

January 11 | 2016

## Discourse Indicators of Gray Zone Activity

**Sub-Title:** Russian-Estonian Relations Case Study

**Prepared for:** Strategic Multi-layer Assessment under  
Contract GS00Q09BGD0050



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## Executive Summary

The increasing use of emotive themes and rhetorical devices (that amplify a message's emotional effect) provide indicators of gray zone activities in speeches made by Eurasian regional leaders and has the potential to provide leading indicators and reveal key issues and concerns.

## Indicators & Warnings (I&W)

- Putin exhibits a sustained concern over *Europe* and the *threat of Nazism*, consistent with earlier studies (Kuznar, 2016b).
- The overall sentiment between the Putin and Estonian governments demonstrates increasingly negative relations between the two countries.

## Predominant Concerns of Regional Actors

- The Putin government predictably stresses the plight of *Russian Minorities* in Estonia, and the need for *Cooperation* in its discourses on Estonia.
- Ethnic Russian-Estonians emphasizes their ethnic *Identity*.
- The Estonian government stresses the need for *Cooperation*.

## Use of Emotional Language

- The Estonian government used nearly five times the amount of emotional language (emotional themes and rhetorical devices) used by the Putin government.
  - This pattern reflects other studies that have demonstrated that the Putin government generally uses much more restrained language than other leaders (Kuznar, Popp, & Peterson, 2017; Kuznar & Yager, 2016).
  - This restrained language may be an indicator that the Putin government is more vulnerable to traditional deterrence operations (USSTRATCOM, 2006), provided that their values are accurately identified.



## Introduction

People both knowingly and unknowingly signal their values and intentions through the way they use language (Beeman, 2001; El-Badawy, Comerford, & Welby, 2015; Fairclough, 2001; Rahimi & Sahragard, 2006; van Dijk, 2005). Thematic analysis focuses on themes people employ that reveal what matters to them (Braun & Clarke, 2006; Guest, MacQueen, & Namey, 2012; Ryan & Bernard, 2003), while discourse analysis focuses on the linguistic tools people use to deploy and emphasize these themes (Farnell & Graham, 1998; Schiffrin, 2003; van Dijk, 2005). The approach used in this study combines both thematic analysis and discourse analysis to identify what issues matter most to a speaker and to what degree. Because people are often unaware of the extent to which they signal their values and intentions, identification of key themes can provide early indicators and warnings (I&W) in advance of political action. The authors have employed this approach in studies of both state (Fenstermacher, Kuznar, & Yager, 2012; Kuznar, 2013, 2014, 2016b; Kuznar, Popp, & Peterson, 2016; Kuznar, Suedfeld, Morrison, & Spitaletta, 2014; Kuznar & Yager, 2013, 2016; Kuznar, Yager, Clair, & Stephenson, 2012) and non-state (Kuznar, 2016a; Kuznar & Hunt, 2015; Kuznar & Moon, 2014; Kuznar & Yager, 2012) actors.

This study examines discursive I&W in relation to a series of gray zone (Kapusta, Rouse, Astorino-Courtois, & Collison, 2016)<sup>1</sup> actions taken by Russia against Estonia. There are two key events upon

<sup>1</sup> This paper employs the following working definition of the Gray Zone. "The Gray Zone is a conceptual space between peace and war, occurring when actors use instruments of power to achieve political-security objectives with activities that are ambiguous or cloud attribution and exceed the threshold of ordinary competition, yet fall below the level of large-scale direct military conflict. They threaten US, allied and partner interests by leveraging, challenging, undermining, or violating international customs, norms, or laws" (Kapusta, Rouse, Astorino-Courtois and Collison 2016).

which this study focuses, the Russian cyber attack on Estonian Internet of 27 April 2007, and Russian military exercises on 25 February 2014 in response to NATO exercises on the Estonian side of the border. Both events exhibit challenges for identifying I&W, since both were to some degree provoked by Western actions. The 2007 cyber attack, which paralyzed Estonian government websites, media, and banking, was in response to the controversy over the Bronze Soldier of Tallinn statue that sparked riots by ethnic Russian Estonians. Likewise, the Russian military maneuvers in 2014 were in response to NATO exercises. Since these were Russian responses, it is unlikely that they could provide I&W in advance of these events. Nonetheless, each would have required advance planning, and so there remains the possibility that the Russian had the intent beforehand and took advantage of these opportunities when they arose.

Three groups are examined in this study, the Putin government of Russia, statements by ethnic Russian-Estonians, and the Estonian government. A total of 53 speeches were coded (37 Estonian, 10 Putin Government, 6 Russian Estonians). The final database comprised a total of 1981 coded segments of text that represented codebook themes and rhetorical devices.

The corpus is divided into two periods, each leading up to one of the two key gray zone events and extending afterward in order to detect any post-event discursive activity that might reveal objectives or the meaning of the event to a group after the fact (Appendix: Key Dates and Events).

- Period 1 covers the time spanning border negotiations in 2005, includes the April 2007 cyber attacks, and concludes in October 2007.
- Period 2 begins in 2009, includes the February 2014 military exercises, and concludes in January of 2015.

