenikski and Naukanski.
large part of Russian technical vocabulary, socio-political, scientific, economic, etc. terms (see chapter 5.1).

However, until 1950, the influx of the Russian population to the local Eskimo areas was limited in number, and for the most part restricted to professional personnel: higher and middle administrative officers, highly qualified specialists (physicians, teachers, architects), police inspectors, solicitors, etc. (Vakhtin 1992: 16). Thus, the Russian speaking population came to constitute a new class, class of administration, or intelligentsia. Consequently, the function of the Russian language was for the most part restricted to that of intelligentsia, while CSY was still (one of) the language(s) of local masses (narod). Moreover, visits between the ‘Russian’ Eskimo and the Eskimos of St. Lawrence Island, which gave the Eskimo people opportunity to communicate with each other in their native language, continued until the break down of the Cold War and the closure of Russian-American border in 1948 (Krupnik 1993: 22-23). Consequently, despite the high rate of Yupik-Russian bilingualism among the speakers, the majority of the CSY population of the Russian Far North still spoke their native language.

4.2.3. Bilingualism-in-Formation

Around 1950 the linguistic situation on both sides of the Bering Strait was somewhat similar, and can be described as ‘bilingualism in formation’21. The majority of the Yupik population spoke the colonial language, English in Alaska and Russian in Chukotka, along with their mother tongue. Yupik-Russian and Yupik-English bilingualism, on each side respectively, was widespread and each language had borrowed an amount of words from its contact language. Yet, while in many CAY areas children were no longer learning their native language, on the Russian mainland, mostly due to the earlier effort of the educational system and continuing contact with the SLI Eskimos, the majority of children still spoke their native language.

In spite of that, however, the amount of Russian words borrowed into CSY was much higher than the amount of English words borrowed into CAY. CAY has borrowed only some 60 words (if not less) from English, while the amount of Russian words in CSY exceeded hundred. Thomason writes, “if one of the two groups is much smaller than the other then the smaller group is more likely to acquire features from the largest group’s language” (Thomason 2001: 66). Indeed, the Eskimo population of the Russian Far North

---

21 The term ‘bi-lingualism in formation’ is used by N. Vakhtin (1997: 165) to describe the situation in the Russian Far North in the early 1950s. However, this term also applies to the linguistic situation in Alaska.
represents a tiny minority within other native and non-natives groups, and already mixed with Chukchi. In contrast, by the time of the CAY contact with the Americans, the population remained one of the larges within the area. In the beginning of the 20th century CAY population encountered 10 000 people (see appendix 3a).

Moreover, introduction of the Cyrillic alphabet and the principle of adaptation of words into CSY directly from Russian speeded up the acquisition of the Russian language by the native population and hence increased the adaptation of Russian loans into the Yupik language. In contrast, the introduction of Euro-American culture and the English language in Alaska was slow, even during the time of heavy suppression of the native languages by the federal government, for the most part because of a strong literary tradition established by the Russian Church, the Moravians and the Catholics.

4.3. The 1950s-1970s: The Turning Point
4.3.1. Emergence of Bilingual Education in Alaska

For the Alaska Native languages, the years between 1960 and 1970 were, in Krauss’s words, “a transitional period of rebirth of interest in Alaska Native languages and a shift of developments in their favour” (1980: 26). The Civil Right movements of the 1960s, the liberalisation process and the resurgence of ethnicity, followed by the decline of the “melting pot” philosophy brought recognition of the Native languages by the educational system (Krauss 1979: 41). The passing of 1967 Federal Bilingual Education Act permitted instruction in public-supported American schools in other languages than English. In 1970, experimental bilingual education was invented in four Yup’ik schools, using a unified Central Yup’ik writing system (developed in the 1960s by the staff of the University of Alaska) to teach Yup’ik children to read and write in their native language. Following the success of bilingual education in the Central Yup’ik area, a pair of bills on behalf of Alaska Native Languages passed in 1972, “made Alaska one of the first states to require that children be introduced to education in their native language” (Krauss 1980: 29, for further information on language reforms see Krauss 1980: 28-30).

4.3.2. Russification Policies in Chukotka

Some ten years before, quite the opposite took place in the Soviet North. The death of Joseph Stalin in 1953 “overturned the Soviet economic and political strategy in Siberia” (Krupnik 1993: 24). The development of wide-scale timber cutting, oil and gas industry, modern transport, and industrial fishing in the early 1950s caused a massive
influx of non-native Russian-speaking population to the area (Vakhtin 1992: 18, Vakhtin 1997: 165-166). In twenty years, between 1955 and 1975, the population of Chukotka was doubled from 7,000 to 15,000 people (Krupnik 1993: 24). In addition, in the 1950s-1960s, the Russian government carried out policies of forceful relocation, i.e. relocation of small ethnic communities into larger villages and towns. As a result, within some ten years (1959-1970), there was a large drop of the ethnic Eskimo on Chukotka, from 84% to 60% (Comrie 1981: 254, see appendix 3b).

In the 1950s, Russian superiority was proclaimed by official propaganda. Nationalism was discouraged, while intermarriage, assimilation to the Russian culture and language, and “economic and political integration with the Soviet whole” were encouraged (Krauss 1980: 47-48, see also Vakhtin 1992: 17). The policies of Russification, carried out by the Russian government throughout the 1950s-1980s were oriented towards education in Russian only. Russian was declared the international language of the Soviet Union and was given top priority in all schools. The education in the native language ceased, and Yupik became a ‘subject of study’ instead of the primary medium of instruction (Vakhtin 1992: 17-18). At the end of the 1950s, instead of encouraging bilingual education, teachers began to urge the schoolchildren to drop their native language in the favour of Russian. Russian-speaking day-care centres and boarding-school system, whereby young children were taken from their families until late adolescence, were invented and made compulsory for all children. There, the children were required to speak Russian only and were punished for using their native language (Vakhtin 1997: 163-166, Vakhtin 1992: 5, Krauss 1980: 48).

4.3.3. The Crucial Gap

Overlapping somehow with the liberalization process in the United States of the 1970s, the Russification process of the 1950s-1980s in some way resembled (if not overcome) the anti-native language policies of the American government in Alaska between 1910 and 1970 (Krauss 1992: 22). Yet, while the anti-native policies of the federal government did not eliminate CAY and its status remained rather strong in Kuskokwim and Yukon areas, at least until the early 1960s, the Russification policies in Chukotka turned to be fatal for the Eskimo languages. As I have pointed out in section 2.3 of this chapter, by the end of the suppression period, the CAY remained strong, especially in the Kuskokwim area and the Yup’ik language had adapted relatively few loanwords from English. By the end of the Russification policies in Chukotka, the majority of the Eskimos
have switched into Russian. The Yupik language (if spoken at all) was overwhelmed with Russian loanwords. There were also some phonetic and syntactic interference from Russian into CSY (see chapter 5.1).

There are several explanations to this. To begin with, the Russian language policy was never officially announced, or published. The instructions of the U.S. Federal Administrations, on the contrary, were “published and available for open discussion and criticism” (Vakhtin 1992: 18). Moreover, some churches, in particular the Moravian Kuskokwim and the Catholic Yukon churches, continued creation of literature in the native languages even during the time of heavy suppression. Lewis points out that the relationship of religion and vernacular are extremely close and “religion is the most potent factor in the maintenance of a language” (1997: 12). Indeed, by keeping the tradition of literacy in the native language, initiated by the Russian Church in the middle of the 19th century, the churches provided an opposition to the anti-native language policies of the federal government. For that reason, the Yup’ik is strongest in the Kuskokwim area. After the closure of the Committee of the North in 1937, such an opposition was lacking in the RFN. Communist ideology, though resembling in some way the policy of the Russian Orthodox Church, at least in the beginning of their dominance in the area, “promoted mainly through the influence of Russian”, not the native language (Lewis 1972: 12). Moreover, by choosing one Eskimo language (CSY) as a standard, it signed a ‘death’ verdict to the other two, Sirenikski and Naukanski22.

Finally, the increasing population in CAY territory was almost entirely Yup’ik (Krauss 1979: 45-46). On the Chukchi Peninsula, the population was extremely mixed. Technological developments of the 1950s “enabled outsiders, in particular Russians, to colonise the area in large numbers, so that these [Chukotkan] people soon found themselves a small minority in what previously had been their exclusive territory (Comrie 1981: 35). The new settlers alone (mainly Russian-speaking) constituted about half of the total population of the region. Since 1900 the Eskimo population has failed to increase and by the 1950s, they were a very tiny minority among the Chukchis, the Russians, Byelorussians, Ukrainians, etc. (de Reuse 1994: 304, Krupnik 1993: 24, see appendix 3b). Comrie points out that “in mixed groups of this kind, Russian inevitably becomes the

22 These two groups were larger in number than CSY. However, Sirenikski is now a dead language, and Naukanski is at the edge of extinction. As it was mentioned in chapter 2, the number of Naukanski speakers today is less than a hundred, of those none are children.
lingua franca\textsuperscript{23}, and “even if one wants to maintain its native language he will find it increasingly permeated by Russian vocabulary items, and perhaps even Russian syntactic constructions” (1981: 36). Indeed, by 1980, Russian was the lingua franca of the whole area, and hence the only language a child heard outside of home. Due to the thirty years of Russification policies and boarding school system there were almost none (or very few) children and young people on the Russian mainland that were fluent in Yupik. There were more than three hundred Russian words in CSY. In addition, Russian has affected CSY phonology and syntax (see chapter 5.1).

The majority of the Yup’ik population (including children) in Alaska, particularly in the Kuskokwim area\textsuperscript{24} still spoke their native languages along with English. Recognition of the native languages by the educational system and establishment of bilingual education where children were instructed in their native language improved the position of CAY. By the end of the 1980s, the English influence on the Yupik languages was still limited to lexical borrowing only. Until now there has not been recorded any evidence of English influence on the CAY (or CSY SLI) structure.


