The Estonian Russian Divide: Examining Social Diversity in Estonia with Cross-National Survey Data

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April 6, 2004

Draft
Since Estonia’s separation from the Soviet Union, Estonians and Russians in Estonia have struggled to live together as one society. While Estonians and Russian-Estonians\(^1\) may never have been a single integrated society, the conflict between Estonians and Russian-Estonians intensified during the formation of the independent Estonian state. During the process of establishing a constitution and new government in post-Soviet Estonia, Estonian was made the only official language of the state.\(^2\) Citizenship was granted automatically only to those who had ancestors with Estonian citizenship prior to the Soviet occupation in 1940.\(^3\) This prevented the vast majority of Russians in Estonia, approximately one-third of the residents of Estonia at the time, from being able to gain Estonian citizenship. In addition to the exclusion from citizenship, some Estonians encouraged Russians who had been located in Estonia during the Soviet occupation to leave Estonia and return to Russia. Some Russian-Estonians did migrate back to Russia, but most of the Russian-Estonians made the decision to stay where they had been living, in some cases, for their entire lives. For those without Estonian ancestors, the Estonian Law on Citizenship requires passing an Estonian language examination. Estonian is considered to be a difficult language to learn, and it is in a different language family than Russian. The language programs designed to prepare individuals to take the language examination were drastically under-funded through the 1990s, which prevented those wanting to learn Estonian from being able to. Thus, most Russians were unable to obtain citizenship; by 2000, less than half of those without Estonian ancestors had been granted Estonian citizenship (Estonia Ministry of Foreign Affairs 2002). Without citizenship, Russian-Estonians are excluded from civil service.

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\(^1\) The term Russian-Estonian is not one commonly used within Estonia. I use it here as a convenient way to distinguish between ethnic Estonians and individuals of Russian nationality or other Soviet nationalities who speak Russian as their primary language. The terms “non-Estonians” and “Russian-speaking” are commonly used in Estonia to refer to this population.  

\(^2\) As a part of the USSR, the official language and the dominant language of use prior to independence had been Russian. The vast majority of Estonians as well as Russians spoke Russian. Over 2/3 of Estonians reported knowing Russian for the Estonia 2000 Population Census (Estonia Ministry of Foreign Affairs 2002).  

\(^3\) The other way Russians obtained citizenship after independence was to be granted citizenship for special services to the state (Law on Citizenship 1995). Only a few hundred individuals were granted citizenship in this way.
and other jobs within Estonia, and they are unable to vote in national elections.

In the late 1990s, the Estonian government accepted that the Russians would not simply leave the country and that large numbers of Russians and other non-Estonians still lacked citizenship and a feasible way to obtain it. There was also growing pressure on the Estonian government from international organizations and the EU to acknowledge Russians as permanent and legal residents of the country who should not be excluded from society. In response, the Estonian government developed a plan to integrate Russians into Estonian society (Integration in Estonian Society 2000-2007). This plan built upon research conducted during the mid to late 1990s by international agencies, Estonian government panels, and academics, which compared Estonians and Russian-Estonians in terms of opinions, language skills, occupation, unemployment, media consumption, and other indicators. The discourse surrounding this research asserted that Estonia had two separate societies within one country. Partly in response to this research, one of the Integration Program’s stated missions is to reduce this division within the country; however, the terms by which Estonians and Russian-Estonians will come together as one society, as well as the meaning of integration itself, is unclear.

The main component of the Integration Program requires Russian-Estonians to learn Estonian so they can pass the citizenship exam and more fully interact in Estonian society. This is to be accomplished primarily through the education system, with supplemental programs for older residents. While much of the Integration Program is aimed at improving the situation of Russian-Estonians, it is clear that improvements for Russian-Estonians must not threaten Estonian culture. The program provides resources for Russian-Estonians to take the necessary

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4Russians held many of the government jobs during Soviet rule, making this restriction a particularly concerning one. In Narva, where the vast majority of residents are Russian-Estonians, this restriction made it difficult to fill necessary civil service positions, such as police officers.

5 For a more full account of the events leading up to the formation and adoption of the integration plan, see Laitin 2002.

6 See section 3.1 of the State Integration Programme.
steps to obtain citizenship, but there is little in the way of concessions or compromises on the part of the Estonians in terms of creating a common society. There is a fear among many Estonians that including Russian-Estonians as full members of the Estonian state may threaten Estonian independence (Kruusvall 2000a, 2000b; Barrington, Heron, and Silver 2003), or dilute Estonian culture (Hallik 2000). There is little desire to create a common culture that incorporates both Estonian and Russian elements, primarily because many Estonians still view Russians as an occupying, dominating force, not a part of Estonian society (Lauristin, et al. 1997). Estonians see themselves as Europeans, part of the West; they see Russians as part of the East, with a cultural history that is significantly different from their own (Aalto 2003). Many in Estonia believe that there is a fundamental difference between Estonians and Russians that could prevent the groups from existing together in a common society.