The primary results of this study are detailed after a brief description of some key methodological terms. Supporting information is found in the following appendices:



- Appendix: Key Dates and Events
- Appendix: Narrative of Historical Events
- Appendix: Source Data
- Appendix: Gray Zone Code System

## Methodological Terms

### Codebook Typology

The codebook is a taxonomy of themes and rhetorical devices that represent topics mentioned, persons, places, things, ideas, and ways of using language that amplify the sentiment associated with the themes. The following terms describe the higher-level categories of the codebook taxonomy.<sup>2</sup>

- **Theme** – something that can be nominalized (named); can be a person, place, thing, idea, or emotion
- **Emotive Theme** – themes that convey emotion (sentiment); their mere mention evokes an emotive response
- **Rhetorical Device** – a way of using language to amplify or dampen sentiment
  - Includes repetition, sarcasm, intensifiers (very, huge), lexicalization (special word choice), pejoratives (trash talk), use of kin terms, etc.

The Primary Categories of the taxonomy include:

- **Polities** – countries, formal organizations, regions, and sub-state groups
- **Cultural Emotive Values** – themes that evoke emotions in audiences
  - **Negative Extreme Emotive** – a cultural theme that tends to evoke an extremely negative response
  - **Negative Normal Emotive** - a cultural theme that tends to evoke a negative response that is not extremely negative
  - **Positive Extreme Emotive** - a cultural theme that tends to evoke an extremely positive response
  - **Positive Negative Emotive** - a cultural theme that tends to evoke a positive response that is not extremely positive
- **Political Factors**
  - **Positive Cohesive Concerns** – political concerns that tend to lead to notions of cooperation
  - **Disruptive Security Concerns** – political concerns that tend to lead to conflict
  - **Other Security Concerns**
- **Rhetorical Devices** – ways of using language that amplify or dampen the sentiment associated with a theme

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<sup>2</sup> As a convention, actual themes and rhetorical devices will be capitalized and italicized throughout the text in order to differentiate them from more generic uses of the terms. When appropriate, footnotes defining themes will be given.

## Who is Analyzed?

Speeches were analyzed from the three political actors, or groups, upon which this study is focused. Its presidents represent the Putin government during this period, Vladimir Putin and Dmitry Medvedev, and foreign minister, Sergey Lavrov. Russian-Estonians are represented by a number of people who made public statements. Finally, presidents, prime ministers, and Estonia's minister of foreign affairs represent the Estonian government.

Table 1. Speakers Analyzed in Russian – Estonian Relations Case Study

Group	Speaker(s)	Position(s)
Estonian Government	Andrus Ansip	PM
	Arnold Ruutel	President
	Rein Lang	Minister of Culture
	Taavi Roivas	PM
	Toomas Ilves	President
	Urmas Paet	Minister of Foreign Affairs
Putin Government	Dmitry Medvedev	President
	Sergey Lavrov	Foreign Minister
	Vladimir Putin	President
Russian Estonians	Aleksandra	
	Aleksandra Brokk	
	Aleksandra Dusman	
	Anton	
	Elena	
	Ilja Smirnov	
	Katja Koort	
	Roman Vikulov	
	Oleg Uglov	
	Multiple Speakers	

## Key Metric: Density

The key metric for measuring themes is **Density**: the number of times a theme occurred in a document or speech, divided by the number of words in that document. This provides a normalized measure of how often a theme is used that can be compared across documents and between authors, groups, etc. Comparison of densities between themes also places a theme in a broader context, guarding against bias in judging the relative importance of themes. The underlying assumption is that the more densely a theme is used, the more important it is to the author, and potentially, to an audience.

Theme densities were calculated for each document, and the variations of these densities through time were used to identify trends and possible indicators and warnings (I&W). Only those trends that were statistically significant at the .05 level or less are reported.

### **Metrics for Sentiment and the Use of Emotional Language**

The use of rhetorical devices and emotionally charged themes are ways to interject emotive appeal into an argument. When done unwittingly, this is an indicator that the speaker is in a more emotive state, as opposed to a more rational, deliberative state. Therefore, the ability to detect departures from a rational state of mind can provide clues that the speaker's decision calculus is departing from the deliberative, cost/benefit calculus which is at the heart of traditional deterrence theory (USSTRATCOM, 2006).

In order to measure the use of more emotive language, themes were classified as Extreme Negative Emotive, Negative Emotive, Extreme Positive Emotive, Positive Emotive, and Rhetorical Devices and were coded (Appendix: Gray Zone Code System). Each of these categories was tallied for each document and subsequently normalized as densities. In addition to these categories, the Extreme Negative and Negative Emotive themes were summed as were the Extreme Positive and Positive Emotive themes. This provides nine measures of the use of emotive language against which different actors or speakers can be compared.

