Ethno-territorial conflict and coexistence in the Caucasus, Central Asia and Fereydan

Rezvani, B.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Chapter Four

Methods

To answer the main research question of this study, it is not only necessary to explain why certain ethno-territorial conflicts occur, but also why other ethno-territorial groups do not come into conflict. Therefore, I constructed a database of 129 ethno-territorial encounters, the units of analysis, and at the same time all potential conflicts. In this database the encounters are characterised by having conflict or not (the dependent variable) and by features that correspond with the explaining conditions (the independent variables) which were selected in Chapters 2 and 3 (see Figure 3.7). The measurement of the dependent and independent variables will be discussed in this chapter.

My analysis is twofold. First, I shall give an analytical description of those encounters that are identified as ethno-territorial conflicts, based on fieldwork and existing literature. Chapter 6 will present the results of these case studies of conflict. Second, the database of all ethno-territorial encounters will be analysed systematically by qualitative comparative (QCA) and statistical methods. Chapter 7 will present the results of this analysis.

Before doing so, it is necessary to identify the ethno-territorial groups and encounters. Chapter 5 and Appendix 5 will present the results of this identification. The criteria for this identification will be discussed in this chapter. Then follows the criteria for identification and measurement of the dependent variable, ethno-territorial conflict. Following this, the measurement of the explaining conditions will be discussed. Finally, the methods of analysis will be introduced.

Ethno-Territorial Groups and Encounters

I define ethno-territorial groups as those ethnic groups that are rooted in the land on which they are living and hence may potentially have claims upon it. Ethno-territorial encounters (frequently called encounters in this book, for reasons of simplicity) are dyads of two ethno-territorial groups that border each other. The ethnic map and the situation according to the last Soviet census (1989) is taken as the source of reference, as that year
coincides roughly with the emergence of ethno-territorial conflicts in the (post-)Soviet space. Some trees’ roots go deep into the ground; other trees’ roots do not go deep into the ground, but they cover a rather vast area. Both types of trees are rooted and cannot easily be uprooted from the orchard. Both types are among the main “residents” of that orchard and “claim” their share of and place in that “ground”.

Rootedness of ethnic groups can be based both on an ethnic group’s longevity in a country (or union republic) or on the large number of its members there. Indigeneity—that is, being indigenous to the land—means that the respective ethnic group has lived in that union republic or country at least since the 18th century. Such ethnic groups are considered ethno-territorial if they constitute the majority of the population in at least one village, town, or city in the union republic or state in which they are living. (As information on the number of people in the 18th century is scarce and often unreliable, a number exceeding 5,000 in 19th century is a good indication of their presence in the 18th century.)

An ethnic group is also considered ethno-territorial when it settled in a certain union republic or state in the 19th century on the land where traditionally nomadic groups prevailed, provided its number in the 19th century exceeded 5,000, and it inhabited in 1989 three contiguous villages, cities, or towns, in one of which it constitutes the majority of the population.

When there is no evidence or indications that an ethnic group has lived on the territory of a union republic or state since the 19th century, it will be considered ethno-territorial if it is indigenous in a neighboring union republic or state, providing that its number exceeded 20,000 (in 1989, according to the last Soviet census) in the union republic or state in which it is living. In addition, in the state or union republic in which it is living, that ethnic group should constitute the majority of the population in at least five contiguous villages, cities, or towns.

Contiguity in these measurements means that these settlements are less than 15 kilometers apart from each other. Regarding the geographic and demographic features of the regions involved (for example, their population density, the natural landscape, and the condition of the terrain), this is a good criterion.

In cases where none of these conditions are met, those ethnic groups are also considered ethno-territorial which live in a significant area of that union republic or state—that is, in at least ten contiguous, towns, villages, and cities—and constitute at least 20% of the total population of that union republic or state. (Although in this case it is debatable whether we can regard such ethnic groups as rooted ones, it is still justifiable to regard them as ethno-territorial because of their large share in the population of that union republic or state.)
Regarding the geographical, demographic, and historical realities in these regions, I believe these criteria offer a firm basis for the identification of ethno-territorial groups there. In many cases one ethnic group may be considered ethno-territorial on more than one ground. This has made it possible to include as many as possible ethno-territorial groups in this study. This has had consequences especially for Central Asia, where many ethnic groups arrived later than the 18th century but nevertheless constitute rather significant ethnic concentrations. The more cases can be included into the analyses, the more significant will be the results of the analysis.