While the use of a common language within Estonia is an important step for Estonians and Russian-Estonians to address the conflict and division in the country, linguistic integration alone will not result in a socially integrated Estonian society. Without some agreement in beliefs and attitudes towards general social issues between the two groups, the problem of two societies in one country will not be eliminated even with complete linguistic homogeneity. Unless there is a greater degree of consensus in Estonia as to the limits of government, the way society should be organized, and what rights residents of the country have, democratic society is unlikely to be stable (Weingast 1997; Almond and Verba 1989; Horowitz 1985). Even if common values are not a precursor to stable democracy, but rather a result of democracy (Barry 1970), the presence or lack of consensus in Estonia is still of interest for studying the effect of democracy and the integration program on reducing the division in Estonian society. While it is possible for divided societies to function successfully as democracies (Lijphart 1968, 1984), this is not the path being pursued in Estonia; government officials and academics in Estonia are pushing for a common
Estonian society through the Integration Program.

This paper aims to examine to what extent Estonians and Russian-Estonians have similar beliefs about and attitudes towards general social issues such as family, religion, and government and whether the groups converged or diverged in their attitudes from the early to mid 1990s. This paper will provide an indication of the extent of division in Estonian society, as well as an indication of the level of social integration that has occurred, or failed to occur, in Estonia prior to the implementation of the Integration Program. This paper systematically examines whether the perception of many Estonians and Russian-Estonians of two separate societies in Estonia is consistent with the evidence that can be gathered about divisions in the country. I aim to provide a more systematic characterization of the division in Estonian society than what currently exists. In this paper, I leave aside questions about the legality, effectiveness, design, morality, and intentions of the Integration Program. What this study does address is whether there is a trend towards common attitudes and a common society in Estonia or whether Estonia will persist as a country divided into two separate societies.

The rest of the paper is laid out as follows: I first discuss what answers previous research has supplied concerning the division in attitudes in Estonia and lay out the hypotheses I seek to test. Next, I describe the data and methodology used to create the measures of attitudes in Estonia. Then, I present the analysis of these measures and the results. Finally, I conclude by discussing what the results suggest about the perceived division between Estonians and Russian-Estonians and how this approach to studying social division can be applied to other research questions.

\[7\text{Attitudes is used here and throughout the paper to refer to the range of phenomena that might be called opinions, judgments, preferences, and beliefs as well as attitudes. Taken together, I consider these things to constitute an individual's attitude on a given topic. The questions used as indicators of attitudes, discussed in detail below, include such things as judgments about the justifiability of certain actions, preferences about desirable characteristics of a job, willingness to engage in certain political actions, and agreement with or approval of statements of opinions. This use of the term attitudes is consistent with Rokeach's (1968) definition and his distinction between values and attitudes.}\]
Theory

The division between Estonians and Russians in Estonia has been studied extensively (see Lauristin et al. 1997; Lauristin and Heidmets 2000; Kirch and Laitin 1994; Lauristin and Vetik 2000). Aasland and Flotten (2001) review some of the main findings of the research: ethnicity has little if any impact on poverty rates, education levels are similar between Estonians and Russian-Estonians, and demographic characteristics such as age and gender distribution are comparable. There are significant differences as well: Russian-Estonians live almost exclusively in urban areas,\(^8\) they are over-represented in industries, such as manufacturing, that have been in decline, they have a higher unemployment rate, and they face legal restrictions that prevent many from voting or holding public jobs. Despite these differences, studies of the opinions and values of Estonians and Russian-Estonians suggest Estonians and Russian-Estonians have more in common with each other than with those outside of Estonia. Lauristin and Vilalemm (1997) used the Rokeach scale of basic values to show that there are some small differences between Estonians and Russian-Estonians, but overall they are more similar to each other than either group is to the Swedes. In addition, they show that changes in values over time have been similar among Estonians and Russian-Estonians.

Given this research and the perception of difference that exists in Estonia, I expect to find that Estonians and Russian-Estonians differ in their attitudes about social issues throughout the 1990s; however, I also expect Russian-Estonians to be more similar in the majority of their attitudes to their fellow countrymen, Estonians, than to Russians in Russia. These expectations are based on both previous research and the history that most Russian-Estonians have in Estonia. For the most part, Russian-Estonians are not newcomers to the country, and their

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\(^8\) The highest concentrations of Russian-Estonians are in Tallinn, the capital, and Narva and Kohtla-Järve, two cities in the Ida-Virumaa region which borders Russia.
identity is often based on their residence in Estonia. Laitin (1998), in his study of the Russian-speaking population in several post-Soviet states, discusses how the term “Russian-speaking” is often used by Russian-Estonians to refer to themselves as a group. The term “Russian-speaking,” instead of simply “Russian,” signifies a break between the Russian-Estonian population and the country of Russia. Vihalemm and Masso (2000) find that younger Russian-Estonians identify themselves more often with the Estonian state and society than with Russia. A recent survey by Laitin (2002) of 9th graders supports this finding as well. Vihalemm and Masso (2000) find that Russian-Estonians identify more strongly with other Russian-Estonians than with Russians from Russia and about equally as strongly with Estonians as with Russians from Russia.

However, despite the willingness of Russian-Estonians to create distinctions between themselves and Russia, Estonians are not necessarily ready to break down the barriers between themselves and the Russian-Estonians. Estonian media and government commonly make use of terms such as “non-Estonians” when referring to the Russian-Estonian population. While this term is an accurate description of most of the Russian-Estonian population, given that they are neither Estonian by nationality nor by citizenship, it is not one that is likely to foster a productive relationship between two groups living in the same country. This suggests that differences between the groups are likely exist.