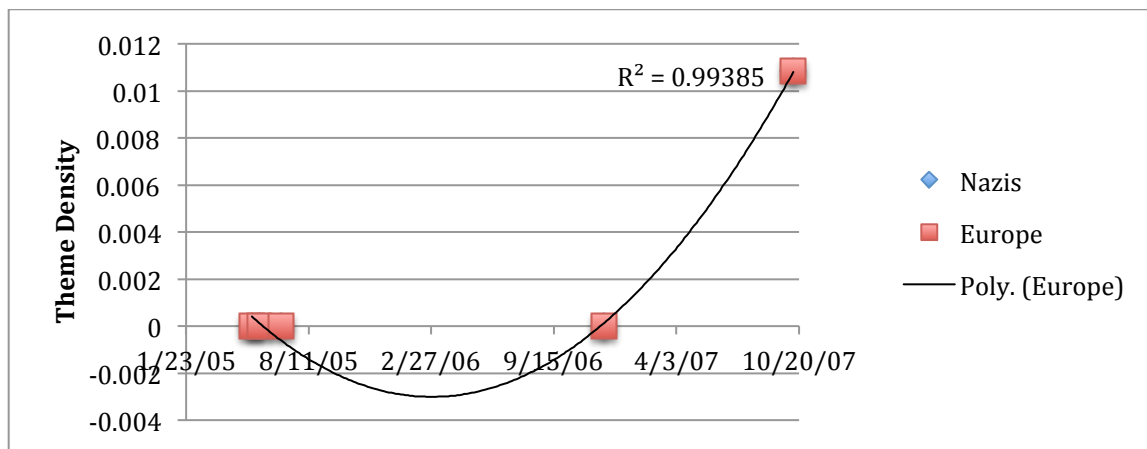
The mean densities of these measures were compared between all actors in order to gauge whether or not differences in rhetorical style indicate different levels of emotionality in their language.

## Leading Indicators of Gray Zone Activity: Russian Cyber Attack on Estonia and Military Exercises

Statistically significant trends in the occurrence of themes and rhetorical devices identified leading discursive indicators of gray zone activity. Analysis was conducted for each actor (Putin government, ethnic Russian-Estonians, Estonian government).

### Putin Government

In previous studies, Putin demonstrated less emotion and more restraint in his use of language than other Eurasian and Western leaders (Kuznar & Yager, 2016). This makes identification of leading indicators of his intent difficult on the one hand, since he gives up so little. And, in this case study, no official in the Putin government provided any I&W of its gray zone activity. This is not surprising given the largely reactive nature of their actions. Putin exhibited the only statistical pattern, and it was his mention of *Nazism* and *Europe* after the Bronze Soldier of Tallinn and Russian cyber attack in April of 2007 (Figure 1). In other studies, when Putin does mention issues of importance in a statistically detectable manner, he often mentions adversaries, in this case his concern with *Europe*. Another pervasive issue in Putin's speeches is the threat of *Nazism* (Kuznar et al., 2017; Kuznar & Yager, 2016).



**Figure 1. Statistically Significant Patterns in Putin Government Discourse - 2007 Cyber Attack.** Note that the pattern for Europe and Nazism themes is identical. Poly. = second degree polynomial curve fit.  $R^2$  is goodness of fit.

During Period 2 (the lead-up to 2014 military exercises), there are no clear indicators of Russian intent. However, the Putin government steadily decreases its use of positive themes, and the overall sentiment expressed in their speeches shifts from positive to negative, reflecting the deteriorating relations between the two countries (Figure 2).

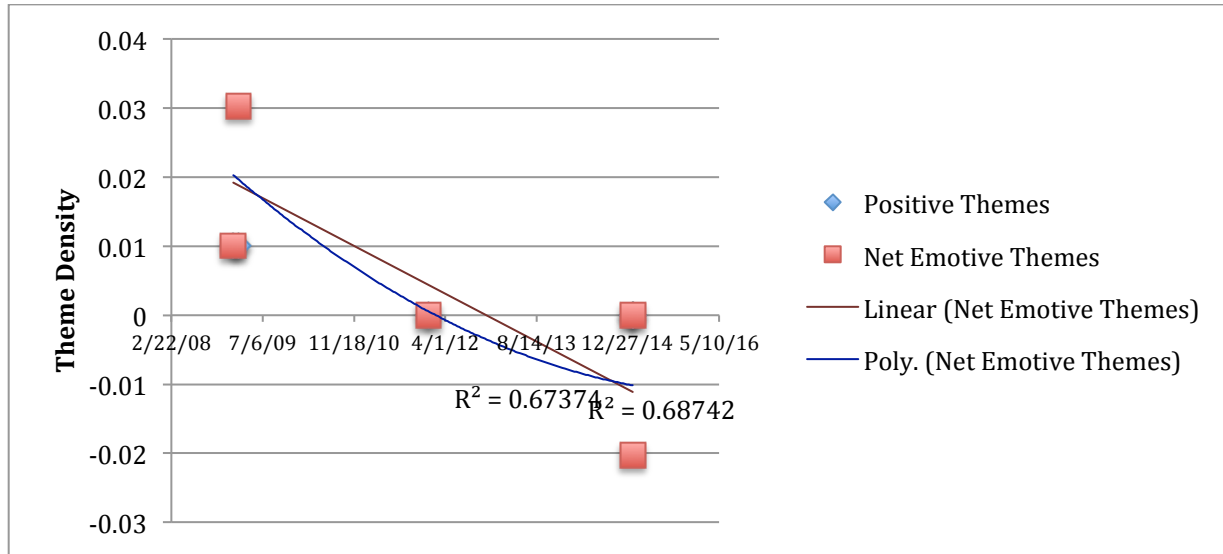


Figure 2. Putin Government Shift toward Negative Sentiment 2009 - 2015. Poly. = second degree polynomial curve fit.  $R^2$  is goodness of fit.