**Ethno-Territorial Conflict**

According to the discussion in Chapter 2, a conflict should be violent and the groups involved should be fighting over a territory, or one group is fighting against a state that is dominated by, and associated with, another ethno-territorial group (an ethnic nation). In these cases, the conflict between a state dominated by an ethnic nation and an ethnic group means a conflict between the dominant majority and a subordinated minority. To establish whether a conflict is violent is arbitrary. I decided to use a criteria of at least 100 deaths during the time of fighting, when, in addition, each party has suffered at least 25 human lives. This threshold is relatively low compared with those in most other studies and databases.

\[
C=1=\text{Two ethno-territorial groups fight over an area, which has resulted in the death of more than 100 persons, and, in addition, each party has suffered at least 25 human lives.}
\]

\[
c=0=\text{Two ethno-territorial groups do not fight over an area, or if their clash does not result in the death of more than 100 persons, and, in addition, each party has suffered at least 25 human lives.}
\]

**Explaining Conditions**

In Chapters 2 and 3 many explaining conditions (factors) were selected and a model was presented (see Figure 3.7).\(^\text{75}\) Below, their definitions and measurements are given. As the qualitative comparative analysis (see further in this chapter) requires dichotomous variables, all conditions will be measured accordingly. These dichotomous variables are conditions

\(^\text{75}\) Explaining conditions may also be called “causal conditions”. I prefer “explaining conditions” above “causal conditions” thanks to certain methodological and philosophical reasons which go beyond this book.
which can be either present or absent. Therefore, these variables are also interchangeably called factors or conditions.

**Ethno-political subordination (S)**

The condition ethno-political subordination is present when one of the ethno-territorial groups in an encounter is politically subordinated to the other. In practice, in the (post-)Soviet context, this means an ethno-territorial encounter between a titular and a non-titular ethnic group in an SSR/state. In Iran, the Shi’ite ethnic groups are in fact titulars, and all non-Shi’ite ethnic groups are not. Hence, in the context of Iran, an ethno-territorial encounter is marked by ethno-political subordination when an ethno-territorial encounter exists between a predominantly Shi’ite ethnic group and a non-Shi’ite ethnic group.

\[ S=1= \text{One ethno-territorial group is the titular group of the hosting union republic or country and the other is not.} \]

\[ s=0= \text{Both ethno-territorial groups are the titular groups or both are non-titular groups of the hosting union republic or country.} \]

**Religious difference (R)**

Religious difference is present when the majority of both ethno-territorial groups confess different religions. This study differentiates between six religions: Shi’ite Islam, Sunni Islam, Judaism, Yezidism, Orthodox Christianity (Eastern Christianity), and other Christian denominations (Western Christianity). The main religious affiliations of ethno-territorial groups in different regions are listed in Chapter 5.

\[ R=1= \text{The majority of both ethno-territorial groups adhere to different religions.} \]

\[ r=0= \text{The majority of both ethno-territorial groups adhere to the same religion.} \]

**Linguistic difference (L)**

Ethno-territorial groups in the Caucasus, Central Asia, and Fereydan speak various languages belonging to different language families. These families are: Slavic, Germanic, Iranian (or Iranian) and Armenian, Nakh-
Dagestani, 76 Northwest Caucasian, 77 Kartvelian, Turkic, 78 and Sinic. The first four language families are sub-families of the Indo-European language family. There is much debate about the classification of (North)-Caucasian languages. In this study a classification is made of the Caucasian languages based on expert sources. Most of these language groups are divided further into many branches, which contain many languages. The many language families and their branches present in this study are depicted in Figures 4.1, 4.2, and 4.3.

Two languages should be in the same branch of the same language family in order to speak of language similarity. These branches of the same family are in fact the penultimate groupings in Ethnologue, a website/(printed) encyclopedia, which lists languages of the world and their affiliations (Ethnologue 2009, 16th edition). The languages at this level are very often intelligible to each other’s speakers.