In addition to the similarities or differences that may exist between Russian-Estonians and Estonians at any point in time, the division between the groups may have increased or decreased over time. Previous work gives indications that there could have been either convergence or divergence in the attitudes of the groups between 1990 and 1996. There are several factors that could have led to the convergence of attitudes of the groups from 1990 to 1996. The

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9 The years of the two surveys I will be using to test the hypotheses.
out-migration of one quarter to one third of the Russians living in Estonia at the time of
independence suggests that the Russians remaining in Estonia in 1996 should be more similar to
the Estonians; based on their willingness to return to Russia, those Russians who left Estonia to
return to Russia are more likely to have had attitudes closer to those of Russians than Estonians,
leaving the remaining Russian-Estonian population with attitudes more similar to Estonians. I will
address the impact that the out-migration may have had on the Russian-Estonian attitudes in my
analysis below. Additionally, since independence everyone in Estonia has had the opportunity for
greater exposure to western media and ideas, which suggests that both Estonians and
Russian-Estonians may have moved closer together in their attitudes by simultaneously moving
closer to the attitudes found in Europe and the US. The discussions Estonians and
Russian-Estonians were engaged in during the early 1990s concerning the role of
Russian-Estonians in the new Estonian state may have also brought both groups closer to a
common ground.

There are also reasons to suspect that there should be no observed convergence in
attitudes over the time period. As mentioned above, Estonians and Russians have been living
with each other in Estonia for many years. Thus, simply living together and interacting from 1990
to 1996 does not suggest that there should have been any convergence of attitudes since the
situation was not different from the past. There may actually have been divergence of attitudes
over the time period since there were more new media sources open to Estonians after
independence than to Russians. While some of the content and control of the Russian language
media services changed after independence, the change was much less drastic than the
exposure those with Estonian and English language skills gained to Western media through
Finland, Europe, and new media outlets in Estonia. Russian language media sources for
Russian-Estonians still come primarily from Russia, and many are the same sources that existed
under Soviet rule.

Another factor supporting the divergence theory is the loss of linguistic integration after the collapse of the Soviet Union. Under Soviet control, the primary language spoken by both Estonians and Russian-Estonians, at least in a public context, was Russian. After independence, Estonians spoke Estonian and Russian-Estonians spoke Russian. While this does not mean Estonians with Russian language skills did not continue to speak in Russian when they found it necessary to communicate, it does mean that there was no longer a single language that served as the basis for communication and public discourse since most Russians could not speak Estonian. As argued above, the level of linguistic integration does not necessarily translate into the level of social integration, but it is likely a contributing factor.

Given the existing evidence, there is no clear single hypothesis as to the trend in the attitudes of Estonians and Russian-Estonians. However, there are several hypotheses concerning the attitudes of Estonians and Russian-Estonians that are plausible and can be tested.

**Hypothesis 1:** There was not a significant difference between the attitudes of Russian-Estonians and Estonians in 1990.

**Hypothesis 2:** There was not a significant difference between the attitudes of Russian-Estonians and Estonians in 1996.

**Hypothesis 3:** There was convergence in the attitudes of Estonians and Russian-Estonians between 1990 and 1996.

**Hypothesis 4:** The attitudes of Russian-Estonians were more similar to Estonians than to Russians in 1990.

**Hypothesis 5:** The attitudes of Russian-Estonians were more similar to Estonians than to Russians in 1996.
Hypothesis 6: The attitudes of both Estonians and Russian-Estonians were more similar to those of Western countries in 1996 than in 1990.

It is probable that different hypotheses will hold when attitudes about different areas of social life are considered. Kirch and Kirch (2001) found that Estonians and Russian-Estonians had similar views on the EU and democracy, for example, but different views on foreign policy related to Russia. As another example, Laitin (2002) found that Russian-Estonians report religion to be more important to them than Estonians do and are also more likely to be Orthodox, but both groups are similar on another dimension, their intention to study English.

Data and Measurement

Since attitudes are latent traits which cannot be observed or measured directly, attitudes must be measured by the outcomes they produce. Responses individuals give to survey questions can be used as observable outcomes that stem from the underlying attitudes held by the respondents. I use data from the 1990 wave and 1995-1997 wave of the World Values Survey (WVS), which contains indicators of values and attitudes in a variety of areas. This data set allows the same survey items to be used to compare attitudes in both time periods and also covers a wide range of topics. I divide the respondents from Estonia into the groups Estonian and Russian-Estonian based on the language in which the survey was conducted. Both the Estonian and the Russian-Estonian groups thus include small percentages of individuals who would not necessarily self-identify into these groups.10 I do not consider this a problem, however, since language is the main factor that divides these groups within the country. In addition to the responses for Estonians and Russian-Estonians for both waves of the survey, I also include the

10 Ethnic self-identifications are not available for Estonia for 1990. For 1996, the ethnic self-identification matches the language in which the survey was given very well. Based on the 2000 Estonian Census, less than 2% of those of Russian nationality speak Estonian as their primary language.
responses from those in the USA, West Germany, Russia, and Finland for both waves. I separate out self-identifying African-Americans in the United States from the rest of the US respondents.\textsuperscript{11} This is to provide a comparison minority group and a way to assess the size of the difference in opinions and attitudes between Estonians and Russian-Estonians.