4.4.1. Central Alaskan Yupik

Recognition of the Native languages by the educational system in the early 1970s and establishment of bilingual education in Alaska have greatly improved the status of CAY. Moreover, it brought a rebirth of literacy in the Native languages. In the 1980s, over two hundreds elementary books in CAY were published and a hundred Yup’ik teachers were trained. A great significance for the development of the native languages had the establishment of the Alaska Native Language Center (ALNC) at the University of Alaska, which is responsible for scientific studies in Alaska’s native languages and carries active research on Alaskan languages (Krauss 1980: 32). In 1990, the first edition of Jacobson’s \textit{A Practical Grammar of the St. Lawrence Island / Siberian Yupik Eskimo Language} was published, followed by almost 600 pages of \textit{A Practical Grammar of the Central Alaskan Yup’ik Eskimo Language} in 1995. Two other works of great significance appeared in 1994: Willem J. de Reuse’s book \textit{Siberian Yupik Eskimo}, and a \textit{Comparative Eskimo Dictionary}

\textsuperscript{23} \textit{Lingua franca} is “a language used by non-native speakers when interacting with speakers of different languages” (Silver and Miller 1997: 224).

\textsuperscript{24} CAY is strongest in the area. Partly because of the work of the Moravians that was quite exceptional in the area during the time of heavy suppression of the native languages in 1910-1960s. Partly, because the Kuskokwim was the first area to invent bilingual education in schools (Krauss 1980: 45, Krauss 1980: 20).
by Michael Fortescue, Steven Jacobson and Lawrence Kaplan. In addition, in the recent years conferences and meetings have been held “to create and to uniform terminology for the multitude of legal, medical, technological and others devices, ideas and institutions of modern life” (Jacobson 1995: 440).

On the other hand, during the last two decades, the pace of introduction of Euro-American culture has picked up considerably. Following an explosion of social and political organizations in the Yukon-Kuskokwim and Bristol Bay regions during the 1960s-1970s, the 1970s-1980s saw a growth of both population and modern facilities; local harvesting activities became supported by employment income and cash transfers. Introduction of cable television in the early 1980s increased the exposure of Yup’ik youth to American popular culture (Fienup-Riordan et al. 2000: 16, 22). Under the influence of American TV, the Yupik’s knowledge of the English language is constantly expanding and practically everyone now under the age of 60 can read, write, speak and understand English to a fair extent (Jacobson, personal communication). Moreover, though many Yup’ik schools support active bilingual programs, the majority of these programs have transitional attitude towards bilingualism, i.e. they do not seek to maintain Yup’ik language on an equal footing with English, but rather to use Yup’ik in the primary grades to facilitate the acquisition of the English language by the children (Fienup-Riordan et al. 2000: 25).

Under the influence of Euro-American culture and industrial developments, the Yup’iks sense of national identity has been weakened, and during the last ten to fifteen years there has been a sharp decline of CAY. There has been acceleration of the Yup’ik-English code-switching and instead of coining words from language’s own structure (as it has been before 1970s), CAY has borrowed heavily from English (Jacobson, personal communication). Even on St. Lawrence Island, where due to its geographical isolation all the inhabitants (including all the children) still speak their native tongue, the CSY-English bilingualism becomes more and more widespread. Though the population still

25 There are two opposing views on bilingualism, transitional and maintenance. The first one views bilingualism as a temporary phenomenon, a transitional stage between monolingualism in the native language and monolingualism in the dominant language, with the native language being abandoned as soon as a child learns enough English, or any other language for that matter. The second one, of maintenance, views bilingual education as a mean of maintenance of a native language, which should be ‘cultivated’ in schools even though a child is perfectly capable of communicating in another language (Krauss 1980: 30).

26 ‘Code-switching’ is “the alternative use of two languages in the same utterance or conversation” (Grosjean 1982: 116).

27 In 1994, families that spoke English to their children were a minority, so few that some people could tell them by name (de Reuse 1994: 3).
speak English with some recognizable interference from CSY, their knowledge of the English language is constantly expanding. Already in the early 1990s, there has been some reduction of CSY use, at least among teenagers (de Reuse 1994: 3-4).

3.4.2. The Revival of CSY RFN

The revival of the native languages of the U.S.S.R. did not begin until the mid 1980s, when the process of *glasnost* finally opened the Soviet society to international and external security (Vakhtin 1992: 5). In 1990, the Soviet Parliament passed two laws on behalf of the ethnic minorities of the USSR: ‘On General principles of Local Self-Administration’ and ‘On Free Ethnic Development of the Citizens of the USSR’. In the same year, the First Congress of Northern Minorities held in Moscow adopted several important resolutions, including the reopening of the *Northern Minority Newspaper* (Vakhtin 1992: 27-29). Yet, all this has barely changed the situation on Chukotka Peninsula. The Russian influence in the area did not cease until the demise of the Soviet Union in 1991, which engulfed Chukotka into a period of economic depression and forced the Russian population to leave the area.

The most significant factor for the revival of the Eskimo languages of the USSR was the reopening of Russian-American border in 1988, which for the first time since the closure of the border in 1948, made CSY a language of intermediate communication. By the 1990, the visits between Eskimo people on the Russian mainland and the Eskimos on St. Lawrence Island were re-established. Different exchange programs were arranged – these included children group’s visits to St. Lawrence Island, children’s two to three months stay in Alaskan families, exchange programs for teachers, athletes and dancers, family visits and summer occupation programs for middle-aged Siberian Eskimo, and for the most part were carried out during the 1990s (research March-April 2003). The reopening of the Russian-American border has greatly strengthened the Eskimo’s sense of national identity and improved the position of CSY. In contrast to the Soviet times, as it is pointed out by the inhabitants of the village of Novoe Chaplino, being an Eskimo and speaking the Eskimo language today is a matter of pride for every Eskimo in Chukotka.

The research on CSY that I carried out in March-April 2003 showed that there has been a noticeable increase in the use of the Yupik language by the Yupik population. Incorporation of the Yupik words into the Russian speech (note, not vice versa) and Russian-Yupik code-switching have become quite common, especially among those of 40 and above, though even children (whose knowledge of Yupik is still very poor, if any)
show the ability to code-switch, or at least use some Yupik words in their Russian speech. Borrowing of the Russian words into CSY has decreased, instead the Eskimo population prefers to coin words from the language’s own stock of morphemes. There is a growing tendency towards the use of the Russian roots within Yupik words and sentence structures, especially by those who are not very good at Yupik. Such ‘attempts’ are often met with laughter and even blame by those who know Yupik well enough. Note that this tendency is also present in CAY. Yet, alike English-Yup’ik code-switching this tendency is motivated by a growing influence of the English language on CAY, not vice versa, as it is in the case of CSY RFN (see chapter 5.4).

The children’s knowledge of Yupik is also expanding, primarily due to the increasing effort of their grandparents, their visits to Alaska and the boom of the Eskimo cultural activity in the villages. A few five-seven year old children have a good command of Yupik, and approximately 70 % of all schoolchildren in the village of Novoe Chaplino claim to have some knowledge of Yupik (see appendix 2). However, due to the Russification policies of the 1950s-1980s, there is a considerable gap between the older generation and the young ones. In contrast to the older generation, almost no parents (people between the age of 20 and 35) speak the native language and thus are not able to pass the language on to their children. Because of the lack of the necessary educational system – the educational system provides little (if any) support for the language preservation (Vakhtin 1992: 31) – the children’s knowledge of Yupik decreases, as they grow older. The Yupik vocabulary of a child between 12 and 17 is rather poor and often restricted to the school program vocabulary only (see appendix 2). Moreover, there is an increasing interest in the English language especially among teenagers. Not only do they find it amusing to use some English words in their speech, but they (especially those who have been in Alaska) often “confuse” English with Yupik when trying to speak one or another language.

The biggest problem, however, is that even today (almost 15 years after the demise of the Soviet Union and decline of the Soviet activity in Chukotka) the Russian influence in the area is still very strong, and the language of administration, industry, mass media, and education is Russian. Due to acceleration of privatisation in the area, the amount of local radio stations and newspapers is constantly decreasing, and the existing ones are almost solely in Russian. One radio station, the Anadyr Radio (situated in the capital of Chukotka Autonomous Okrug, Anadyr) from time to time broadcasts programs in Eskimo, most often in the Naukanski dialect, but they are seldom available in the
villages. The available radio and TV broadcasts are exclusively in Russian. Moreover, the ‘Russian’ administration still looks with suspicion on the cross-border communication of the Eskimo people\textsuperscript{28}. Over the past 15 years, no flights or sea routes between the Russian mainland and Alaska have been established. Quite the opposite, during the last five years, visits between the Siberian Eskimos’ and the Eskimos of SLI have been reduced. Thus, on one hand the reopening of Russian-American border and a growing desire of the Eskimo people to maintain their native language has strengthened the status of CSY and increased its use among the native population. On the other hand, the Russian influence in the area is still very strong and some major circumstances (lack of the necessary educational system, of language skills among parents and lack of Yupik environment in general) complicate the development of the Yupik skills among the younger generation.

5. Outside Influence on CSY and CAY

In the previous chapter, I have discussed social factors that have influenced the linguistic outcome of the contacts and have pointed out that the main linguistic interference that occurred in both languages is borrowing, i.e. “incorporation of foreign features into a group’s native language by speakers of that language” (Thomason and Kaufman 1988: 37). As opposed to interference through shift\textsuperscript{29}, in borrowing situation lexical items are the first foreign elements that enter the borrowing language. Consequently, the main source of foreign influence in borrowing situation is loanwords. Then structural features (sounds, syntactic and morphological elements) may be borrowed as well (Thomason and Kaufman 1988: 37).

This chapter looks more closely on the types of linguistic features that have been borrowed into CSY and CAY as a result of their contact with English and Russian and determines the degree of outside influence in each Yupik language.

\textsuperscript{28} The Whaling Commission (that regulates whaling in the area) imposes strict rules on the Eskimo whalers. The rules prohibit the Eskimos to go any further than the Chukotka coast zone, and thus indirectly forbid the Eskimo to visit their American neighbours by boats. Breaking of the rules may have serious consequences for the whalers, for instance confiscation of whaling boats (many of the boats still belong to the government). This information was achieved at the official Meeting of Whalers of Providenski District, Providenya, April 5-10 2003.