The classification of languages in this study generally accords with those in Ethnologue (2009, 16th edition). Owing to the complexity of

---

76 Linguistic study of the Caucasus has resulted in complex and sophisticated debates. Many authorities connect the Nakh-Dagestani and Northwest Caucasian languages together to a (hypothetically) North Caucasian language (super)family and many do not. The Nakh-Dagestani language group is divided into many branches: the Nakh, the Avar (Avar-Andi-Tzes), the Lak-Dargwa (Central), and the Southern or Lezgic branches (Van den Berg 2005: 150). Khinalugh can be regarded either as a language distantly related to the other languages in the Lezgic branch or as a separate branch of the Nakh-Dagestani languages. In addition, there still exists ambiguity about the affiliation of certain languages and dialects. For example, Archi is a language spoken by a small group in Dagestan who are registered as Avars. There is ambiguity about whether this language belongs genetically to the Avar-Andi-Dido, Lezgic, or even Lak-Dargwa branches of the Nakh-Dagestani languages. As the Soviet ethnic categories are maintained in any case when the groups are smaller than 20,000 souls, and as Archi is not the main language of Avars, this ambiguity does not generate any problems for the analysis in this book.

77 The Northwest Caucasian family of languages has suffered greatly owing to Russian policies. Most general descriptions are not very accurate. Therefore, to depict its branches, we have relied on written (and oral) expert information. Next to the Kabardian and other members of the Circassian dialect continuum (see e.g Colarusso 1992; Kumakhov & Vamling 1998), it also contains Abkhaz/Abaza and Ubykh languages (Hewitt 2005: 91). Abkhazian and Abaza are intimately close to each other and show only a few phonological differences. Abaza can be considered as an Abkhazian dialect, or both languages can be seen as two varieties in a dialect continuum. Ubykh is now extinct. Ubykh language was spoken in the area around the city of Sochi prior to the Russian-Circassian war. Its last native speaker died in 1992 in Turkey (Hewitt 2005: 91 and 93).

78 Johanson (1998: 82-83) maintains the following classification, upon which there is a large degree of agreement among linguists and which also corresponds with Ethnologue (2009, 16th edition). These classifications are also maintained in this study (as long as there exist languages of that branch in this study), but the subgroups’ names are different. These are: 1) the southwestern (SW) branch or Oghuz Turkic; 2) the northwestern (NW) branch or Kypchak (Kipchak, Qypchaq, etc.) Turkic; 3) the southeastern (SE) branch or Uyghur Turkic; 4) the northeastern (NE) branch or Siberian Turkic; 5) Chuvash, representing Oghur or Bulghar Turkic; 6) Khalaj, representing Arghu Turkic. The last branch, Khalaj Turkic, is an isolated language which is spoken only by relatively small numbers of people in central Iran. Only the first three branches appear among the languages spoken by ethno-territorial groups in these regions. In this book, however, the designation Karluq or Qarluq is preferred above Uyghur for the southeastern branch. Although there is ample evidence that their ancestors, being related to the Khakas ethnic group, spoke a different language (see Butanaev 1995), the modern Kyrgyz language is similar to Kazakh and is most often categorized as a Kypchak Turkic language.
the subject, however, only those in the Caucasus differ to minor extents from those of *Ethnologue* (2009, 16th edition). The classification of other language families in *Ethnologue* (2009, 16th edition) accords with other sources. With regard to the Caucasian languages, the classification of certain experts in Caucasian linguistics (e.g. Colarusso [1992], Hewitt [2005], and Van den Berg [2005]), are given priority over those in *Ethnologue* (2009, 16th edition). Those sources are cited in Chapter 5 of this book. In that chapter the main language of each ethno-territorial group is listed along with its language family and branch.

\[ L=1= \] Both ethno-territorial groups speak languages belonging to two different language families, or to two different branches of the same language family.

\[ l=0= \] Both ethno-territorial groups speak languages belonging to the same branches of the same language family, or speak the same language.

**Traumatic peak experience (T)**

A traumatic peak experience is present when at least one of the ethno-territorial groups in the encounter has undergone a traumatic peak experience in the last 100 years, in the form of an ethnically targeted, well-organized massacre (or genocide as it is often called), or ethnically oriented deportation which has cost many human lives. These massacres or deadly deportations must have resulted in the death of over 100,000 persons, or at least 20% of the ethnic population, at the time of their occurrence. This “punishment” must have been either organized by the state (Soviet Union and Iran in this study), or the state must have been actively involved in the process and its aftermath.