Inclusion of these other countries serves several purposes. First, it provides a check on the measurement of attitudes. On average, those in the United States are considered much more liberal than those in Russia, so estimates of the attitudes of Russians and Americans should follow this pattern if attitudes are being measured accurately. Second, the other countries serve as a basis of comparison for understanding the Estonian and Russian-Estonian responses. Without these other countries, Estonians and Russian-Estonians could only be compared to each other. Knowing how multiple countries are positioned allows the magnitude of differences between Estonians and Russian-Estonians to be assessed. Third, each country may have potentially influenced Estonians or Russian-Estonians over the 1990-1996 period and inclusion of these countries makes it possible to see if Estonians or Russian-Estonians are becoming more similar to other countries in their attitudes. Finland is traditionally seen as the closest linguistically and culturally to Estonia. The United States is the dominant English-speaking culture.\textsuperscript{12} Russia is the homeland of the ancestors of most Russian-speakers and is included for the reasons discussed in the theory above. West Germany is a continental, non-communist European nation and a representative of European culture. In total, there are 11,104 respondents included in the study spread over the two waves of the study and seven country/ethnic groups.

I use factor analysis as a preliminary tool to identify groupings of questions that all

\textsuperscript{11} Those identified as African-Americans for this study are those individuals who answered that they saw themselves primarily as African-American, rather than simply American or another ethnicity. Thus, the African-American group used here is a particular subset of the entire set of citizens in the United States who would identify themselves as African-American by ethnicity in response to a question purely about ethnic identity. Dowley and Silver (2004) discuss the difficulties of extracting ethnicity indicators from the WVS data.

\textsuperscript{12} Great Britain could possible play this role as well, but data was not available for both waves of the survey.
measure a common social attitude.\textsuperscript{13} This process led me to construct 3 indices of 16-20 questions each.\textsuperscript{14} The three attitudes that I identified and measure in this study are religion, traditionalism, and civic contentment. The religion attitude is measured by questions on the importance of religion in the respondent’s life, religious beliefs, and reports of religious behavior. The traditionalism attitude is measured by views towards homosexuality, questions on morality, and general life outlook questions. The civic contentment attitude is measured by support of civil organizations, the government, and certain laws.\textsuperscript{15} The specific questions included in each index can be found in Table 1. For each attitude, higher values correspond to attitudes consistent with the name of the scale. For example, higher values on the religiosity scale correspond to individuals who are more religious.

While factor analysis is a useful tool for preliminary analysis, better methods exist for measuring the three attitudes identified above. Item-response theory\textsuperscript{16} provides a more flexible framework for estimating the latent attitudes of respondents than factor analysis allows.\textsuperscript{17} Item-response models are similar to factor analysis in they use the idea that the answer an individual gives to any particular question should provide an indication of the actual attitude of the respondent which is determining the respondent’s answer to the question; item-response models, however, estimate the latent trait directly, which is important in this situation where the latent trait, the attitude of the respondent, is the variable of interest. The response an individual gives to

\textsuperscript{13} I included in the preliminary analysis questions with response sets that could be ordered. When “don’t know” responses were included for a question, and such a response did not fit into the ordering of the responses, “don’t know” responses were coded as missing data. I made this decision because the availability of “don’t know” as an option often varied across countries and waves of the survey.

\textsuperscript{14} Not all questions that loaded on each factor were included. No question was included on more than one index.

\textsuperscript{15} When I constructed this index, it was intended to tap a libertarian/authoritarian attitude dimension, so a question on abortion and one on euthanasia are included on this index. Upon examining the results, this index seemed to be capturing instead how willing people were to accept the actions of their government, which is not quite the same as libertarian attitudes. In future incarnations of this paper, I plan to adjust this index somewhat. I did not have time to redo the analysis at this juncture, however. The inclusion of these the abortion and euthanasia questions should not have significantly altered the results.

\textsuperscript{16} see Schmidt McCollam 1998 for an overview.

\textsuperscript{17} see Takane and Leeuw 1987 or Bartholomew and Knott 1999 for a more detailed review of the similarities between the models.
each question is an imperfect measure of the underlying attitude of the respondent; there is error and uncertainty in how the attitudes held by individuals are translated into responses to survey questions. When the responses to multiple questions are considered together, however, a more accurate measure of the respondent’s underlying attitude can be achieved. For example, the answer a respondent gives to the question “How often do you go to church?” provides an imperfect indication of the importance of religion to the respondent. Considering the response to another question, “Were you brought up religiously at home?” as well decreases the uncertainty with which the importance of religion to the respondent can be measured.

An item-response model allows this underlying attitude, or latent trait, to be estimated; however, unlike factor analysis, item-response models take into account the uncertainty with which we are able to estimate the latent trait. In political science, item-response models have recently and frequently been applied to the problem of determining legislators’ ideal preference points based on roll call votes. In that situation, each vote provides some information about the legislator’s underlying ideological position in each dimension considered. Similarly, when measuring attitudes, each survey question provides some information about the individual’s underlying attitude for each topic considered. Item-response models are particularly good for measurement problems involving ordinal indicator variables and missing data (Treier and Jackman 2000) – common characteristics of survey data. They also allow for the possibility that questions are able measure the latent trait with differing degrees of precision.