\textsuperscript{29} We have already mentioned, that substratum interference is a subtype of interference that results in the TL as a result of imperfect group learning during a process of language shift. In substratum interference, structural borrowings (like phonological and syntactical features) usually come first, while in the borrowing situation, lexical borrowing is primary and structural borrowing is subordinate and usually requires an intense contact with a strong long-term cultural pressure from the dominant language group (Thomason and Kaufman 1988: 37-39).
5.1. Outside Influence on Central Siberian Yupik

The most widespread type of outside influence on Central Siberian Yupik of the Russian Far North (CSY RFN) is lexical borrowing, in particular loanwords from Russian. Most of them are relatively recent borrowings that have entered the language during the last 50-70 years. Russian had little influence on CSY prior to the Revolution, and in the pre-Soviet period (before the early 1920s) CSY contained only few Russian loan-words, such as sakar from /sakhar/ “sugar”, saja from /čaj/ “tea”, tavaka from /tabak/ “tobacco”, klepa from /khleb/ “bread”, kasaq from /kazak/ “a Cossack” and some others. Since there were little (if any) direct contact between the Russians and the Eskimo during the time of the Tsarist Russia, it is most probable that these words entered the Yupik language via Chukchi, through the “adoption” by ear. They underwent changes “in conformity with the phonetic and morphological traits of the host language” (Skorik 1990: 77-78). Later, during the Soviet period, these words were “re-adapted” so that they were pronounced according to the rules of the Russian language (see table 4).

Table 4: Earlier Russian Loanwords in Siberian Eskimo and Their ‘Re-adapted’ Forms

<table>
<thead>
<tr>
<th>Russian</th>
<th>Earlier borrowing (pre-Soviet period)</th>
<th>Re-adapted forms (Soviet period)</th>
<th>Gloss (English)</th>
</tr>
</thead>
<tbody>
<tr>
<td>bljudce</td>
<td>pljusa</td>
<td>Bljutca</td>
<td>saucer</td>
</tr>
<tr>
<td>čaj</td>
<td>saja</td>
<td>čaj</td>
<td>tea</td>
</tr>
<tr>
<td>tabak</td>
<td>tavaka</td>
<td>Tabak</td>
<td>tobacco</td>
</tr>
<tr>
<td>pačka</td>
<td>paska-q</td>
<td>pačka</td>
<td>bundle</td>
</tr>
</tbody>
</table>

 Thomason and Kaufman 1988:33

Beginning from the 1920s and continuing for approximately 70 years, the lexicon of CSY RFN has been greatly influenced by Russian (note that CSY on St. Lawrence Island remained untouched by the Russian influence; there are only three Russian loanwords found in CSY SLI). A vast number of Russian loanwords have entered the language. Over two hundred loanwords from Russian were adopted in socio-political, scientific and technological sectors. Many of them are words of an international character, such as alphabet, administration, army, brigade, citizen, commission, committee, communism, democracy, delegate, director, economy, history, law, nationality,
organization, party, politics, republic, revolution, state, socialism etc. A list of CSY socio-political terminology is given in the book *Practice in the Eskimo Language Lexis* written by two Russian linguists, N. Vakhtin and N. Emelyanova (1988: 214-220). A few more words, which are not included in Vakhtin and Emelyanova’s list, can be found in *The Eskimo-Russian Dictionary* composed by G. Menovschikov (1983).

A good many loanwords were connected with new economic activities and experiences, such as the work of schools, clubs, cinemas, radio, television, post offices, etc. For instance, words meaning *club, radio, television, telegraph, post-office, newspaper, letter, ticket, envelope, satellite*, etc., are all borrowed from Russian. School lexis exhibits an extreme richness of Russian loans. Among others it includes such Russian loans as /internat/ “(boarding)school”, /klass/ “classroom”, /pártə/ “desk”, /doská/ “blackboard”, /černíla/ “ink”, /búkva/ “latter”, /slóvo/ “word”, /predložénie/ “sentence”, /glásnaya/ “vowel”, /soglásnaya/ “consonant”, /zvuk/ “sound”, /slog/ “syllable”, /znak/ “sign”, etc. Some commands most commonly used by Russian schoolteachers, such as “think!”, “translate!”, “compose!” and so on, are also borrowed from Russian (Vakhtin and Emelyanova 1988: 220-224).

Russian loanwords are also found in such domains as transport (*tractor, autobus (bus), helicopter, tank, rocket*)30, names of metals and raw materials (*silver, oil*), time reckoning (*date, time, epoch*), nationalities (*Negro, Cossack*), professions (*cashier, geologist, author, cosmonaut*), entertainment (*circus, cinema, theater, museum*), games (*chess, checkers*), food items (*cereals, noodles, cheese, bread, vegetable, fruit, carriage, potatoes*), housing (*furniture, bath, carafe, castle*), flora and fauna (*nature, camel, horse, chicken, cock, stork, wheat, palm tree*) and some other (Menovschikov 1983, Vakhtin and Emelyanova 1988).

During the last few decades, more Russian loanwords have entered CSY, mostly through Russian television and radio broadcasts. According to the Yupik Eskimo people that I interviewed during my stay in the village of Novoe Chaplino, Chukotka, the majority of these loans are words connected with new world events such as for example, war in Iraq, and new political streams, e.g. /lévye/ “left wing”, /právye/ “right wing”, /sotsialdemokráty/ “social democrats”, etc. These words are borrowed directly from Russian and are used in accordance with the rules of Russian.

---

30 All the examples given in this paragraph in brackets are the English equivalents for the Russian loans.
Besides the main loans, i.e. words that have been borrowed into CSY without changes, such as /ármia/ “army”, /milítsia/ “police”, /dictatúra/ “dictate”, /gosudárstvo/ “state”, /dáta/ “date”, etc., there are many words (mostly nouns) that have been incorporated into the language by adding an Eskimo ending –a to Russian roots, like in mira from Russian /mir/ “peace”. Russian adjectives have lost their final –j, e.g. Yupik voenni from Russian /voénnij/ “military”, Yupik istoričeski from Russian /istoričeskij/ “historical” (Vakhtin and Emelyanova 1988: 213). There are also words, which are derived from Russian roots and Eskimo suffixes. For example CSY verb služigaquq is derived from Russian verb /sluzít'/ “to serve in the army”, and CSY verb svobodalitaka “to give freedom to somebody” is derived from Russian noun /svobóda/ “freedom” (Vakhtin and Emelyanova 1988: 213, 219).

Under the influence of Russian, several new words were coined from the language’s own resources. I came across the following examples: igravli-umilga “school principal”, atlavrvm-umilga “store manager”, yaslim-umilga “kindergarten principle”. In the last example the word yaslim is borrowed from Russian /yásli/ “day-nursery”, and the word umilga (umilek) is the Yupik word which means “a chief, a person that has power” (the earlier meaning is “owner of the whaling boat”). It is most probable that these loanwords were coined during the earlier years of Russian dominance in Chukotka, when the first ‘Culture bases’ were established.

In conformity with the Russian model the use of native words was extended, and a number of native words gained a new meaning that was attributed to already existing ones, e.g. CSY word angalik which originally means “owner” have gained the second meaning “leader, manager, head person” (Vakhtin and Emelyanova 1988: 108). Pairs of synonyms where one word is borrowed from Russian and another is derived from the mother tongue are also quite common in CSY, e.g. rabočij (Rus.) - ghipaghta (CSY) “worker”, sobrania (Rus.) - girnuk (CSY) “meeting” (Vakhtin and Emelyanova 1988: 214).

Borrowed items are usually pronounced in accordance with the rules of Russian, which is phonologically very distant from Yupik. In chapter 3.1, I have pointed out that not all Russian phonemes have counterpart among the Yupik phonemes, e.g. the phonological opposition between voiced and voiceless plosives /b/, /d/, /g/ and /p/, /t/, /k/ is absent in Yupik. When lexical items are borrowed, the phonemes that are absent in Yupik are often replaced in CSY by the “neighbouring” Russian phonemes, especially among the younger
generation. Due to the absence of labialized consonants in Russian labialized uvular and back consonants [kʷ, hʷ, qʷ, “R] often lose labialization and are pronounced as corresponding uvular and back consonants. The phonological composition between uvular consonants and back consonants is often lost, so that sounds /k, g, h/ become free variants of /q, gh, ghh/. Finally, Yupik tends to lose phonological vowel length, replacing it by dynamic stress (Vakhtin 1997: 170). As a result, not only Russian loanwords are usually pronounced in accordance with the rules of the Russian languages, but native Yupik words (according to some native speakers of CSY), especially among the younger generation (if speaking Yupik at all), gain a Russian pronunciation.

Russian has also influenced the syntactic structure of the language. Syntactic interference from Russian into Yupik has been studied by N. Vakhtin and described in his article “The Linguistic Situation in the Russian Far North: Language Loss and Language transformation” (1997). By means of a comparative analysis of Yupik texts recorded at different historical points of time - folklore texts before the Yupik-Russian contact recorded by V. Bogoraz in 1890 (published in Bogoraz 1949) on the one hand, and radio program transcriptions in Yupik broadcasted by Anadyr Radio in January-May 1974 and folklore texts and everyday conversations recorded by the author himself in 1977 on the other – Vakhtin comes to the following conclusion. There has been a change in the length of words: word length increased and the proportion of long and short words changed. Vakhtin attributes the increase of heavy word structures to “artificial word-building used for rendering new concepts that have no adequate translations in Yupik”, e.g. /zayavlenghusit inkun kuyusitengekutelleghqamun/ “application to help=get=ability” or, in simple words, “application for a pension” (1997: 171). Apparently, this was caused by CSY exploiting its own morphological resources to create words for new concepts, instead of borrowing directly from Russian (something, as we will see, CAY also have done).

In addition, Russian has affected the syntactic pattern of Yupik. According to Vakhtin “the sentence length increase is caused in Yupik by two parallel processes: the process of chaining, in accordance with the Russian literary norm, of coordinate clauses, and the building of sentences with numerous (exceeding the Yupik arbitrary “norm”) dependent clauses” (1997: 172). His analysis shows that the increase in complex subordinate sentences in CSY under Russian influence has affected the order of words
within both Yupik sentences and Yupik clauses\textsuperscript{31}. The degree of Russian interference, he writes, is enormous, “going almost to the extreme of corrupting Yupik syntactic structure completely” (Vakhtin 1997: 173). Yet, it should be pointed out that word order is a very superficial matter (especially when both languages have rather free word order, as in the case of Yupik and Russian). The changes in CSY word order pattern is not a matter of structural influence of Russian on CSY, but of expanding the existing potential of CSY to literary use.