## Russian-Estonians

The ethnic Russian-Estonian corpus was restricted to the period from April 2014 to April 2015, which is after the gray zone events occurred, and so it cannot provide any I&W. Shortly after NATO exercises in Estonia and Russian exercises near the Estonian border, Russian-Estonians expressed their *Unity* as ethnic Russians as well as historic examples of their sense of *Injustice* at the hands of the Estonian government, which is the root of their unrest.

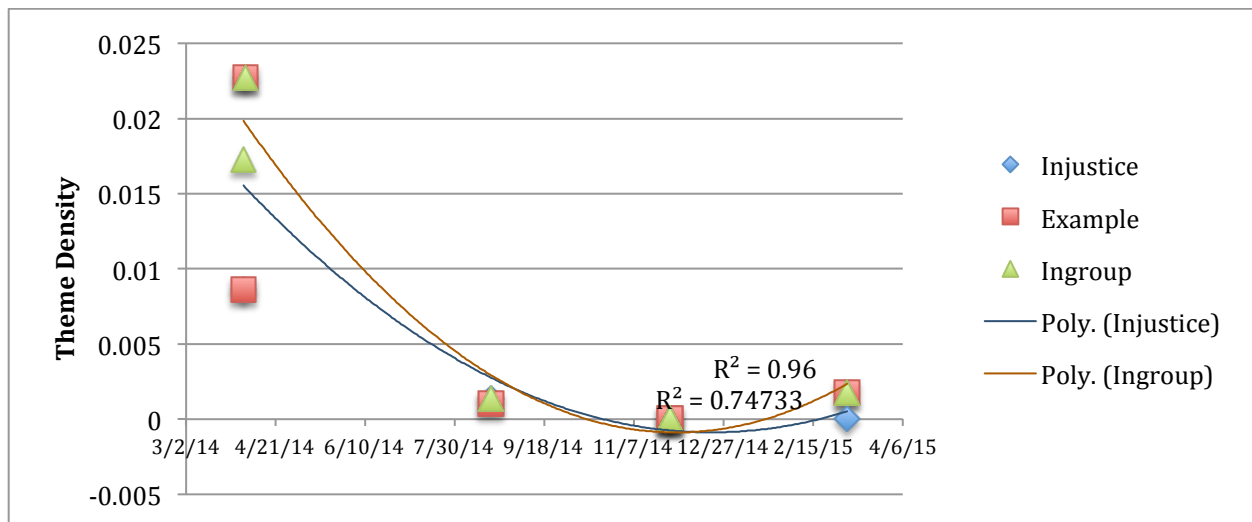


Figure 3. Russian-Estonian Discursive Patterns 2014-2015. Poly. = second degree polynomial curve fit.  $R^2$  is goodness of fit.

## Predominant Concerns of Regional Actors

### Predominant Concerns: Putin Government

Putin government officials (Putin, Medvedev, Lavrov) statistically emphasized two security themes in relation to Estonia: *Russian Minorities* and the need for *Cooperation* (Table 2). The primary polities that seem to concern the Russian government are the *EU* and *Ukraine* in this corpus. Finally, the Putin government made statistically frequent use of *Counter-arguments*, *Intensifiers*, and *In-grouping* language.

**Table 2. Predominant Concerns of Putin Government. 1 = theme statistically more often used at a less than or equal to 0.05 level.**

Code Type	Code	Group		
		Estonian_Govt	Putin_Govt	Russian_Estonian
Positive Extreme Emotive	National_Identity	0	0	1
	Russian_Minorities	0	1	0
	Cooperation	1	1	0
Polity	Estonia	1	1	1
	Russia	1	1	1
Rhetorical Device	Accusation	0	1	0
	Intensifiers	1	0	1
	Lexicalization	1	1	1
	Outgroup	0	0	1

### Predominant Concerns: Russian-Estonians

Ethnic Russian-Estonians predictably asserted their ethnic *Identity*, and spoke most commonly about the polities that most concern them, *Estonia* and *Russia*. They also made statistically frequent use of *Intensifiers*, *Lexicalization* (special word choice), and distinguishing themselves as distinct from the *Outgroup* (the Estonian government) (Table 3).

**Table 3. Predominant Concerns of Ethnic Russian-Estonians. 1 = theme statistically more often used at a less than or equal to 0.05 level.**

Code Type	Code	Group		
		Estonian_Govt	Putin_Govt	Russian_Estonian
Positive Extreme Emotive	National_Identity	0	0	1
	Russian_Minorities	0	1	0
Other Security Concerns	Cooperation	1	1	0
Cooperative Security Concerns				
Polity	Estonia	1	1	1
	Russia	1	1	1
Rhetorical Device	Accusation	0	1	0
	Intensifiers	1	0	1
	Lexicalization	1	1	1
	Outgroup	0	0	1



## Predominant Concerns: Estonian Government

The primary themes expressed by the Estonian government included *Cooperation* and the primary polities that concern them, *Estonia* and *Russia*. Estonian government officials statistically used Rhetorical Devices of *Intensifying* language and *Lexicalization* (special word choice) statistically more often.