I estimate each attitude individually using a mixed item-response model.\textsuperscript{18} I use a partial credit model (Masters 1982) for questions with 2, 3, or 4 response categories and linear regression for questions with 5 or more response categories. The partial credit model is similar to

\textsuperscript{18} It is possible to estimate all three attitudes simultaneously using a multi-dimensional model, however given the size of my data set, such estimation was impractical in this situation. This is part of the reason factor analysis was used as a preliminary tool to determine the number and nature of the underlying dimensions in the data.
an ordered logit, where the value on the latent trait, here the respondent’s attitude, determines
the probability of crossing the thresholds between response categories. As with ordered logit,
when the number of response categories is large, linear regression serves as a reasonable
approximation, and it is a much easier model to estimate. The model is identified via a constraint
on the way one survey item in each index discriminates with respect to the latent attitude. This
constraint ensures a unique polarity for the unidimensional latent attitude underlying each set of
questions.

I use Markov chain Monte Carlo (MCMC) to estimate the model parameters within a
Bayesian framework (via relatively simple WinBUGS programs). Aside from the identification
constraints, all model parameters are assigned vague prior distributions. Convergence is
achieved reasonably quickly for this problem: I use a burn-in period of 5,000-10,000 iterations
and then record every 10th iteration of the next 5,000 iterations, which results in 500 samples
from the posterior density of the parameters. Figure 1 provides an example of the posterior
density of the parameters. The posterior mean for each individual on each attitude is then used
as the estimate of the respondent’s attitude for the next stage of analysis.

The method by which I estimate this model assumes that there is no systematic
variation, particularly no cross-national variation, in the way that respondents understood the
survey questions and that each survey question measures the latent attitude of the respondents
in the same way. While this is a strong assumption, it is not an unrealistic one for this data.

There is not a strong reason to believe that questions on religion or traditional values would be
understood differently across these countries. For civic contentment, respondents in the

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19 see Jackman and Treier 2000 for the specifics of the ordinal item-response model.
20 Common threshold and item discrimination parameters were estimated for all respondents. In addition, the
weights included in the WVS data were not incorporated into model estimation, but were incorporated into later
analysis of attitudes, such as the calculation of group means.
21 See King, et al. 2003 for a discussion of problems that may arise when comparing survey responses
cross-nationally. This assumption could be tested by estimating separate model parameters for different groups, but I
do not conduct such a test here.
post-Soviet states may interpret some of the questions differently than those in the West, but
since I am primarily concerned with comparisons within Estonia and between Estonia and
Russia, the possible differences are not of huge concern here.

With estimates for the three attitudes of each respondent, the next step is measuring the
aggregate attitudes of the country-year groups of respondents. There are 14 groups of
respondents in total – West Germans, Russians, Finns, Americans, African-Americans,
Estonians, and Russian-Estonians in each of the two waves of the survey. Again, for each
respondent I use the mean of the 500 samples from the posterior distribution for each attitude.
Then, for each group on each attitude I take the weighted mean for the respondents in the group.
The weights come from the WVS dataset and are included to make the sample of respondents
representative of the demographics of each country.\textsuperscript{22}

I use the 500 samples from the posterior distribution of each respondent’s attitudes to
construct 95% confidence intervals on the group means. I first use weighted least squares
regression to estimate the group means for each of the 500 samples from the posterior
distribution. This results in a point estimate and a standard deviation on the group mean for each
of the 500 samples (the estimated regression coefficient and standard deviation). I then sample
from each of the 500 normal distributions specified by the mean and standard deviations from the
regressions to create a distribution for the group mean. I then take the 95% highest density
interval from this distribution as confidence interval on the group mean. This method of
computing the confidence intervals ensures that the uncertainty inherit in measuring attitudes is
propagated through all stages of the analysis; this results in larger confidence intervals than
would be observed if sample means were treated as perfect measures.

\textsuperscript{22} I use the variable V236, which is the original weight, as the base. I then adjust the weights from some of the
groups so that they have a mean weight of approximately 1, so that one country is not driving the results. The variable
WEIGHT could also be used, but this makes all groups have a size of approximately 1500 respondents, and this is an
unnecessary adjustment. The different weighting schemes do not greatly change the results.
Results

Some general results concerning the models need to be discussed before the hypotheses can be evaluated. For each attitude, about 80% of the variance across individuals is explained by the country or ethnic groups of which an individual is a member;\textsuperscript{23} however, while much of the variation in attitudes can be explained by group differences, there is also a large degree of overlap between the members of different groups. As an example, Figure 1 shows the distribution of individuals in the West Germany 1990 sample for the traditionalism attitude. The range of attitudes in West Germany is greater than the range of the mean attitudes for the different groups; there is more variation within each group than there is across the means for the different groups. Figure 5 shows the posterior distributions for each of the groups in 1990 for the traditionalism attitude. As is evident, there is a great deal of overlap between the groups. This overlap between the groups is substantively significant; while the means of the groups may differ, it is important to remember that most of the members of each group are not much different than those in any of the other groups. There is more similarity between the groups than difference.