Apart from Russian borrowings, CSY RFN has a body of more than two hundred words from Chukchi, including a large part of Chukchis tundra-related vocabulary (e.g. quyngiq “domestic reindeer”) and a number of other inflectable words, the large majority of which are nouns. CSY has also borrowed over a hundred uninflectable words from Chukchi: numerous particles, adverbs, coordinative and coordinative conjunctions, interjections, and modal words (de Reuse 1994: 330, 362, Vakhtin 1997: 169, Jacobson 1979: 90). Some of the Chukchi loanwords are also found in CSY SLI, e.g. particles elngaatall, enkaam, and iwernga, (de Reuse 1994: 362).

The borrowing of conjunctions, such as inkam “and”, led to “a partial loss of the native Eskimo morphological means of expressing coordination and subordination” (Thomason and Kaufman 1988: 5), and many CSY verbal affixes have been replaced by adverbia/coordinating particles in analytic constructions (Fortescue, personal communication). As I have pointed out in chapter 4.1, CSY richness in Chukchi particles can be explained in historical terms, in particular the existence of Chukchi-Eskimo trade jargon. The detailed description of Chukchi-Eskimo contact and Chukchi borrowing in CSY is given in de Reuse (1994: 343-413).

Chukchi had also influenced CSY phonology. Some of the phonological tendencies are described by Jacobson (1979: 90), Krauss (1985: 188-190) and de Reuse (1994: 330-331). Several of these tendencies (for instance labialization) are also found in CAY\textsuperscript{32}.

\textsuperscript{31} Despite that both languages have a relatively free word order pattern, “the specific rules that regulate the communicative function are, naturally, different in the two languages,… a simple formal transposition of Russian word order onto Yupik ‘soil’ doesn’t necessarily result in the anticipated effect”. As a result, many Yupik sentences, especially when translated from Russian, gain a noticeable “Russian accent” (Vakhtin 1997: 173).

\textsuperscript{32} Even though some of the phonological tendencies are found in CAY, it is most unlikely that Chukchi have had any influence on CAY, or vice versa. Chukchies have never been in Alaska, and only a few Chukchi loanwords made it to Alaska, e.g. quzngiq “pipe”, kalkaag “paper”, and kujngiq “domestic reindeer” (Fortescue, personal communication, Jacobson 1990a:269).
CSY has a number of loanwords from English, e.g. *supa* “soap”, *kula* “coal”, *tawli* “towel”, *manki* “monkey”, *manik* “money”, *alifa* “elephant”, *kaawa* “cow” etc. (Vakhtin 1997: 170, Vakhtin and Emelyanova 1988). In addition, words “America”, “beans”, “bomb-gun”, “boom (holding sail on boat)”, “butter”, “candy”, “Christmas”, “cigarette”, “clock”, “doctor”, “drum (container)”, “engine”, “flour”, “lock”, “onion”, “pepper”, “playing card”, “pump”, “pussy(cat)”, “sandpaper”, “skate”, “trap”, “watch”, “wire” and “Evinrude” (brand name for outboard motors) (de Reuse 1994: 300, 303). Altogether, there were borrowed thirty-four English loanwords in the Eskimo languages of the Russian Far North. Most of the English loanwords found in CSY are a result of the contact between American English and Yupik whalers in the second half of the 19th century; they have been fully adjusted into the Yupik language (Vakhtin 1997: 170).

In contrast, recently borrowed English words are borrowed into CSY in their original English form and even pronounced with an American accent. I came across few such words during my research on CSY: *cottage*, *college* and *islander*. Other two words are *pippik* and *kitti*, from English “baby” and “kitten”. It is most probable that they came into the language after the reopening of the Russian-American border in 1988, via CSY SLI, and therefore are used in their ‘adapted’ CSY SLI form.

An interesting example is the word *umilek-pargh-nglatara* “white house” or “administration building”. When used, it usually referred to the head administration building in the rayon centre, the town Providenya. The first part of this word is a native word for “chief” (see above). The second part of the word contains a consonant combination impossible for the Yupik languages and is most probably a loanword. Taking into consideration the word’s meaning and form, it is possible that the word is borrowed from the English “parliament”.

5.2. Outside Influence on Central Alaskan Yupik

CAY has about three hundred loanwords from other languages: approximately 200 of them are from Russian, about sixty from English, some from Chukchi and a

---

33 It is possible that words *cottage* and *college* have entered the Yupik language through Russian (not directly from English), since during the last few decades, these words have been widely used in Russian as well.
34 This and other examples given in this paper without references have been recorded during my stay in the villages of Novoe Chaplino and Sirenki, Chukotka, RFN in March-April 2003 (transcribed from Russian according to the table given in appendix 1).
35 This number (60) includes English loan words that are fully incorporated into CAY. The number of partially adjusted and not adjusted at all English loans in CAY is constantly increasing. There are, however, no detailed studies on the subject matter, and the number of recent borrowings from English into CAY is still unknown.
number of loanwords from Aleut, Inuit, Karyak, Lappish, Philippine and some others languages (Jacobson 1984: 678-679).

As in CSY there are Russian loans for imported food items (*flour, bread, butter, tea, coffee, potatoes, cabbage, etc.*)\(^{36}\), for domestic animals (*cat, horse, cow, pig, chicken*), for household and personal items (*table, lock, dishpan, soap, candle, spoon, watch, eyeglasses, hammer, stove, and matches*), for clothing (*coat, boots, socks* etc.), for types of boats (*steamboat, scow, and ship*), music and games (*guitar, balalaika, violin, harmonica, chess, checkers, ice skating etc.*), and religious terms (*icon, nun, cross, censer, Christmas and Easter*) (Black 1984: 38, Jacobson 1984: 678-679). Two other words can be mentioned: one is the Russian word /bánya/ “stream-bath/sauna”, which is commonly used by the natives and is linguistically distinguished from the native word, and the word *maskarat* “a masked dance” that is derived from Russian /maskarád/ (Black 1984: 38-39).

Many Russian loanwords for which there are no Yup’ik equivalents are commonly used in all Yup’ik areas, e.g. *caarralaq* or *saarralaq* from Russian /sákar/ “sugar” (or possibly from its diminutive form /sakharók/), *kass’aq* from Russian /kazák/ “white person”, *kuuniq* from /kon/ “horse”, *kelipaq* from /khleb/ “bread”, and *sap’akiq* from /sapóg/ “shoe/boot” (Jacobson 1984: 679, Mithun 1998: 64). Russian words that have native equivalents are less common than the native words. For example, word *tapuuluq* from Russian /topór/ “axe” is less commonly used than native words *piqertuutaq* and *qalqapak*. Some of these words may be restricted to a particular area; in some areas for example Russian loanword *putuskaq* /podúška/ “pillow” is more commonly used than the native Yupik word (*akin*) for the same thing (Jacobson 1984: 678). According to Black (1984: 23) and Jacobson (1984: 678), such irregularity can be explained through differences of Russian activity in different parts of Alaska.

What is interesting is that Russian loans tend to be phonologically distinctive in Yupik in a number of ways. Some Russian loans start with unusual for the native words letter /l/, e.g. *laavkaq* from Russian /lávka/ “store”, and many have long (double) vowels and unusual consonant germination, as in *yassiik* from Russian /yásčik/ “box” and *kuluk’uunaq* from Russian /kolokólcik/ “bell”\(^{37}\). Yet, as it is pointed out by Jacobson, the Russian words “have entered the Yup’ik language to the extent that they do not incorporate

---

\(^{36}\) All the examples given in this paragraph in brackets are the English equivalents for the Russian loans.

\(^{37}\) Vowel length and consonant gemination in Russian loans “was formulated so as to duplicate the stress of Russian original where possible. It has led to a very distinctive stress pattern in Russian loan words; they tend to have long (double) vowels and often unusual gemination or lack of germination” (Jacobson 1995: 439).
any sounds not previously present in Yup’ik” (1984: 678). Russian sounds that are not present in Yupik are usually replaced by the sounds that already exist in the language. For instance, Russian /r/ was replaced with /l/ as in *piilitsaag* from Russian /pérets/ “pepper”, and Russian /o/ with /u/ as in *mulut’uuk* from Russian /molotók/ “hammer” (Jacobson 1995: 438; see also Jacobson 1984: 679). Note that Russian loanwords sometimes appear in several different forms, either because the word has come into the language in several different forms as in the case of *mulut’uuq* which can also be pronounced as *malat’uuq*, and in the case of *muluk’uuq* and *malak’uuq* from Russian /molokó/ “milk”38, or because a word has been adapted differently in separate regions. For instance, the word *caskaq* from Russian /čáška/ “cup” can begin with both *c* and *s* and have either short or long vowels. As a result, it can be pronounced as *caskaq, caaskaq, caskaaq, saskaq* or *saaskaq* (Jacobson 1984: 679).

Some words were coined from language’s own structure, instead or in addition to borrowing a Russian word, e.g. *igarcuun* “pencil”. Note, that the word “pencil” in CSY is *iga(r)siq*. It is also coined from language’s own stock of morphemes and, as we can see, is very similar to the CAY word for pencil (Menovschikov 1983: 172).

Like English loanwords in CSY, all Russian borrowings in CAY date from the recent past. The existence of Russian loanwords in CAY and English loanwords in CSY provides evidence for their early contact and can be explained in terms of the early pattern of Yupik contact with Europeans, discussed in the previous chapter: CAY Eskimo came first into contact with Russians while Siberian Yupik Eskimo came first into contact with Americans. Consequently, CSY has loans from English, while CAY has loans from Russian. Moreover, while on the Russian mainland and on SLI the words for “flour” /avlawa/, “cow” /kaawa/, “soap” /suupa/, “butter” /para/ and some others are borrowed from English, on the Alaskan mainland names for the same items are borrowed from Russian. In particular, “flour” is *mukaaq* from Russian /muká/, “cow” is *kuluvak* from Russian /koróva/, “soap” is *miilaq* from Russian /mílo/, and “butter” is *maass’laq* from Russian /máslo/ (Jacobson 1979: 91, Krauss 1980:17). Some of the Russian loanwords, e.g. *puuliq* “bullet”, *vvelak* “flag”, *kitalaq* “guitar”, *Yiissus* “Jesus”, *skuulaq* “school” were later fortified by English (Jacobson 1984: 686-687).