**Table 4. Predominant Concerns of Estonian Government. 1 = theme statistically more often used at a less than or equal to 0.05 level.**

Code Type	Code	Group		
		Estonian_Govt	Putin_Govt	Russian_Estonian
Positive Extreme Emotive	National_Identity	0	0	1
	Russian_Minorities	0	1	0
Other Security Concerns	Cooperation	1	1	0
Cooperative Security Concerns	Estonia	1	1	1
Polity	Russia	1	1	1
	Accusation	0	1	0
	Intensifiers	1	0	1
	Lexicalization	1	1	1
	Outgroup	0	0	1
Rhetorical Device				

## Use of Emotional Language

There were no appreciable statistical differences between the Putin Government and Russian Estonians or between the Estonian Government and Russian Estonians. However, the Estonian government used much more emotive language, both positive and negative, than the Putin government (Table 5), reinforcing other research that has demonstrated a cool, rational, and disciplined use of language by the Putin government, compared to other Western leaders (Kuznar et al., 2017; Kuznar & Yager, 2016). The difference was not only highly statistically significant ( $\alpha = .002$ ) but was also very strong; Estonians' use of emotional themes and rhetorical devices was nearly 5 times that of the Putin government. It is interesting that there was no difference in overall positive or negative sentiment between the Estonian and Putin governments; the Estonians used much more positive and negative language for an overall more emotional rhetorical style of expression.

**Table 5. Use of Emotional Language: Estonian vs. Putin Governments**

Estonian Govt Mean Density All Emotive Language	Putin Govt Mean Density All Emotive Language	Unequal Variance df	t	alpha
0.2028	0.0414	41.389	3.378	0.002

## Conclusions

Analysis of key themes and uses of language (rhetorical devices) can provide indicators and warnings (I&W) of gray zone activity, reveal the predominant concerns of actors, and provide insights into emotional factors that can influence their decision calculus.

Thematic analysis, in which the density of themes and rhetorical devices are normed against measures of speech length, provide objective metrics that track the potential importance of issues to speakers (and potentially their audiences) and their actual level of emotionality, which impacts decision making. These measures discipline our own subjective readings of other's discourse in which we are likely to over- or under-estimate the importance of what people express.

## Indicators & Warnings (I&W)

The discovery of discursive I&W in this case study was expected to be challenging, since Russian gray zone actions appeared to be reactions to Estonian and NATO actions. However, cyber attacks and military maneuvers require advanced planning, presenting the possibility that the Putin government had intended to conduct these gray zone activities and were waiting for opportunities to use these tools of non-war. While examining the history of discourse and gray zone activities in this case study were warranted, it yielded no I&W, but it did yield some insights into pervasive concerns of the Putin government and the state of relations between the Putin and Estonian governments.

Putin exhibits a sustained concern over *Europe* and the *threat of Nazism*, consistent with earlier studies (Kuznar, 2016b). Also, the overall sentiment between the Putin and Estonian governments demonstrates increasingly negative relations between the two countries.

## Predominant Concerns of Regional Actors

Examining each group's corpus for the entire period yielded no surprises.

The Putin government predictably stressed the plight of *Russian Minorities* in Estonia and the need for *Cooperation* in its discourses on Estonia.

Ethnic Russian-Estonians emphasized their ethnic *Identity*.

The Estonian government stresses the need for *Cooperation*.

These patterns reinforce the pervasive issue of the status of Russian minorities in Estonia, but the fact that both the Putin and Estonian governments mentioned cooperation may indicate that neither side necessarily desires conflict over this issue.

## Emotional Language and Decision Calculus of Regional Actors

There was only one statistical difference detected in the use of emotional language between the regional actors. There was an extremely strong difference between Estonian and Russian government rhetoric, with the Estonian government using nearly five times the amount of emotional language (emotional themes and rhetorical devices) as the Putin government did. This pattern reflects other

studies that have demonstrated that the Putin government generally uses much more restrained language than other leaders (Kuznar et al., 2017; Kuznar & Yager, 2016). Such a difference has the potential to yield insights into the decision calculus of both sides; the Russians' cool rhetoric may be an indicator of a more rational cost/benefit evaluation at the heart of their decision calculus, which should make them more vulnerable to traditional deterrence operations (USSTRATCOM, 2006), provided that their values are accurately identified.

## Appendix: Key Dates and Events

The following table (Table 6) lists key dates and events involved in gray zone events between Russia and Estonia. A full narrative of events is found in Appendix: Narrative of Historical Events.