With this understanding of the large amount of variance within groups and overall similarity of the respondents in different groups, the estimates of the attitudes of groups in the topic areas can be correctly interpreted. Figures 2 - 4 present the measures of the attitudes of each group for both waves, with the arrows pointing from the 1990 wave value to the 1995-1997 wave value and the parentheses giving the 95% confidence intervals on the estimates. The scales are not consistent across attitudes, so comparisons as to the magnitude of differences must be restricted to within each scale; a difference of .5 on religiosity is not equivalent to a difference of .5 on traditionalism. With this introduction, I turn now to evaluation of the 6

\textsuperscript{23} This was calculated by taking the mean $r^2$ value from weighted least squares regressions on each of the 500 samples from the posterior distribution with the measure of the latent trait as the dependent variable and indicators for the groups as the independent variables.
Hypotheses set out above.

**Hypotheses 1, 2, and 3: Similarity?**

An initial look at the plots shows that the attitudes of Russian-Estonians and Estonians are not that dissimilar compared to the differences between other countries and ethnic groups. Table 2 provides the magnitude of the differences between the groups. Differences do exist between the groups, and Russian-Estonians and Estonians do seem to have moved further apart in their attitudes between 1990 and 1996. Even in 1996, however, the differences are not much larger than those between African-Americans and the rest of the US. Whether or not there are large differences between African-Americans and Americans is another question that is debatable, but, however one answers that question, the answer helps one to make judgments in the Estonian case.

The biggest change over time and the largest relative difference between Russian-Estonians and Estonians was in terms of civic contentment in 1996 versus that in 1990. In 1990, Russian-Estonians actually showed more contentment with the Estonian state and society than the Estonians did. In 1996, however, the Estonians had become much more content and the Russian-Estonians much less so. This is not a surprising result given the course of events in Estonia. Estonians took over control of the government and many civic organizations. Russian-Estonians lost many government positions are were largely excluded from the political process. This result is particularly interesting because, as discussed below, the Russian-Estonians did not become much different from the Estonians on the other attitudes measured here.

Turning to the traditionalism index, a look at the pattern of the groups in Figure 3 shows
that while there are differences between Russian-Estonians and Estonians, what is more relevant is that Russians, Estonians, and Russian-Estonians are all have more traditional attitudes than those in Finland, West Germany, and, to a lesser extent, the US. This is one area where the effects of the Soviet Union still exist and separate Estonia from the rest of Europe. Given the variation across countries, the difference between Russian-Estonians and Estonians is not particularly significant.

A similar picture arises when looking at the religiosity results in Figure 2. Here, it is clear that the USA is much more religious than the other countries in the study. Both Estonians and Russian-Estonians appear to be less religious when compared to the USA, Finland, or West Germany. As with traditionalism, there are differences between the groups, but the difference between those living in Estonia and those living in other nations are much greater than in-country differences. This is not to say that the differences that do exist within Estonia are not important. To make that claim, one would also have to be willing to claim that the differences between African-Americans and others in the United States are not important. This is something that could be argued, but there are many who would find such a claim to be unreasonable.

While the differences in either year are not particulary large, the distance between Russian-Estonians and Estonians did increase on each attitude from 1990 to 1996. This indicates that the conflict in the country may have contributed to moving the groups further apart. Whatever the cause for the increased distance between the groups, the change does not bode well for the efforts of the Integration Program to reduce the division within the country. Without further years of data, however, it it difficult to tell whether the changes observed here are part of a trend or not. Many of the differences between the Russian-Estonians and Estonians are not statistically significant at the 95% significance level, which is yet another reason to restrain from

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24 The differences are not significant at the 95% level.
drawing conclusions as to the trend in Estonia at this time.

The differences that exist between 1990 and 1996 do not seem to be related to patterns of out-migration by Russian-Estonians. The demographic variables available in the WVS are not good predictors of the attitudes of the Russian-Estonians; this suggests that while it is possible that out-migration did affect the distribution of attitudes of the Russian-Estonians, it did not do so in a way that can be identified using characteristics of the survey respondents. Those who left Estonia between 1990 and 1996 seem to have been dispersed throughout the population in terms of their attitudes.

**Hypotheses 4 and 5: Are they Russians or are they Estonians?**

Remembering that not all of the differences between the three groups are statistically significant, Russian-Estonians are closer to Estonians in their attitudes than to Russians in 1990 but not 1996. For religiosity and traditionalism, the Russian-Estonians occupy a position between that of the Estonians and the Russians, where one would expect them to be. They seem to have incorporated the influences of both societies. In terms of religiosity, all three groups became more religious between the 1990 wave and 1995-1997 wave of the survey. Russian-Estonians had a bigger shift in attitudes than the Estonians, resulting in them moving closer to the Russians than they had been in 1990. This indicates that while all groups were moving in the same direction, the magnitude of the change in Russian-Estonian religiosity may have been influenced more by Russian attitudes than Estonian ones. In terms of traditionalism, Estonians remained virtually unchanged between 1990 and 1996, while Russian-Estonians and Estonians became more traditional in their views; for the Russian-Estonians, however, the group mean for 1990 was not different than that for 1996 at the 95% significance level. While not statistically significant, the

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25 I ran a series of linear regressions with each of the attitudes as the dependent variable and factors such as age, employment status, number of children, gender, and marital status as the independent variables. Few of the demographic variables were significant predictors.
changes in the traditionalism attitude are further evidence that the Russian population may have had an impact on the Russian-Estonian population during this time period.