38 Note that because of the vowel reduction in Russian (see chapter 2), Russian unstressed /o/ is usually pronounces as /a/ or schwa (though some Russian dialects pronounce /o/). This dialect variation is sometimes reflected in the Yup’ik loans (Jacobson 1995: 438).
The number of English loanwords found in CAY is relatively small. About sixty of them are fully incorporated into the language, “with their phonology adjusted to make them suitable for Yupik”, e.g. *piipik* “baby”, *patituussaaq* “potato”, *piikinaq* “bacon”, *suuq* “show (movie)”, *milek* “milk”, *esip’aq* “zipper”, *anainessaq* “onion”, etc. (Jacobson 1984: 686-687, Jacobson 1995: 439). Other, more recent English loanwords have been partially adjusted or not adjusted at all. For example the English word “radio” can appear in the forms *liitiuq* and *riitiuq* (with the initial apical *r* as in English), or as *radio-q* (pronounced as in English) (Jacobson 1984: 679). A list of Russian and English loanwords in CAY is given in Jacobson’s *Yup’ik Eskimo Dictionary* (1984: 681-687).

What is interesting is that the amount of Russian loanwords (approx. 200 words) in CAY borrowed during some forty-sixty years of Russian-CAY contact is larger than the amount of English loanwords (some 60 words) borrowed by CAY during the first 75 or more years of American English – CAY contact (after 1867). In stead of borrowing, CAY used its power to coin words from Yup’ik bases to create terms for new things introduced by Americans, e.g. *igarcuun* ‘pencil’, *iqairissuun* ‘washing machine’, *mingqessuun* ‘sewing machine’, *tengssuun* ‘airplane’, *niicgnissuun* ‘radio’, *tangercetaaq* ‘movie’, *kenurqutaq* ‘flashlight’, *nakacuguq* ‘light bulb’, *agayussuun* ‘hymnal’, *naulluuvik* ‘hospital’, *yungcarista* ‘doctor’, *elitnaurista* ‘teacher’, *elitnaurvik* ‘school’, and *elliqeryaraq* or *levaaq* ‘outboard motor’. It has only been in the last few decades that CAY has borrowed heavily from English giving terms such as *tiiviiq* ‘TV’, *snuukuuq* ‘snow-machine’, and many more - often entirely or partially “undomesticated” - loan words (Jacobson, personal communication).

It is most likely that because of the increasing population, almost entirely Yup’ik, strong sense of identity among the Yup’ik population and the support of the vernacular Yup’ik by the churches, the pace of introduction of Euro-American culture was slow and Yup’iks preferred to coin words from the language’s own stock of morphemes. Introduction of modern facilities and cable TV in CAY areas in the 1970s has speeded up the exposure of the Yup’iks to the American culture and during the last few decades, instead of ‘coining’, the Yup’ik language has borrowed heavily from English. Like Russian loanwords in CSY RFN, there are some English words (mostly the recent borrowings) in CAY that have not been adjusted to the language beyond the point of adding a Yup’ik ending –*aq* or –*aaq* (in CSY –*a*), i.e. without being adjusted to Yup’ik phonology, e.g. *clinic-aaq* and *orange-aaq* (Jacobson 1995: 440).
It is difficult to calculate the amount of recent English borrowings in CAY, since no detailed research has been carried out in this field so far. Moreover, as we have seen, English loanwords can be treated differently by different speakers of CAY, e.g. the word “radio” (exemplified above). Jacobson points it out that the list of English loanwords for different Yup’ik speakers would be “undoubtedly different” (1984: 679). The only way to explain such irregularity is in historical terms: (1) dissimilar degree of American activity in various CAY areas, (2) strong position of the churches in Yukon and Kuskokwim, (3) and unequal demographical patterns.

I have already mentioned that there are three dialectal areas of CAY, the Kuskokwim and the Yukon Deltas, and Bristol Bay area, and that all three areas have been affected differently by the Americans. Another way of dividing CAY, proposed by Jacobson (1995: 441), is into *core* and *peripheral* General Central Yup’ik (GCY). The first one includes Lower Kuskokwim and Bristol Bay; the second one comprises the Upper Kuskokwim and areas around Lake Iliamna. Jacobson points out that partly, this division is attributed to the lexical differences of these two and partly, to “the attachment pattern for certain suffixes and in certain phonological points” (1995: 441). One of the differences mentioned by Jacobson (1995: 441) is particularly interesting for our discussion, i.e. *core* GCY pronounces intervocalic *v* like English ‘w’, while *peripheral* pronounces it like English ‘v’. This difference points towards unequal degrees of English influence on the phonology of various CAY dialects. However, no detailed research has been carried out in this field so far, and further research on the subject would be needed to provide the data for this supposition.

5.3. Language Transformation

The lexical influence of Russian on CSY has been enormous: CSY vocabulary has been greatly extended by Russian loanwords and by the attribution of new Russian-based meanings to already existing native words. Russian has not only become the main source for lexical borrowings into CSY RFN affecting most (if not all) domains of life, it has also influenced CSY phonology and syntax. In contrast, CAY does not seem to have undergone heavy borrowing in any of the language’s subsystems. Russian and English loanwords in CAY are restricted in types (nouns) and are perfectly adjusted to the phonetic, word-formative and syntactic patterns of the language. Types of outside influence on CAY and CSY are shown in table 5.
Despite the noticeable difference in the degree of contact interference in CSY and CAY, the main type of foreign influence in each situation is borrowing of words (mostly nouns). Yet, while CSY has many more lexical borrowings, CAY has used semantic extension and loan translation instead. Structural changes in CSY RFN (distortion of CSY pronunciation, increase of word length and sentence length, and unnatural word order) are a result of widespread bilingualism among the speakers, and of CSY expanding its structure under the influence of the Russian culture and literature.

**Table 5: Outside Influence on CSY and CAY**

<table>
<thead>
<tr>
<th>Outside Influence</th>
<th>CSY RFN</th>
<th>CAY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexicon, content words</strong></td>
<td>- heavy borrowing from Russian</td>
<td>- no heavy borrowings</td>
</tr>
<tr>
<td></td>
<td>- restriction on types (mostly nouns, but also verbs and adjectives)</td>
<td>- restriction on types (only nouns)</td>
</tr>
<tr>
<td></td>
<td>- numerals, months, colours maintained</td>
<td>- numerals, colours maintained (months are possibly borrowed)</td>
</tr>
<tr>
<td><strong>Lexicon, functional words</strong></td>
<td>- none from Russian (some conjunctions and particles from Chukchi)</td>
<td>- none</td>
</tr>
<tr>
<td><strong>Phonology</strong></td>
<td>- loss of labialization of labialized uvular and back consonants</td>
<td>- none</td>
</tr>
<tr>
<td></td>
<td>- loss of phonological composition between uvular and back consonants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- some loss of the phonological vowel length</td>
<td></td>
</tr>
<tr>
<td><strong>Morphology</strong></td>
<td>- none</td>
<td>- none</td>
</tr>
<tr>
<td><strong>Syntax</strong></td>
<td>- word length increased</td>
<td>- none</td>
</tr>
<tr>
<td></td>
<td>- proportion of long and short words changed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- sentence length increase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- word order is affected</td>
<td></td>
</tr>
</tbody>
</table>

5.4. Mechanism of Interference and Verbal Strategies

The main mechanisms of borrowing simple (non-compound) English/Russian lexical elements (simple words) into CSY and CAY are quite similar. Jacobson writes: “if one wishes to use an English word in a Yupik sentence and that English word has not
already become part of the language... then the English word can be temporarily borrowed into Yupik so to speak by following it with +aë, e.g. Engl.: “computer” = Yupik: computer-a (1990: 32-33). Russian words (nouns) are borrowed into Yupik in the same way. A previously mentioned example is Russ.: /mir/ (peace) = CSY mir-a (sing.). In CAY, as we have seen, the words are usually borrowed by adding the Yupik endings –aq or –aaq to the consonant ending English words, thus, using the same principle, e.g. orange-aaq.

However, in contrast to CSY that, until recently, borrowed words directly from Russian (in accordance with the Russian orthographical and phonological rules), the majority of English loanwords, when borrowed into CAY, have been fully (or partially) adjusted to the phonological system of Yupik. Compare:

<table>
<thead>
<tr>
<th>Russian</th>
<th>CSY</th>
<th>CAY</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>rádio</td>
<td>radio</td>
<td>riitiuq / liitiuq /radio-q</td>
<td>radio</td>
</tr>
<tr>
<td>kófe</td>
<td>kofe</td>
<td>kuuvviaq</td>
<td>coffee</td>
</tr>
<tr>
<td>sákhar</td>
<td>sakhar-a</td>
<td>caarralaq / saarralaq</td>
<td>sugar</td>
</tr>
<tr>
<td>kartoška</td>
<td>kartoška</td>
<td>patituussaaq</td>
<td>potato</td>
</tr>
</tbody>
</table>

In other words, while in CSY RFN simple words were borrowed into the language by transferring the phonemic sequences from the contact language (Russian) to their native language, in CAY the expression of a sign was (most often) changed “on the model of a cognate in a language in contact, without effect on the content” (Weinreich 1974: 50).

At the same time, when newly introduced objects and concepts are given names in CSY (note that newly introduced items are constantly appearing in both languages as a result of their continuing contact with English/Russian), they are usually not given native names at all. Instead, the word is borrowed directly from Russian and is adapted to the derivational or syntactic patterns of Yupik, e.g. Russian /gerb sovetskogo sojuza/ has been borrowed into Yupik as sovetskim sojusim gerbinga “the Emblem of the Soviet Union” (Vakhtin and Emelyanova 1988: 215). It can also involve the borrowing of some elements and the replacement of others, as we have seen in the case of yaslim-umilga “kindergarten principal”, where yaslim is derived from Russian word /yásli/ “day-nursery” and word umilga (umilek) is Yupik word for “owner” (see above).