**Table 6. Key Dates and Events in the 2007 Russian Cyber Attack on Estonia**

Event	Date	Aggressor
Lavrov signs border treaty w/ Estonia	18-May-05	
Putin declares Russia will not honor treaty	31-Aug-05	Russia
Russian accusation of discrimination against Russians and Jews	9-Jun-05	Russia
Bronze Night	26-Apr-07	Ethnic Russians
Cyber attacks	27-Apr-07	Russia
Russia ceases using Estonian ports for oil transport	3-May-07	Russia
Estonians erect monument to Ukrainian Insurgent Army of WWII	1-Oct-09	Estonia
2012 negotiations opened on treaty	14-Oct-12	
Kidnapping of Estonian security official	5-Sep-14	Russia
Estonian - Russian military exercises	25-Feb-14	Estonia - Russia
New Estonian - Russian border treaty signed	18-Feb-14	

## Appendix: Narrative of Historical Events

The Russian cyber attacks against Estonia in April of 2007 mark a highpoint in hostilities between the nations that had considerable history of border disputes, ethnic tensions, and disputes over memorializing WWII.

The roots of the Russian – Estonian conflict can be traced back to Soviet expansion and Estonian complicity in the Nazi invasion of 1940. However, more recent events that appear to be more causally linked focus on key disputes over borders beginning with the signing of a border treaty between Russian foreign minister Sergei Lavrov and Estonia on 18 May 2005 (Reuters).<sup>3</sup> However, Russian President Putin rescinded the treaty on 31 August 2005 over language regarding the Soviet occupation of Estonia that Putin found objectionable.<sup>4</sup>

Tensions continued to increase over alleged discrimination against ethnic Russians living in Estonia and the passage of Estonian language qualifying exams.<sup>5</sup>

Inter-ethnic tensions continued to mount, culminating in a dispute over the Bronze Soldier of Tallinn in 2007. The Bronze Soldier is a statue in the Estonian capital of Tallinn that, to ethnic Russians, represents suffering at the hands of and victory over the Nazis in WWII and, to many Estonians, is a reminder of 50 years of Soviet occupation after WWII.<sup>6</sup>

In January of 2007, the Estonian parliament approved of moving the statue and the remains of 13 Russian soldiers who died in WWII to a military cemetery on the outskirts of the capital city of Tallinn. Ethnic Russians in Estonia as well as Russian politicians were outraged. Russian foreign minister Sergei Lavrov accused the Estonian government of harboring a "blasphemous attitude towards the memory of those who struggled against fascism," and speaker of the Russian parliament's upper house, Sergei Mironov, called the move "the first step towards legalisation of neo-Nazism in that country."<sup>7</sup>

On 26 April, 2007, 1500 ethnic Russians rioted in Tallinn, leading to clashes with Estonian police. In the melee, one person was stabbed to death, and 12 police officers and 44 protestors were injured. The next day, the Russian Foreign Minister stated that Russians would "take serious steps which would demonstrate [their] true attitude[s] to this inhuman action."<sup>8</sup>

Beginning at 10:00 PM on the 26<sup>th</sup>, Estonia began experiencing waves of denial of service (DOS) attacks on its Internet, the first site attacked being that of the Reform Party of the prime minister.<sup>9</sup> The next targets were Estonian news media and expanded to the banking system and universities. The attacks increased to their peak on 9 May 2007, the anniversary of the end of WWII, at which point they stopped.

<sup>3</sup> <http://www.reuters.com/article/us-russia-estonia-idUSBREA1H0QN20140218>

<sup>4</sup> <http://www.pravdareport.com/news/russia/01-09-2005/65142-0/>

<sup>5</sup> <http://www.osce.org/cio/15774?download=true>

<sup>6</sup> <http://www.telegraph.co.uk/news/worldnews/1541641/War-of-words-over-bronze-soldier.html>

<sup>7</sup> <http://www.telegraph.co.uk/news/worldnews/1541641/War-of-words-over-bronze-soldier.html>

<sup>8</sup> <http://www.spiegel.de/international/europe/deadly-riots-in-tallinn-soviet-memorial-causes-rift-between-estonia-and-russia-a-479809.html>

<sup>9</sup> <http://www.iar-gwu.org/node/65>

Despite widespread suspicion that the Russian government at least enabled hackers to attack the Estonian Internet, no hard evidence has been uncovered linking the Russian government to the incident. One person, Dmitri Galushkevich, an ethnic Russian student residing in Estonia, was admitted to being one of the hackers and was fined approximately \$1,600. No other arrests have been made to date.<sup>10</sup>

The cooled relations between Estonia and Russia began to thaw in 2012 with resumption of talks over the border agreement.<sup>11</sup> After two years of negotiations, the nations signed a new treaty on 18 February 2014 resolving the border issue but not the tensions between the nations.<sup>12</sup>

However, on 5 September 2014, the Russian FSB security service kidnapped an Estonian security officer in a cross-border raid, and he was subsequently tried, convicted of espionage, and sentenced to 15 years in prison.<sup>13</sup> The kidnapping occurred two days after U.S. President Barack Obama visited Tallinn in a show of NATO solidarity with the Estonian government.