The reason for these criteria is that traumatic experiences which occurred in the recent past and in the same territory as an ethnic group’s contemporary living area are more likely to evoke feelings of justice-seeking, because they are more engraved in the mind of the survivors still alive and the ethnic group’s collective memory in general.

In practice, these are the Stalin-era deportations of many ethnic groups, as well as the Armenian Genocide, the latter occurring (mainly) in the Ottoman Empire but effects of which were also felt in the territory of the former Soviet Union (and elsewhere).

\[ T=1= \] At least one of the ethno-territorial groups in an encounter has experienced a traumatic peak experience.
\textbf{ Automatically setting (A)}

An autonomous setting is present when both ethno-territorial groups are titular, at the same or different levels in the same state or union republic.

In practice, this means that either both ethno-politically subordinated groups enjoy lower-ranked territorial autonomies within a state or union republic in which they are not titular at SSR level, or one of the ethno-territorial groups enjoys a lower-ranked territorial autonomy and the other one is the titular ethnic group of that union republic or state. These lower-ranked territorial autonomous units can be either autonomous provinces or autonomous republics, formerly called AOs and ASSRs.

\textbf{A=1= } Both ethno-territorial groups are titular at the same or different levels of hierarchy in the same union republic or country.

\textbf{a=0= } One or none of the ethno-territorial groups are titular at the same or different levels of hierarchy in the same union republic or country.

\textbf{Titular demographic dominance (D)}

Titular demographic dominance is present when both ethno-territorial groups in an encounter constitute the majority (that is, over 50\%) of the population in their corresponding state (or union republic) or lower-ranked autonomous unit (AO or ASSR). This combines the criteria of the condition “autonomous setting (A)” with demographic dominance of both ethno-territorial groups in their autonomous units.

\textbf{D=1= } Both ethno-territorial groups constitute the majority of population in their corresponding titular homelands, in the same country or republic.

\textbf{d=0= } At least one ethno-territorial group does not constitute the majority of population in its corresponding titular homeland, or has no lower-ranked titular homeland in that union republic or country.

\textbf{t=0= } None of the ethno-territorial groups in an encounter has experienced a traumatic peak experience.
Contiguity to titular kinfolk’s homeland (G)

Contiguity is present when the state or the union republic in which the ethno-territorial encounter is located borders a state, union republic, or lower-ranked autonomous unit where the subordinated ethno-territorial group or its kinfolk is titular.

Kinfolks\(^{79}\) are defined as those ethno-territorial groups that speak the same or intimately related languages—in other words, when the condition “linguistic difference” is absent (l=0) in a hypothetical encounter between these ethno-territorial groups.

\[ G=1 = \text{At least one ethno-territorial group has an ethnic kinfolk in a neighboring republic, country, or lower-ranked autonomous unit.} \]

\[ g=0 = \text{None of the ethno-territorial groups has an ethnic kinfolk in a neighboring republic, country, or lower-ranked autonomous unit.} \]

Transborder dominance (B)

This condition is defined as a condition in which the subordinated group’s kinfolk is at least three times more populous in its neighboring titular homeland than the titular group is in the state or union republic in which its ethnic kinfolk lives.

In fact, this is a situation when the condition contiguity (G) is present and, in addition, the subordinated ethno-territorial group in one union republic (or state) numbers (over) three times more than the other ethno-territorial group in its titular union republic or state. The following example attempts to make this clear. People B is an subordinated group in A-istan. But the number of Bs in B-istan is three times larger than the number of As in A-istan.

\[ B=1 = \text{At least one ethno-territorial group has an ethnic kinfolk in a neighboring republic, country, or lower-ranked autonomous unit who are at least three times more populous than the titular group in the host state or union republic where its kinfolk lives.} \]

\[ b=0 = \text{None of the ethno-territorial groups has an ethnic kinfolk in a neighboring republic, country, or lower-ranked autonomous unit} \]

\(^{79}\) Kinfolk is used as a singular in this book as a synonym of an ethnically related ethnic group or nation.
who are at least three times more populous than the titular group in the host state or union republic where its kinfolk lives.