In CAY the main principle of introducing foreign items is, in Weinreich words, “reproduction in terms of equivalent native word” (1974: 50). For instance, by coining
words from language’s own stock of morphemes, Yup’iks have created words iqairssuun “washing machine”, tengssuun “airplane”, calistenguciquq “he will be a worker”, calissuun kalikaq “Social Security card”, and many more (Jacobson 1995: 440). Another way is translating English words/phrases with a native Yup’ik construction. The word “oil” for example does not exist in the Yupik languages and its meaning is expressed by the native Yup’ik construction misek tuklaq “bad grease/fat”. In the same way, the English construction “air pollution” is ‘replaced’ by the Yup’ik utterance “when we come out and smell, it stinks” (note, the word “air” does not exist in the Yupik languages as an underived form, and the closest meaning is “atmosphere”) 39. In CSY, the newly introduced items are simply borrowed from Russian, most often in their original Russian orthographical and phonological forms.

Modern speakers of both CSY and CAY tend to bring foreign roots, Russian and English respectively, into their native language as they speak. An example of an English root in CAY is tiparuga-t-wa imailingut - “it is obvious that the many tapes are empty” (Mithun 1998: 64). An example of Russian root in CSY, given by one of the native CSY speakers interviewed in the village of Novoe Chaplino, is makitaq-ghem padmita-naghunga (Rus.: /podnimís’ požálusta, ya zdes’ podmetů/) - “stand up, please. I will sweep [the floor] here”. Another example, given by a native woman in Providenya is Nepoydo-ghna-nghituten, povdoghh-lequten školamun - / čto ne pojdeš ne govori, pojdeš v škólu/ - “Don’t say that you won’t go, you will go to school”.

Over the last few decades, there has been an increasing tendency towards intense lexical borrowing from CSY RFN into Russian (not vice versa as in the previous examples). For instance, occasionally noticed lexical borrowing of CSY in Russian, as it is shown in the following example, uses CSY base (underlined) in a Russian sentence and with Russian inflectional ending: Ja eto niive-ayu? – “(Do) I pour it out?” (Vakhtin 1985: 43). Note, since the majority of children in CAY territory and on St. Lawrence Island are Yupik-dominant, the borrowing occurs in the other direction, i.e. of an English word used in the Yupik sentence. An example of English word in CSY SLI is Around and around-(e)ngllagh-naq(e)-unga - “I am going to make circles (while drawing)” (de Reuse 1994: 305.)

39 This information was provided by one of the local people interviewed in the village of Novoe Chaplino, Chukotka, RFN. According to the informant, the given translation was made by one of the translators from Nome, Alaska.
I have also noticed that speakers of CSY RFN tend to bring native Yupik words in to their speech, as they speak Russian. An example, involving the use of a Yupik noun in the Russian sentence, recorded during my stay in Chukotka is: *Alqutak daj* – “give me the spoon”. The native Yupik words, such as e.g. *unorgh* “tip”, *antorpaq* “old walrus”, *aserpaq* “a group of young walruses”, etc. often occurs in the speech of whale-hunters during the hunt, e.g. *Daj mne unorgh* - “Give me the tip”.

One example is particularly interesting, the word *naqam* meaning “but instead, then, however, but, nevertheless” (de Reuse 1994: 393). Originally, this particle was borrowed from Chukchi, but being fully incorporated into CSY, it is considered by the native population to be a native Eskimo word. I have noticed that it very often appears in the speech of the local population as they speak Russian, e.g. *Naqam ty skazala...* - “But you have told (that...)”, or *Naqam ty idy domoy* - “Then, you go home”.

The best way of demonstrating this tendency, however, is by the following Russian poem into which the Yupik words (nouns), corresponding to the Russian ones, have been incorporated (the Yupik words are underlined):

> Motrosskij *nasapraat tapraqak* v ruke,
> Nesu ya *anjaapak* po bystroy reke
> I skachut *valneghpug* za mnoj po pyatam
> I prosyat menya: “Prokati kapitan”

The final example is a short dialogue between a 7-year-old boy (A) and his 25-year-old mother (B):

<table>
<thead>
<tr>
<th>Russian-Yupik mixture</th>
<th>English translation (English equivalents for Yupik are underlined)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: - Nu gde <em>ängqak</em>?</td>
<td>A: - Were is the <em>bold</em>?</td>
</tr>
<tr>
<td>B: - Ni gde, a <em>naqu ängqak</em></td>
<td>B: - Not “where”, but <em>where is the bold</em></td>
</tr>
</tbody>
</table>

The last examples show that the CSY RFN speakers tend to mix (or switch between) native and foreign languages. The alternative use of two languages in the same utterance (or conversation) is known as code-switching, and can include a word, a phrase or a sentence (Grosjean 1982: 116, 145-146). Note that code-switching is different from

---

40 In to the English language the poem can be translated as followed (English equivalents for Yupik words used in the Russian version are underlined):

A sailor’s *hat*, a *rope* in the hand,
I carry a *little* *ship* down the streams of the beck
And *frogs* are jumping, chasing my steps
And ask me, “give a ride captain [Jack]”. 
lexical borrowing in that the switched element is not integrated into the other language, yet, as it is pointed by Grosjean, it “is meaningful in much the same way that lexical choice is meaningful” (1982: 145-146). For instance, code-switching into the minority language can signal group solidarity, becoming “ethnic identity markers” and hence help to maintain the native language (Grosjean 1982: 153). Indeed, after the reopening of the Russian-American border, which increased the sense of national identity among Siberian Eskimos, incorporation of Yupik words into the Russian speech and code-switching into Yupik have become quite common, especially among those of forty and above (though this tendency can also be traced among children). In contrast, switching between CAY and English occurs into a majority language (English), which can be attributed to a growing popularity of the Euro-American culture and decrease of group’s sense of national identity.

The discussion of code-switching is a separate and complex topic and cannot be fully covered in this paper. Moreover, there has not been any detailed study on code-switching (or code mixing) between either Russian and Yupik, or English and Yup’ik. However, this phenomenon exists on both sides of the Bering Strait and its study may help us to understand some tendencies peculiar to each contact situation. What is also important is that it closely related to bilingualism and hence may be an important factor in predicting the direction of interference of language contact.

6. Conclusion

In this thesis I have provided historical evidence for CSY-Russian and CAY-English contacts and exposed how the social factors of the contacts have manifested in the different levels (lexical, phonological, morphological and syntactic) of the Yupik languages.

We have seen that the main type of linguistic interference in both Yupik languages is borrowing. Yet, while in CAY borrowing is restricted to loanwords only, in CSY RFN some structural features (phonological, syntactical) have been borrowed as well. Moreover, CAY has two hundred loanwords from Russian, which is three times as many as the amount of English loanwords adapted by CAY during the first 75 years (if not more) of its contact with English. A great difference in the extent of linguistic interference in CSY and CAY is striking.

In chapter 3, I have discussed the typological distance between the languages concerned. As we have seen, CSY and CAY are typologically very similar. In particular, they are both relatively homogeneous polysynthetic languages that have a complex word
structure with grammatical means being concentrated within a single word (‘head marked’) by means of extensive suffixation. I have also pointed out that the morphological and syntactical systems of Eskimo are much more highly interrelated than Russian and English and that “the ‘internal syntax’ of Eskimo has more connections with the ‘external syntax’ of separate words” than in Indo-European languages or other more analytical languages (de Reuse 1994: 414).

According to the linguistic constraints, the most highly structured languages, such as Eskimo, would show a high resistance to linguistic interference. Weinreich for instance claims that a language that has many restrictions on the form of words “may be proportionately more resistant to outright transfer and favor semantic extension and loan translation instead” (1974: 61). As we have seen, CAY favoured semantic extension and loan translation instead of borrowing from English, at least until very recently, while CSY has extended its vocabulary by lexical borrowing directly from Russian. Then, according to the structuralists’ supposition and the amount of interference in CAY and CSY, CAY should be more resistant to linguistic interference than CSY, and hence should have more interrelated structures. However, CSY and CAY are two relatively homogeneous languages with a complex and tightly knit polysynthetic structure; they exhibit similarity on all structural levels. Thus, CAY cannot be considered as being more impervious to linguistic interference than CSY, a similarly homogeneous polysynthetic language. In the case of CSY, as we have seen, social factors did overcome structural resistance, at least to some extent.

The naturalness constraint, which claims that changes will take place in the direction of less-marked structures, does not seem to hold either. As pointed out by de Reuse, “the transformation of CSY is unlikely to be caused by a natural tendency within Eskimo (polysynthetic languages) to loose their structural features if language contact and consequent borrowing give the opportunity to do so” (1994: 453). CSY cannot be seen as less marked than an equally homogeneous polysynthetic language, such as CAY. It is therefore not likely that the evolution described in this paper is internally motivated.

The contact situations that I have described in Alaska and Chukotka seem to be an appealing ground for Thomason and Kaufman’s claim that socio-linguistic constraints are more important than linguistic constraints.

Based on the principle that “it is the sociolinguistic history of the speakers, and not the structure of their language, that is the primary determinant of the linguistic result of language contact,” Thomason and Kaufman (1988: 35) distinguish three possible types of
contact-induced language change: contact-induced language change in maintenance, contact-induced language change in language shift, and pidginization. Discussing borrowing under language maintenance, they propose a scale according to which the borrowing can be arranged, beginning from (1) *Casual contact: lexical borrowing only*, through intermediary points, to (5) *Very strong cultural pressure: heavy structural borrowing*” (1988: 74-76).

Taking into account the amount of English borrowing in CAY, described in the preceding chapter, it appears that CAY-English situation fits classification of point 1 of this scale, which is characterised by Thomason and Kaufman as followed:

<table>
<thead>
<tr>
<th>(point 1)</th>
<th>Casual contact: lexical borrowing only</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lexicon:</strong></td>
<td>Content words. For cultural and functional (rather than typological) reason, non-basic vocabulary will be borrowed before basic vocabulary.</td>
</tr>
</tbody>
</table>

As we have seen in the previous chapter, the only words that have been borrowed by CAY from English (and in that respect, also from Russian during the earlier contact) are content words, mostly words that are connected with newly introduced items, new activities, modern developments, etc., e.g. “potato”, “bacon”, “orange”, “zipper”, “show”, “radio”, “television”, “clinic”, etc. Thus, from a sociolinguistic point of view, Thomason and Kaufman’s framework presupposes that the presence of particular patterns of borrowing in CAY is linked to the intensity of contact between English and CAY.