Subsequent to the annexation of Crimea and ethnic Russian separatist actions in Eastern Ukraine, NATO and Russia have conducted military exercises in the Baltics, and tensions continue.<sup>14</sup>

<sup>10</sup> <http://www.iar-gwu.org/node/65>

<sup>11</sup> <http://news.err.ee/v/news/politics/cad9087b-0c7a-46ce-8360-d0bf6bd1e039/efforts-relaunched-for-working-estonian-russian-border-treaty>

<sup>12</sup> <http://www.reuters.com/article/us-russia-estonia-idUSBREA1H0QN20140218>

<sup>13</sup> <https://www.theguardian.com/world/2015/aug/19/russia-jails-estonian-police-officer-allegedly-abducted-border-eston-kohver>

<sup>14</sup> <http://www.telegraph.co.uk/news/worldnews/europe/estonia/11435698/Nato-and-Russia-hold-rival-military-exercises-on-Estonian-border.html>; <http://www.telegraph.co.uk/news/worldnews/europe/estonia/11600458/Estonia-stages-biggest-military-exercise-in-countrys-history-amid-fears-of-Russian-aggression.html>; <http://www.newsweek.com/estonia-kicks-6000-strong-military-exercise-amidst-reinforcement-455160>; <https://www.rt.com/news/341577-estonia-nato-drills-russia/>

## Appendix: Source Data

A total of 53 speeches represented the three actor groups analyzed in this study. Ten speeches represented the Russian government of Vladimir Putin and six represented pro-Russian ethnic Russian-Estonians (Table 7). 37 speeches represented the Estonian government (Table 8). Each speech was coded (themes/rhetorical devices and their associated language identified) by at least two coders.

**Table 7. Putin Government and Ethnic Russian-Estonian Speeches Analyzed in Russian – Estonian Relations Case Study.**

Document_Name	Date	Period	Word Count
2005.05.10_Putin Govt_Vladimir Putin_04	5/10/05	1	326
2005.05.23_Putin Govt_Vladimir Putin_01	5/23/05	1	36
2005.06.27_Putin Govt_Sergey Lavrov_03	6/27/05	1	49
2006.12.06_Putin Govt_Sergey Lavrov_02	12/6/06	1	41
2007.10.11_Putin Govt_Vladimir Putin_02	10/11/07	1	92
2009.01.26_Putin Govt_Dmitry Medvedev_05	1/26/09	2	58
2009.02.22_Putin Govt_Dmitry Medvedev_04	2/22/09	2	177
2012_Putin Govt_Vladimir Putin_03	1/1/2012	2	30
2015.01.21_Putin Govt_Sergey Lavrov_06	1/21/15	2	143
2015.01.22_Putin Govt_Sergey Lavrov_05	1/22/15	2	170
2014.04.03_Russian Estonian_Ilja Smirnov_01	4/3/14	2	116
2014.04.04_Russian Estonian_Oleg Uglov_01	4/4/14	2	44
2014.08.19_Russian Estonian_Katja Koort_01	8/19/14	2	2867
2014.11.27_Russian Estonian_Anton_01	11/27/14	2	74
2014.11.27_Russian Estonian_Elena_01	11/27/14	2	29
2015.03.06_Russian Estonian_Multiple Speakers	3/6/15	2	1148



Table 8. Estonian Government Speeches Analyzed in Russian – Estonian Case Study

Document_Name	Date	Period	Word Count
2005.03.04_Estonia_Rein Lang_01	3/4/05	1	99
2005.03.07_Estonia_Arnold Rüütel_01	3/7/05	1	914
2005.03.18_Estonia_Rein Lang_02	3/18/05	1	87
2005.06.20_Estonia_Urmas Paet_01	6/20/05	1	191
2005.09.01_Estonia_Urmas Paet_03	9/1/05	1	111
2005.11.24_Estonia_Andrus Ansip_01	11/24/05	1	68
2005.11.24_Estonia_Urmas Paet_02	11/24/05	1	149
2006.11.16_Estonia_Toomas Ilves_02	11/16/06	1	489
2006.12.06_Estonia_Rein Lang_04	12/6/06	1	187
2007_Estonia_Urmas Paet_04		1	49
2007.01.25_Estonia_Rein Lang_03	1/25/07	1	80
2007.01.25_Estonia_Toomas Ilves_01	1/25/07	1	98
2007.05.04_Estonia_Toomas Ilves_05	5/4/07	1	41
2007.05.12_Estonia_Urmas Paet_06	5/12/07	1	311
2007.05.17_Estonia_Urmas Paet_05	5/17/07	1	52
2007.06.15_Estonia_Urmas Paet_07	6/15/07	1	145
2007.06.26_Estonia_Toomas Ilves_04	6/26/07	1	1444
2007.10.01_Estonia_Andrus Ansip_02	10/01/2007	1	102
2007.10.01_Estonia_Toomas Ilves_03	10/01/2007	1	42
2009.06.04_Estonia_Urmas Paet_09	6/4/09	2	368
2009.08.29_Estonia_Urmas Paet_08	8/29/09	2	156
2012.04.20_Estonia_Urmas Paet_10	4/20/12	2	89
2012.10.11_Estonia_Andrus Ansip_03	10/11/12	2	110
2012.10.31_Estonia_Urmas Paet_11	10/31/12	2	58
2013.02.24_Estonia_Toomas Ilves_06	2/24/13	2	3004
2014.03.05_Estonia_Urmas Paet_12	3/5/14	2	148
2014.03.06_Estonia_Andrus Ansip_05	3/6/14	2	165
2014.03.20_Estonia_Andrus Ansip_04	3/20/14	2	45
2014.03.27_Estonia_Toomas Ilves_11	3/27/14	2	808
2014.04.07_Estonia_Jevgeni Ossinovski_01	4/7/14	2	350
2014.04.15_Estonia_Toomas Ilves_07	4/15/14	2	294
2014.07.25_Estonia-Taavi Roivas_01	7/25/14	2	28
2014.09.04_Estonia_Urmas Paet_13	9/4/14	2	401
2014.10.10_Estonia_Toomas Ilves_09	10/10/14	2	1334
2014.10.23_Estonia_Toomas Ilves_08	10/23/14	2	394
2014.12.22_Estonia_Toomas Ilves_10	12/22/14	2	1884
2015.02.19_Estonia-Taavi Roivas_02	2/19/15	2	160

