

**RODNOVERY AND THE RUSSIAN LANGUAGE:
LINKING ANCIENT RELIGION WITH THE EVOLUTION OF EAST SLAVIC LANGUAGES**

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ABSTRACT

The origin, formation, and evolution of language has been an ongoing topic since the beginning of linguistics itself. This research aims to demonstrate and explain the relationship between the Slavic Native Faith, Rodnovery, and the development of the Russian language, as well as the impact of this relationship on the survival and ultimate comeback of the Native Faith in Russian society. To assess these two dimensions, a combination of both demographical data and lexical data have been used to perform multivariate regression analyses. The demographics data encompass the role of religion in modern Russian society, including non-Orthodox faiths like Rodnovery, and provide insight not only into presence of the faith but also its importance. The lexical data are comprised of 564,493 words taken from the modern Russian language, which were subsequently filtered to remove non-Slavic loan words and categorized by root word. The most important root word analyzed was *rod*, the name of the primary Rodnover god, and compared with the English language and its equivalent word, *god*. The results showed that overwhelmingly, the Russian language is far more heavily centered around religious terms than is English. Additionally, comparison between the two types of data allows for the secondary inference to be made—that it is plausible that Rodnovery survived a thousand years of repression due to its tenants being embedded within the Russian language itself.

TABLE OF CONTENTS

1. Introduction.....	1
2. Literature review	2
3. Gaps in the established knowledge	6
4. Data and methods.....	8
5. Substantive findings.....	16
6. Conclusion	24
References	25

1. INTRODUCTION

The resurgence of the Slavic Native Faith, Rodnovery, over the last 30 years, despite having been officially repressed by the Russian state since antiquity brings into question how and why it has been able to survive, let alone thrive. In order to address this phenomenon, it must first be situated among the existing research in the fields of both demography and linguistics. The concept of *dvoeverie* is one which has been actively studied for nearly two centuries—and posits the notion of a dual-religion adopted and practiced by the East Slavic peoples since the initial Christianization of the Kievan Rus' in 988 AD.¹ Two methods of statistical analysis, multivariate regression and time series regression, will be performed in order to determine the role of religion in contemporary Russia, and more importantly the endurance of Rodnovery from antiquity into modernity. This research will address the relationship between Rodnovery and the development of the East Slavic language family, focusing on Old East Slavic and modern Russian, as it is plausible that the embedment of Rodnovery ideas and terminology within these languages prolonged or sustained its survival over the last thousand years. Not only have more people openly identified as Rodnovers, or converted to the faith, but the very importance of religion itself has gradually increased since the fall of the Soviet Union. This research is hinged on linguistic reconstructive techniques which allow one not only to piece together an extinct language, but assist in the comparison of modern languages to determine the original meanings of chosen words.² Thus,

¹ Трикоз, Е. Н. 2018. «УЛОЖЕНИЕ» ВАСИЛИЯ ЛУПУ 1646 г.: НА ПЕРЕКРЕСТКЕ ПРАВОВЫХ КУЛЬТУР.” *Rusin: International Journal of History*, no. 51 (March): 113–33.

² Dyen, Isidore. 1973. “The Impact of Lexicostatistics on Comparative Linguistics.” In *Lexicostatistics in Genetic Linguistics: Proceedings of the Yale Conference, Yale University, April 3-4, 1971.*, edited by Isidore Dyen, 75–84.

comprehensive data on the Russian language comprising of 564,493 words will be analyzed in combination with demographical data on religion from the Levada and Pew Centers.

2. LITERATURE REVIEW

2.1 ESTABLISHED KNOWLEDGE

Languages and their respective language families derive from reconstructable sources and means—simply put, languages originate and evolve for definitive reasons and to fill a necessary means of communication. Languages from the Germanic family, for example, have been demonstrated to have evolved around the need for early humans to express and explain the natural landscape around them.³ These languages formed in a tactical and locative manner allowing for clear and direct communication, thus making cooperation and survival more viable. This was proven using the Maze Game hypothesis in which people were tasked with making up a new language in order to effectively and clearly communicate where they were within the maze. This locative knowledge and its comprehensible transmission enabled cooperation amongst the participants such that they could help one another solve the puzzle and exit the maze.⁴

2.2 SCHOOLS OF THOUGHT

2.2.1 Comparative linguistics

Comparative linguistics uses two or multiple languages to draw conclusions and similarities between them. This field is responsible for much of what we know about

³ Embleton, Sheila M. 1985. “Lexicostatistics Applied to the Germanic, Romance, and Wakashan Families.” *WORD: Journal of the International Linguistic Association* 36 (1): 37–60.