Yet, the *casual contact* does not presuppose that the population was exposed to strong cultural pressure from the source language speakers, which we do have in the case of CAY-English. As we have seen, the CAY population was under strong cultural pressure for almost 60 years (1910-1970): until the early 1970s, the official policy of the U.S. federal government was of assimilation to the Euro-American culture and of monolingual education in English only with the use of the native language being forbidden in schools. Where there is strong cultural pressure (point 4 of the borrowing scale) Thomason and Kaufman expect moderate structural borrowing to take place. Yet, this did not occur in CAY. From the typological point of view, the English borrowing in CAY did not cause any disruption. Though there are some recent borrowings that have been either partially
cultivated into the language or not cultivated at all, majority of words are perfectly adapted into the structure of the language.

The situation is also intriguing taking into account the amount of Russian loanwords in CAY (which is higher than the amount of English loanwords in CAY). The amount of borrowing would require both contacts to be placed under point 1 of the scale. Yet, in comparison to CAY-Russian contact, which is believed to have been short-lived and, in terms of numbers, very limited, the American presence “is seen as relatively massive, resulting in permanent settlements by Euro-Americans” (Black 1984: 21-22).

The influence of Russian on CSY does not seem to match precisely any of the five points on the borrowing scale; while it mainly corresponds to Thomason and Kaufman’s degree 1 (borrowing of content words only), there are elements that suggest their degrees 4 and 5 rather, for instance phonological and syntactic interference from Russian into CSY.

As regards CSY phonology, there has been an introduction of new distinctive phonological features in contrastive sets of the native vocabulary, e.g. introduction of voiced plosives /b, d, g/ (restricted to loanwords only), along with loss of some contrast between phonemes. There has been loss of phonological composition between uvular and back consonants so that /k, g, h/ become free variants of /q, gh, ghh/, and loss of phonological vowel length. Though the phonological influence that I have described has mainly been in and through Russian loan words (as presupposed in points 2 and 3 of the borrowing scale), its spread to native words is significant and matches point 4 on the borrowing scale: Strong cultural pressure: moderate structural borrowing.

The influence of Russian on the CSY syntactic structure, predominantly the construction of Yupik sentences with numerous dependent clauses, as in Russian, has affected the proportion of long and short words and the words order pattern of both Yupik clauses and sentences (point 5: very strong cultural pressure: heavy structural borrowing). However, in contrast to Chukchi influence, when many CSY verbal affixes have actually been replaced by adverbial/coordinating particles in analytic constructions, also affecting the morphology, Russian influence on CSY did not introduce any typological changes to CSY structure. The increase in complex subordinate sentences in CSY under Russian influence is largely a matter of CSY expanding the existing potential of the language to literary use, not a change to the system.

Thomason and Kaufman say little about this situation, but only mention that syntactic interference can occur independently of phonological interference and arise
through knowledge of another language in its written form (1988: 38). Linguistic interference of Russian into CSY word order pattern is independent of phonological interference and can indeed be attributed to an increasing amount of literature, translated into the native language from Russian (Comrie 1981: 34). According to Fortescue (personal communication), the same has happened with West Greenlandic (as opposed to Canadian dialects) as it has become used more and more for literary and technical purposes. As regards Vakhtin’s point about words getting longer (see chapter 5.1), this is not a matter of structural influence, but of CSY exploiting its own morphological resources to create words for new concepts, something CAY (as we have seen) also have done.

As we can see, the theoretical framework, proposed by Thomason and Kaufman does presuppose that certain social circumstances are related to a particular kind of contact-induced language change. Yet, it does predict the specific outcome of language contact. Obviously, I agree with de Reuse, “there is more than the prediction indicated by Thomason and Kaufman” (1994: 417). The only way to explain the linguistic outcomes of CSY-Russian (and CAY-English) situation(s) is in external historical terms.

We have seen that there have been several twists in the history of CSY and CAY. To begin on the Russian side, the Eskimos were rather few in number and already subordinate to other native groups, in particular the Chukchi. With the consolidation of the Soviet power in Chukotka in the early 1920s, the Russian activity in the area and the pace of introduction of Russian culture and language became extremely high. Introduction of the Cyrillic alphabet in the late 1930s and extension of the Yupik vocabulary by Russian loans increased the Russian influence on CSY as well as the acquisition of Russian language by the population. By the end of the 1940’s the majority of Yupik population of the RFN were bilingual in Yupik and Russian.

Taking into consideration that the CSY were a tiny minority (even within other Eskimo groups), and that the cultural pressure imposed on the Eskimo people and level of bilingualism among the Eskimos were high, one would assume that the population would shift rapidly to Russian (the language of the majority group) and abandon their native language. However, apparently, CSY shift to Russian did not occur, at least not until after 1950 and the majority of the Yupik population still used their native language. There are several explanations to this: support of the native languages by the Soviet government, limited influx of Russian-speaking population, and last but not the least, continuing intense communication across Bering Strait with the Yupiks of St. Lawrence Island. Instead, CSY used its own resources to create words for new concepts. As a result of ‘coining’ words for
new concepts from the language’s own resources by means of extensive suffixation, the amount of long words in Yupik increased. Additionally, the increasing amount of literature translated into the native language from Russian forced the language to expand its resources to literary use.

In the early 1950s a very strong cultural pressure imposed on the Eskimo people by the Russification and relocation policies of the Soviet government and by the tremendous influx of the Russian-speaking population, accompanied by the closure of Russian-American border, forced the population to use more and more Russian. By that time, the population was already bilingual in Russian. Thomason and Kaufman point out that in the case of (Siberian) Eskimo “incorporation of the phonological features that enter the borrowing language with loanwords may seem the first and most obvious kind of structural borrowing to be expected” (1988: 38). Indeed, beginning from 1950s the language has borrowed heavily from Russian. Since the level of bilingualism among the speakers was high and Russian words were adapted into the language in their original Russian phonological form, the Yupiks began to incorporate Russian sounds along with Russian words. By the end of the Soviet reign on Chukotka, the majority of the Eskimo population (especially the young ones) were monolingual in Russian. Today the majority of population is Russian speaking and when trying to speak Yupik many Yupik words get a noticeable Russian accent. Note that many the natives words for the cultural items the Russian language has no words for (unorgh “tip of an arrow”, antorpaq “old walrus”, aserpaq “a group of young walruses”, etc.) have been kept by the native population and are used in their Russian speech, which points to the parallel process of interference through shift.

In Alaska, beginning from 1910, the cultural pressure was much stronger than on the Russian mainland during the first twenty years of the Russian dominance. The active anti-native language policies of the federal government, directed towards monolingual education in English only, facilitated the acquisition of the English language and hence increased level of bilingualism among CAY speakers. By the mid 20th century, as we have seen, the majority of the population were bilingual in English.

According to Thomason and Kaufman’s table of linguistic results of language contact (1988: 50), an intensive contact that includes much bilingualism among borrowing-language speakers over a long period of time results in much lexical borrowing and moderate to heavy structural borrowing, especially in phonology and syntax. However, as we have seen, in contrast to CSY RFN, CAY did not borrow any structural elements from
English. Moreover, the amount of lexical items, borrowed during the first 75 or more years of American contact (after 1867) was less than the amount of words borrowed during the Russian colonial period. Instead, Yup’ik used its power to coining words from its own stock of morphemes.

I am unable to give a certain answer to the question why during the first 75 or more years of American period, CAY has borrowed fewer words than during some forty years of its contact with Russian. However, I agree with Jacobson and believe that it was not a matter of Russian being easier or otherwise more congenial to borrow from, but rather that the pace of introduction of Russian culture was extremely high. In particular, so much material culture was introduced by the Russians in such a relative short period of time that there simply was not enough time for what according to Jacobson might be called “the collective creativity of the Yup’ik language” to come up with “coined indigenous terminology for the items in question” (Jacobson, personal communication). On the other hand, as indicated by the same linguist, by the time Americans came with the English language, the pace of introduction had slowed down considerably so that there was time for that “collective creativity” to function (Jacobson, personal communication).

Partly this was due to the dense and increasing Yup’ik population, partly to the high position of the Russian, Moravian and Catholic churches, which supported the development of native languages and literacy in the native language, initiated by the Russian Orthodox Church in the beginning of the 19th century. Lewis (1972: 12) points out that religion is the most potent factor in the maintenance of a language since it has a close relation to vernacular. Indeed, already by the end of the 19th century, the vernacular literacy was an important part of CAY culture, and since strong starts had been made with Central Yup’ik in the Russian, Catholic and Moravian church schools “it took some time for the anti-Native policy to develop in the area” (Krauss 1979: 41). Note that the early Communist ideology, though resembling in some way the policy of the Russian Orthodox Church, “promoted mainly through the influence of Russian”, not the native language (Lewis 1972: 12). Moreover, by encouraging one language, CSY, as an official literary standard, it has greatly weakened the position of other Eskimo languages of the RFN.

Thus, despite strong cultural pressure and high level of bilingualism, CAY showed a high ‘resistance’ to interference from English. This ‘resistance’, I believe, was not internally motivated, but rather depended on social factors of the contact, such as a high sense of national identity and strong position of the churches and native vernacular. The best proof to this argument is a sharp decline of CAY during the last few decades. In the
recent few decades the pace of introduction of Euro-American culture has picked up considerably and, according to Jacobson (personal communication), the creative spirit of Yup’iks is not as vigorous as it has been before. Consequently, instead of coining words from language’s own recourses, CAY has borrowed heavily from English, giving terms such as *tiiviq* “TV”, *snuukuq* “snow-machine”, and many more - often entirely or partially ‘uncultivated’ - loanwords. A growing tendency towards Yup’ik-English code-switching and incorporation of English lexical borrowing into Yup’ik point towards the decline of CAY under an increasing influence of English.

On the Russian mainland, in turn, the reopening of the Russian-American border and the demise of the Soviet Union, accompanied by a massive flight of the Russian-speaking population, have reversed the linguistic situation: less borrowing from Russian, more coining, increasing lexical borrowing (and code-switching) from Russian into Yupik.