**Mosaic ethno-geographic configuration (M)**

A mosaic ethno-geographic configuration (M) is present when an ethno-territorial encounter is located in an ethno-geographic configuration which can be identified as a mosaic type. In practice, in this study, this means that the ethno-territorial configuration is a common heterogeneous type, if it cannot be identified as a mosaic one. (The other two types of ethno-geographic encounters are ideal-typical and occur only in rare cases in the world.)

As this factor is innovative and included for the first time in a study, an instrument must be made in order to assess whether the type of ethno-geographical configuration in an area is of the mosaic type or not. How do we measure mosaicness and how is a measurement of this concept constructed? In Appendix 1, the construction of an instrument is reasoned and a method is proposed which it is believed can measure well the mosaic type of ethno-geographic configuration.

\[
\begin{align*}
M=1 & = \text{An ethno-territorial encounter is located in a mosaic type of ethno-geographic configuration.} \\
M=0 & = \text{An ethno-territorial encounter is not located in a mosaic type of ethno-geographic configuration.}
\end{align*}
\]

**Economic grievances**

A variable measuring economic grievances in an ethno-territorial encounter requires reliable data about the income (or other indices of welfare and well-being) of each ethno-territorial group at local level. Such reliable data are very difficult to obtain, by any method of data collection. Economic data gathered and published (if at all) during the era of the Soviet Union are not reliable. They also explicitly disregard the informal economy. It is also almost impossible to gather these data for such a vast area 20 years after the Soviet collapse.

Indeed, there existed differences in the level of welfare between different (post-)Soviet republics and between them and Iran. In Iran regions exist which are relatively underdeveloped—for example, Baluchistan and Kurdistan—and relatively developed—such as Tehran and Eastern Azerbaijan. Fereydan, located in Ostan-e Esfahan, one of the more highly developed *ostans* of Iran, is nevertheless mainly a rural region and more or less comparable to the Iranian average in most aspects.
The Soviet data were ordained territorially rather than ethnically. They represented the situation in a certain territory, rather than for each ethnic group separately. Therefore, they are not really suitable for an analysis in which units of analysis consist of pairs of ethnic groups. Moreover, they are not reliable and they do not account for the rather pervasive black economy. The available statistical and qualitative data (often, but not exclusively, attained during fieldwork) revealed that there was no clear relationship between either territorial or ethnic level of welfare and the eruption of ethno-territorial conflicts. For example, Georgia was a republic with a relatively high level of welfare, and Tajikistan scored the lowest on most indicators of welfare and development in the whole Soviet Union. Both republics, however, were afflicted by ethno-territorial conflicts. Similarly, Abkhazia and the ethnic Abkhazians were among the economically better-off, and Pamiris were among the most underprivileged and poorest ethnic groups, respectively in Georgia and Tajikistan (and perhaps the whole Soviet Union). Both ethnic groups were involved in ethno-territorial conflicts. In Iran, too, there are no ethnicity-based statistics. (There are, however, quantitative studies and surveys that consider ethnicity.) No large, ethnicity-based discrepancies between the level of welfare and income became visible to me during my fieldwork in Fereydan.

Economic grievances in the Soviet Union were largely dependent upon its ethno-political system, and correlated largely, but imperfectly, with the variable ethno-political subordination. In the (post-)Soviet context, ethno-political subordination also meant that the titular ethnic groups were privileged and had better chances to obtain governmental administrative and, in general, higher positions in their homeland. Although this was not a black and white pattern and exceptions did exist, this was, nevertheless, a general pattern broadly present all across the (post-)Soviet space.

Deterioration of economic situation is thought to be a conflict-generating factor. It generates unemployment and frustration and can contribute to mobilization for a conflict. “Unemployment does not only mean that people lack jobs and incomes. It has far-reaching psychological implications…. It leaves people idle to conspire and develop negative energies instead of contributing to societal welfare and progress” (Junne & Verkoren 2005: 324). In fact, the Soviet Union and its successor states were struck by economic deterioration and unemployment as well as social unrest in the late 1980s and the early 1990s, the period when the ethno-territorial conflicts broke out.80 Perestroika and glasnost were not