On civic contentment, across the board the groups were more similar to each other than on the other attitudes. Comparisons between Russian-Estonians and Estonians are somewhat less telling on this dimension because they live in different countries. While Russians and Russian-Estonians were both less content in 1996 than in 1990, the reason for the shift is likely different for the two groups. As discussed above, the Russian-Estonians were most likely responding to the situation they faced in Estonia, while Russians were responding to the turmoil in their own country over this time period. While the experiences of the two groups may have influenced each other, it is unlikely that the Russians’ experience was the driving force behind the changes in Russian-Estonian contentment with their own society.

The answer to the question of whether the Russian-Estonians are Russians or Estonians is that they are both, at least in terms of their attitudes. The disconnect that exists between the Russian-Estonians and the Estonians in terms of civic contentment, however, should be taken note of. If the Russian-Estonians continue to be dissatisfied with Estonian society and government, this may increase the influence that the Russian population has on the Russian-speakers in Estonia. For those in Estonia who are concerned about the differences that exist between the Estonians and Russian-Estonians, the evidence here suggests that excluding the Russian-Estonians from Estonian society may be pushing the them further away. The differences between Russian-Estonians and Estonians in terms of religiosity and traditionalism did increase between 1990 and 1996 as the Russian-Estonians became much less content with Estonian government and society.
Hypothesis 6: Westernization?

There is little evidence to suggest that Estonians or Russian-Estonians were drastically influenced by the West between 1990 and 1996, although there is not evidence that they moved away from the West either. Six years is a relatively short time frame for Western influences to affect fundamental attitudes of the people in Estonia. With Estonian membership in the EU, the West will likely have more influence in the coming years than it did in the first few years after Estonian independence. This hypothesis should be reinvestigated when more data is available.

Other Findings

A few more general results merit discussion. First, there were not large changes in the amount of heterogeneity or variation in the attitudes within particular groups over time. Between groups, there are some differences in the amount of variation within each group, but the differences are not drastic. Figures 5-7 provide examples of the posterior distribution of attitudes for some of the groups. As can be observed, the distributions do not vary much over time or between groups. What this suggests is that the means of the groups were not changing because of the emergence of extreme factions or changes in only one part of the population. The means of groups changed over time in response to more widespread changes throughout populations. This is significant for understanding the situation in Estonia because it would be plausible to think that different segments of the Russian-Estonian population had different experiences in Estonia in the early 1990s. The evidence suggests that the changes in Russian-Estonian attitudes were not driven by the experiences of only a fraction of the population.
Conclusions

Based on this analysis, the outlook for Estonia is perhaps not as bleak as some believe it to be. While the attitudes and opinions of Russian-Estonians and Estonians are not the only things keeping the groups apart, that the groups are not extremely different in this respect is a positive indication. The perception on the part of members of both groups that they are significantly different from each other seems to be, at least in part, incorrect. While there are differences between Estonians and Russian-Estonians, the differences are not great when compared to the variation in attitudes within either of the groups or when compared to the differences between Estonia as a whole and other countries. The Integration Program, and language integration more specifically, might result in those living in Estonia both being and feeling less divided along ethnic lines. However, for this to happen, the Russian-Estonians would need to feel that they are a part of the Estonian state and society. While there are only two data points available here, what evidence exists suggests that the trend is actually in the opposite direction, that Russian-Estonians are becoming more dissatisfied with Estonian government and society.

While there is evidence that the idea of a single society existing in Estonia is not just a dream, there are reasons to believe that some division between Russian-Estonians and Estonians will persist for many years. Even if Estonians and Russian-Estonians spoke the same language, it is not clear that their attitudes and opinions would be any more similar than they currently are. The differences between Russian-Estonians and Estonians are currently not much larger than those between African-Americans and the rest of the US; this suggests that language alone does not bring groups closer together. Generalizing from African-Americans and Russian-Estonians, it seems unlikely that most minority groups in other countries are drastically different than the majority population in terms of opinions and attitudes on social issues. Just as
there was much greater variation within each given country than across the mean values for
countries, minority groups may be on average different from majority populations, but the overlap
between groups is usually substantial. Silver and Dowley (2000), considering a larger sample of
ethnic groups, come to the opposite conclusion about groups differences; they find that there are
often greater differences between ethnic groups within a country than there are differences
between countries, but they do not take into account the distribution of attitudes within ethnic
groups.

This conflict in findings suggests that the distribution of attitudes within groups should be
investigated further. As shown here, while there are differences in the mean attitudes of the
groups, what is more striking than the differences is the amount of overlap between the groups.
Ethnic groups are often assumed to be different in ways that are relevant for political processes,
yet many times this assumption is not tested. If members of different ethnic groups are not
significantly different in terms of their attitudes, this suggests that at least certain ethnic groups
may not be as different from each other as they are believed to be. While attitudes are not the
only thing that separate ethnic groups, attitudes are important for understanding policy
preferences, voting, and other aspects of politics.