Thomason and Kaufman (1988) do not consider that contact-induced language change is a process that can be overturned under certain circumstances. In *Siberian Yupik Eskimo* de Reuse, thoroughly exploring the contact between CSY and Chukchi, points out that this possibility should be considered and that the circumstances that would evoke such a change “would have to be sociolinguistic, since it is impossible to imagine language-internal conditions for both a process and the reverse of this process” (1994: 455). Indeed, the case of CSY RFN shows that the possibility of a reversed process of contact-induced change under certain sociolinguistic circumstances is possible. The Russian influence on CSY RFN is still very strong, but there has already been some reduction in the use of Russian loanwords. In addition, a growing tendency towards lexical borrowing from Yupik into Russian and Russian-Yupik code-switching (note not vice versa) supports this supposition.

In studying language contact on both sides of the Bering Strait, I have based my explanation of contact-induced language change on the external socio-historical factors of the contact situations, and have shown that in both situations sociolinguistic constraints are more important than linguistic constraints. We have also seen that the theoretical framework, proposed by Thomason and Kaufman, presupposes that particular patterns of contact change are related to external social factors of the contact. Hence, it provides a valid theoretical basis for the study of language contact and language change. However, their model does not explain everything and cannot predict the specific outcome of the language contact. This study has shown that some specific historical circumstances of the Bering Strait area had the effect that is not entirely predictable.
It is difficult to make any definitive predictions about maintenance of CSY, and further more specific research on the language would be needed (as well as on another remaining Soviet Eskimo language, Naukanski) to provide the basis for an educated assessment. It would also be of significance to carry out a separate investigation of linguistic interference and code-switching in different dialects of CAY. Generally, more comparative studies of related languages are needed in order to provide a more refined methodological basis for the study of language contact and language change in complex situations such as that I have been looking at.
References


Supplementary Reading


Appendix I: The Cyrillic Equivalents of the Latin Letter Orthography for Yupik

**Consonants:**

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>Л</th>
<th>Т</th>
<th>К</th>
<th>Къ</th>
<th>Къ</th>
<th>Къ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>kw</td>
<td>q</td>
<td>qw</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>В</th>
<th>Л</th>
<th>З</th>
<th>Й</th>
<th>Р</th>
<th>Й</th>
<th>Г</th>
<th>Гъ</th>
<th>Гъ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>v</td>
<td>l</td>
<td>z</td>
<td>y</td>
<td>r</td>
<td>g</td>
<td>w</td>
<td>gh</td>
<td>ghw</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>Ф</th>
<th>Ль</th>
<th>С</th>
<th>Ш</th>
<th>Х</th>
<th>Хъ</th>
<th>Хъ</th>
<th>Г</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>f</td>
<td>ll</td>
<td>s</td>
<td>rr</td>
<td>gg</td>
<td>wh</td>
<td>gh</td>
<td>ghw</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>М</th>
<th>Н</th>
<th>Ц</th>
<th>Цъ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>m</td>
<td>n</td>
<td>ng</td>
<td>ngw</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>Мь</th>
<th>Нь</th>
<th>Ць</th>
<th>Цьъ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>mm</td>
<td>nn</td>
<td>ngng</td>
<td>ngngw</td>
</tr>
</tbody>
</table>

**Vowels:**

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>И</th>
<th>У</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>i</td>
<td>u</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>Ы</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>е</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cyrillic</th>
<th>А</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>a</td>
</tr>
</tbody>
</table>

Jacobson 2001:134
Appendix II: Questionnaire Research

The use of CSY among schoolchildren in the village of Novoe Chaplino

During the Soviet times, the Russian language has greatly influenced the Eskimo languages of the Russian Far North, and today almost no children (with a single exception) can speak their native language fluently. Yet, during the last 15-20 years, a growing interest towards the Eskimo language and culture brought an acceleration of Russian-Yupik code-switching and increased CSY use among the Eskimo population of the Russian Far North. One of the main reasons of growing ‘popularity’ of the Eskimo language was the reopening of the Russian-American border in 1988, which was accompanied by different exchange programs, organised by the American and Canadian governments, and the Eskimos’ more or less regular visits and longer stays in Alaska, particularly on St. Lawrence Island. These were directed on the improvement of the language situation in Chukotka.

The purpose of this research was to determine the Yupik language skills among the Eskimo children in the village of Novoe Chaplino. The analysis was based on 64 questionnaires filled in by the village children and collected in April 2003. 64 children that have participated in the research comprise approximately 75% of all schoolchildren in the village, or 38% of all village children between the age of 0 and 19.

The questionnaire details (see below) show that all the children, with the exception of four, claim to have some knowledge of Yupik and claim to speak it at least to some extent. None claims to be fluent in the language, but three consider their knowledge of the language to be quite good. Already at the age of 11, the majority of the children are able to give good examples of Yupik words that they use in their Russian speech and almost all can give at least 12 words that they know in Eskimo and that they often use when speaking Russian. Almost all children (with the exception of one male and seven females) admit that they use Yupik words and phrases when they speak Russian and are able to give examples of such use, e.g. unorgh, antorpaq, aserpaq, etc.

There is a noticeable difference in the language use by males and females at the age of 10-13. Boys show a better knowledge of the Eskimo language than girls do. In all the cases, the examples of Yupik words and phrases given by the boys are connected with traditional way of life and occupation, such as hunting and whaling. Majority of these examples include such Eskimo words as kika, mantak, tuqtak, nanguna, nunivak, uppa, kuveksi, angghak and some other. Note some of the examples given by the girls are the same as the examples given by the boys of the same age. At the age of thirteen, the children’s knowledge of the native language decreases: 13-year old children use Yupik least of all and have troubles giving any kind of examples. In contrast, majority of the children between the ages of 14 and 16 are able to give answers to all the questions, with no noticeable difference in Yupik use between males and females. Yet, the words and phrases given by the children of both sexes are usually limited to what can be called ‘the school program vocabulary’. Most often it is nouns that are connected with traditional occupation and short commands like “be careful”, “attention!”, “go”, etc., but also some particles, majority of which have originated from Chukchi and have been fully integrated into the Yupik language. The most frequently used Chukchi particle is naqam.
Despite the growing interest in the native language and increase of its use by the population, the children’s knowledge of Yupik is still very limited and the language situation in the area is still critical: no children between the age of 11 and 17 speak the Eskimo language fluently. The majority of the children have only a shallow knowledge of the language. Even if by the age of 10 children are able to speak the language quite well (the elders claim that young children begin to speak more and more Yupik and that there are at least two children of seven years of age in the village that are fluent in the native language) their knowledge of Yupik decreases as they grow older.

There are several explanations to this. Despite the effort of the older generation to pass Yupik on to their children, there is a considerable gap between the older generation and the young ones. Most of the parents (people between the ages of 20 and 35) do not have any knowledge of Yupik and hence still speak Russian to their children. Thus Russian, which is already a lingua franca of the whole area, i.e. the language of administration, education and mass media, is also the language a child hears at home. School education in the village(s) is hardly bilingual. With all the instruction being performed in Russian, the amount of Yupik hours being extremely low, and with children still being taught Yupik as a secondary language (along with English) it has hardly any effect on the children’s knowledge of the native language. Even if by the age of 10 children are able to speak the language quite well (the elders claim that young children begin to speak more and more Yupik and that there are at least two children of seven years of age in the village that are fluent in the native language) their knowledge of Yupik decreases as they grow older.

Thus, on one hand a growing desire of the Eskimo people to maintain their native language has increased its use among the native population, including children. On the other hand, the superiority of Russian, lack of the language environment and necessary school education, and growing interest towards English complicate the development of the Yupik skills among the young people.
Appendix III: Demography


The first diagram represents the number of the Eskimo population in Alaska, Chukotka and St. Lawrence Island at different historical times. The second diagram shows the number of population on the Chukchi Peninsula between 1920 and 2000.

Diagram 1a: Number of CAY, CSY SLI, and SY RFN Population

Note 1: The original CAY population of Yukon and Kuskokwim Deltas alone was approximately 15,000 speakers. In the late 19th – early 20th centuries there was a dramatic decline of the native population (ca. 10,000). During the times of heavy suppression of the native languages by the U.S. federal government (1910-1970) the Yup’ik population kept growing. Being almost entirely Yup’ik, by the late 1980s it reached the number of ca. 20,000 (Jacobson 2005: vii).

Note 2: The size of the initial population of St. Lawrence Island is a matter of debate with estimates varying from as few as 500 to as many as 2500 speakers (Krupnik 1994: 51-52). In 1878-1879, the population was tremendously reduced by famine and plague, to approximately 300 speakers. Total recorded population in 1900 was 286, in 1920 – 302, between 1940 and 1944 – 478, and in 1979 – 902 (Krupnik 1994: 56). It is believed that St. Lawrence population has made its remarkable recovery partly due to the repopulation of the island by the Siberian Eskimo, whose significant immigration from Chukotka to St. Lawrence Island continued until the late 1920s (Krauss 1980: 46). On Siberian Eskimo contribution to Alaskan population recoveries, see Krupnik (1994: 49-80).
**Diagram 2b: Chukotka Peninsula, Number of the Eskimo, Chukchi and Russian-speaking Population between 1920 and 2000**

The Chukchi Peninsula

---

**Note 3:** The number of total Siberian Yupik (SY) population of the Russian Far North, given in the diagrams includes both the Naukanski and Chaplinski Eskimos. Before 1950s, there were approximately 1300 CSY on the Russian mainland. A massive influx of Russian-speaking population into the area during the 1950s and the policies of forceful relocation changed the demographical picture dramatically. Between 1959 and 1970, there was a large drop of the ethnic Eskimo in the U.S.S.R. According to Vakhtin, the Eskimo population in 1979 was 1.1% of the total population of Chukotka, in 1989 – 0.9% (1997: 165). Note that after the policies of forceful relocation, carried out by the Soviet government throughout 1950s-1960s, it is almost impossible to separate the Naukanski and the CSY Eskimos and many Naukanski Eskimo today (is speaking the Eskimo language at all) speak CSY. At the beginning of the 1990s there were approximately 900 Eskimo, of whom 400 were Naukanski Eskimo, and of three hundred speakers, only some 70 were Naukanski speaking. Furthermore, a number of the Eskimos of the RFN today are Chukchi-Eskimo, Russian-Eskimo ‘mixed’. Many children consider themselves Eskimo though only one of their parents is an ethnic Eskimo, or even half-Eskimo half-Chukchi (Nielsen 2004).