---

80 Already in 1989, Tishkov (1989: 191) saw the future of the Soviet Union as a single country as threatened, owing to the ethnic strife caused by the difficult democratization process in the former Soviet Union.
only the beginning of increased political liberties but also the beginning of the end of the Soviet Union. The Soviet empire was already struck by economic stagnation for many years, but perestroika and glasnost were the final blows to the Union. Owing to the newly created openness, formerly hidden stories of a bankrupt empire were publicized and its vulnerabilities were exposed. In addition, many forces abused the newly offered openness and political liberties to create tensions. The bomb of ethno-nationalism and separatism were first exploded in the Baltic region, where the nationalists expected support and affection from “European” and “Western” countries, as they deemed themselves closer to them than to the Eurasian Soviet empire. Soon ethno-nationalism, accompanied by economic demise and other sources of social unrest, spread all across the former Soviet Union. Finally, the August coup d’état (1991) destroyed the last hopes of keeping together the old empire. The aftershocks of the collapse of the Soviet Union were felt all across the post-Soviet space. Nevertheless, some parts were more vulnerable than others. The Russian Federation, for example, as a powerful and resource-rich country, was less vulnerable than most other post-Soviet republics.

Iran, on the other hand, revived economically roughly at the same period. The Iran–Iraq war ended in 1988. The Iranian economy received a boost. Although after the Iran-Iraq war Iranian relations with the West were not optimal and Iran suffered under many economic sanctions at most times, the termination of the Iran–Iraq war meant a period in which different projects were begun to renovate and repair the devastated infrastructure. The war had “consumed” much of Iran’s budget, as Iran had to buy often unsophisticated weaponry at higher rates on the black markets. After the war, more budget became available, there were more jobs, and the social situation also improved, as many young men saw a brighter future. Nevertheless, it was not as bright as it was seen to be. More young men were now seeking jobs, but jobs were not available for everyone. This led to a distressing social situation, especially when the income gap increased between the rich and the poor, notably in the largest urban centers such as Tehran, Esfahan, and Tabriz. Fereydan was a mainly rural region and (indirectly) benefitted from the end of the war. Even though the end of the war was not as bright as many had expected, it did bring more stability to the country. This was in sharp contrast to the chaotic situation at the same time in the (post-)Soviet republics. From this aspect, the economic situation in both countries correlated perfectly with political instability.

Therefore, regarding the difficulties and arguments discussed above, these two variables are not included in a systematic analysis in this study.
Analyzing the Dataset

There are two methods of analyzing the dataset. First, the statistical relationship between the separate explaining conditions and the occurrence of conflict will be established by simply comparing the (statistical) chance of conflict in the encounters where the condition is present with those where the condition is absent.

Second, the Qualitative Comparative Analysis (QCA) of Ragin (1987) will be used. The QCA’s aim is to offer explanations for an outcome, based on combinations of explaining conditions. QCA in this study attempts to explain the emergence of ethnic conflict by a combination of the explaining conditions. QCA is a comparative method, based on Boolean algebra and its binary logic. It compares all cases (ethno-territorial encounters), in which an outcome (ethno-territorial conflict) is either present or absent, and seeks combinations of conditions (independent variables) which can explain the outcome. QCA, in fact, combines many features of qualitative and quantitative methods of analysis. Independent variables in this method are (causal) conditions which are either absent or present, or in a more mathematical language they get either zero or one as value. The outcome in this method is the dependent variable that has to be explained and is either absent (=0) or present (=1). In the Boolean algebraic tradition of QCA, a present condition is represented by a capital letter and an absent condition by a lower case letter. In a QCA, a certain knowledge of the cases by the researcher is necessary. Contrary to variable-oriented quantitative methods, accession to reliable databases and statistical skills are not sufficient. Sometimes a researcher who applies Boolean analysis operates as a judge. He, indeed, should determine whether a causal condition is present or absent. But a Boolean judge, as well as every other good and capable judge, reaches his conclusions based on certain criteria. Appendix 2 describes how the method of QCA works.
Figure 4.1. The Slavic, Iranian, Germanic, and Armenian family of languages belonging to the Indo-European family of languages. (Only Groups and Branches are named which are present in this study.)

Figure 4.2. The Northwest Caucasian and Nakh-Dagestani families of languages.

---

133
Figure 4.3. The Turkic languages, belonging to the Altaic family of the languages. (Only Groups and Branches are named which are present in this study.)