## Appendix: Gray Zone Code System

Code System
Agreements
G20
Minsk_Agreements
Polities_Regions_Organizations
Abkhazia
Afghanistan
Arctic_Far_North
Armenia
ASEAN
Asia
Austria
Azerbaijan
Balkans
Baltics
Belarus
Brazil
BRICS
Britain_UK
Bulgaria
Caucasus
Central Asia
Chechnya
China
Crimea
Cyprus
Czechoslovakia
Czech_Republic
Donbass
Donetsk
E_Ukraine
Estonia
EU
Europe
Finland
France
Georgia
Germany
Greece
Hong Kong
Hungary
India
Iran
Iraq
ISAF

Italy
Japan
Jordan
Kalingrad
Kazakhstan
Kyrgyzstan
Latin_America
Latvia
Lebanon
Libya
Lithuania
Luhansk
Malaysia
MENA
Moldova
Mongolia
Nagorno_Karabakh
NATO
North Korea
OSCE
Philippines
Poland
Romania
Russia
Russian_America_[Alaska]
Siberia_Far_East
Slovakia
South China Sea
South Korea
South_Ossetia
Soviet_Union
Spain
Sweden
Syria
Tajikistan
Taiwan
Thailand
Transnistria
Turkey
Ukraine
UN
US
Vietnam
Western_World
Yugoslavia
Denmark
Guam
Norway
Portugal
Switzerland

Cultural_Emotive_Values
Negative_Extreme_Emotive
Aggressor_Aggression
Conspiracy
Danger
Enemy
Humiliation
Injustice
Manichean_Evil
Shame
Threaten
Threatened
Victimization
Xenophobia
Negative_Normal_Emotive
Anti-Western
Competition
Conflict
Corruption
Criminal_Illegal
Denial
Extreme_Radical
Failure
Grievance
Imperialism
Isolation
Lying
Outrage
Weakness
Women_Innocents
Positive_Extreme_Emotive
Dignity
Duty_Obligation
Heroism
Homeland
Honor
Independence
Justice
National_Identity
Overcoming
Preparedness
Pride
Protect
Religion
Resilience
Sacrifice
Self-defense
Strength
Superiority
Victory

Positive_Normal_Emotive	
	Confidence
	Courage
	Democratic
	Equality_Rights
	Hope
	Legitimacy
	Peace
	Progress
	Respect
	Stability
	Success
	Tolerance
	Trust
	Unity
Events	
	CharlieHebdo
	Cold War
	Color_Revolutions
	G20
	Maidan_Square
	MH17
	WWII
Individuals	
	Obama
	Poroshenko
	Putin
	Stalin
Political_Factors	
Positive_Cohesive_Concerns	
	Allies
	Cooperation
	Domestic_Development
	Economy_and_Trade
	Foregin_Aid_Investment
	Foreign Aid
	Formal Agreement
	Friendship
	Governance
	Humanitarian_Aid
	Political_Process
	Political_Reform
	Support
	Domestic_Development
	Foreign_Aid_Investment
Disruptive Security Concerns	
	Annexation
	Atrocity

	Borders_Territory
	Conflict
	Gray_Zone_Activities
	Rebellion_Resistance
	Terrorism
	War
	Coup
	Crime
	Cyber_Attacks
	Economic_Problems
	Economic_Sanctions
	Energy
	Nuclear_Energy
	Oil_Gas_Other
	Extremism
	Violation_International
	Island_Building
	Media_Propaganda
	Military
	Materiel
	Military_Operations
	Occupation_Invasion
	Troops_Fighters
	Regular_Troops
	Irregular_Fighters
	Weapons_Nuclear
	Nationalism
	NATO_Expansion
	Nazism
	Prisoners
	Protests
	Refugees
	Separatism
	Sovereignty
	Other_Security_Concerns
	Article5
	Ceasefire
	Civilians
	Infrastructure
	Novorossiya
	Oligarchs_Elites
	Reunification
	Russian_Minorities
	Security
Rhetorical_Devices	
	Accusation
	Counterargument_Comparison
	Dehumanization
	Ethos_Credibility

Example
Figurative_Language
Graphic_Violence
Grouping
History
Hyperbole
If_Statements
Intensifiers
Intimacy
Kinship
Lexicalization
List
Logos
Magnitude
Misinformation
Other_Outgroup
Pathos
Pejorative
Poetry
Quote
Repetition
Rhetorical_Question
Sarcasm_Irony
Title
Us_Ingroup
Veiled_Threat

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