The methodology used here to understand the differences between a minority group and
a majority group can also be used to investigate cross-national differences more generally. A
limited set of countries was included here primarily as reference for understanding the
Russian-Estonian and Estonian differences, but more countries could be added. Additionally,
here, attitudes were the dependent variable, but they could just as easily be used as independent
variables. Questions about how individual or group behavior is affected by the opinions and
beliefs people hold would be a particularly good fit for this type of analysis.

In addition to estimating latent attitudes, item-response models can also be used to test
assumptions such as the idea that respondents in different countries interpret choice sets in
different ways. By relaxing the restriction that certain parameters in the model be the same
across countries, this assumption can be tested statistically. While King, et al. (2003) have found
a way to diagnose and correct the problem of different understandings of answer sets
cross-nationally with the use of vignettes, item-response models like the one presented here can
be used to test whether such differences exist when data sets do not include a set of vignettes.
They can also be used to test whether particular questions capture a concept equally well across
countries. By allowing the item discrimination parameters to be country-specific, different items
may be found to perform better in some countries than others.

In summary, it is likely that the result found here, that the differences between the groups
are not as large as many believed them to be, may generalize to other situations. This would
force researchers to rethink what actually divides groups and why differences in mean measures
make a difference for political outcomes. If the result found here does not generalize and there
are larger differences between ethnic groups in other countries, then the relative similarity
between the Russian-Estonians and Estonians may help to explain why there was no violent
conflict in the 1990s in Estonia, unlike in some of the other post-Soviet nations with significant
Russian-speaking minorities. The framework used here for examining social diversity in Estonia
can be used to examine similar questions in other contexts and test the assumption often made
by both researchers and ordinary people that significant differences divide ethnic groups.
Works Cited


http://www.uta.edu/cpsees/estoncit.htm


The figures above are examples of the posterior distribution of the attitudes for a respondent and for a group. The individual's distribution is formed using 500 samples from the posterior distribution. The group distribution presented here is comprised of the mean value of the attitude for each respondent in the group. The distribution is smoother when the entire distribution for each individual, such as the figure on the left, is included to form the group distribution.
Figure 2: Religiosity
Arrows point from the mean for the 1990 wave to the mean for the 1995-1997 wave for each group. Higher numbers indicate more religious groups. The parentheses around each point estimate are 95% confidence intervals on the estimate.
Figure 3: Traditionalism
Arrows point from the mean for the 1990 wave to the mean for the 1995-1997 wave for each group. Higher numbers indicate greater consistency with traditional family values and morality. The parentheses around each point estimate are 95% confidence intervals on the estimate.
Figure 4: Civic Contentment
Arrows point from the mean for the 1990 wave to the mean for the 1995-1997 wave for each group. Higher numbers indicate greater contentment with the government and societal organizations. The parentheses around each point estimate are 95% confidence intervals on the estimate.
Figure 5: Group Posterior Distributions
The seven distributions above are for each group in 1990 on the Traditionalism attitude. The distributions are comprised of the mean value of the attitude for each respondent in the group. The vertical bars represent the 7 group means. The distributions are smoother and overlap more when all 500 samples from the posterior distribution of each individual are included instead of only the mean value.
The figures above are the posterior distributions of the attitudes of Russian-Estonians in 1990 and 1996. They are presented to show the change in the distributions over time.

Figure 6: Russian-Estonian Posterior Distributions

Russian-Estonians, 1990 and 1996

Civic Contentment

Traditionalism
Compare to each other over time.

Figure 7: Estonian and Russian-Estonian Posterior Distributions

The figures above are the posterior distributions of the civic contentment attitude for Estonians and Russian-Estonians in 1990 and 1996. The solid line is the Russian-Estonians and the dotted line is the Estonians. These figures show how the distributions compare to each other over time.
### Table 1: Questions Included in Each Attitude

<table>
<thead>
<tr>
<th>Religiosity</th>
<th>Traditionalism</th>
<th>Civic Contentment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9, 22, 28, 135, 177, 178, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191</td>
<td>5, 10, 11, 12, 15, 16, 18, 58, 60, 61, 65, 92, 93, 118, 119, 197, 198, 200, 202, 213</td>
<td>136, 137, 138, 140, 141, 142, 144, 145, 146, 192, 193, 194, 195, 196, 199, 201</td>
</tr>
</tbody>
</table>

Note: question numbers come from the 1995-1997 wave survey

* The Civic Contentment index was originally constructed to measure libertarian attitudes, so it includes a few questions that do not directly relate to civic contentment. These questions will be removed in later drafts of the paper.

### Table 2: Absolute Distances between Groups

<table>
<thead>
<tr>
<th></th>
<th>Estonians and Russian-Estonians</th>
<th>Russians and Russian-Estonians</th>
<th>African-Americans and the US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religiosity</td>
<td>0.135*</td>
<td>0.148*</td>
<td>0.381*</td>
</tr>
<tr>
<td>Traditionalism</td>
<td>0.022</td>
<td>0.071</td>
<td>0.077</td>
</tr>
<tr>
<td>Civic Contentment</td>
<td>0.041</td>
<td>0.210*</td>
<td>0.106*</td>
</tr>
</tbody>
</table>

* indicates a difference that is significant at the 95% level