⁴ Nölle, Jonas, Riccardo Fusaroli, Gregory J. Mills, and Kristian Tylén. “Language as Shaped by the Environment: Linguistic Construal in a Collaborative Spatial Task,” February 25, 2020.

linguistic evolution and development—as well as our understanding of ancient languages and how they shaped early human societies.

2.2.2 Quantitative linguistics and Lexicostatistics

Quantitative linguistics is concerned with the statistical measures of languages or their lexicons, allowing for further examination and mathematical study. Its more common applications are relating to the evolution and change of language over time, the degree and nature of said change, and the underlying structures of the language itself. It has been used to derive linguistic laws—measurable statistical regularities found across languages and language families.

Lexicostatistics is a set of methodologies most commonly employed for refining the comparison between two or more languages and quantifying their common characteristics.⁵ This approach allows for a detailed comparison amongst cognates that determines two things—the mathematical overlap between languages (i.e., if and how closely they are related within a language family) and the time necessary for these languages to evolve from their progenitive proto-language.⁶ It has one further usage, which is the ability to determine the mathematical relationship between cognates within a single language.⁷

2.2.3 Proto-linguistics

⁵ Oswalt, Robert L. 1971. “Towards the Construction of a Standard Lexicostatic List.” *Anthropological Linguistics* 13: 421–34.

⁶ Zhuravlev, A. F. 1988. “Leksikostatisticheskaia Otsenka Geneticheskoi Blizosti Slavianskikh Iazykov.” *Voprosy Iazykoznanii* 4 (July): 37–51.

⁷ Zhang, Menghan, and Tao Gong. 2016. “How Many Is Enough?—Statistical Principles for Lexicostatistics.” *Frontiers in Psychology* 7 (December).

The study of proto-linguistics often involves reconstructing dead or theorized languages. This is done by comparing all the languages in a given language family or sub-family, removing all known loan words (words from sources outside the original lexicon of the language), and drawing out as many similarities as possible between them. This is typically done on a word-by-word basis in which the variations of a word are taken from each of the selected languages and overlaid to determine the most plausible ‘origin word’ for all of them.⁸

For example, using the living members of the Slavic family, it is possible to derive the common origin word for ‘mother’. Firstly, one would need to gather all the modern-day words meaning ‘mother’—in this case they are *mati* (Slovene, Serbo-Croatian, Bulgarian, Czech, Ukrainian), *majka* (Macedonian), *mat’* (Slovak, Russian), *matka* (Polish), and *matsi* (Belarusian). The most common word here is *mati*; the Slovak and Russian *mat’* can be added in as the final ‘ represents the voiceless *i* sound. The logical conclusion, therefore, would be that the original proto-word was *mati*. This can be checked against the Old Church Slavonic dead language as it was initially used approximately 1000 years ago and is thus closer to Proto-Slavic than a modern language would be. In Old Church Slavonic, the word for mother is indeed *mati*, and thus the official Proto-Slavic reconstruction has been attested to be *mati* (*mamu*).

While this is a relatively straightforward example, it demonstrates the methodology used for reconstructing and understanding dead languages and proto-languages. A similar process is used for reconstructing previously used grammatical structures and

⁸ Bakker, Dik, André Müller, Viveka Velupillai, Søren Wichmann, Cecil H. Brown, Pamela Brown, Dmitry Egorov, Robert Mailhammer, Anthony Grant, and Eric W. Holman. 2009. “Adding Typology to Lexicostatistics: A Combined Approach to Language Classification.” *Linguistic Typology* 13 (1): 169–81.

pronunciations.⁹ While we can never be entirely certain of the exact historical pronunciation or word usage, this approach is accurate enough to provide valuable insight and understanding about ancient peoples and their means of communication.

The above explanation applies to comparative reconstruction. An alternative approach, internal reconstruction, is more applicable to the research analysis in this paper. This method uses irregularities and cognates within a single language to posit the previous nature of that language. Cognates are a group of words which all share a common etymological origin or root word. This works on the assumption that the cognates all descended from a singular origin word in a proto-language, and that that origin word had a specific and discernable meaning. This meaning is thus shared by all the cognates and links their modern-day meanings together.

2.2.4 Origin of language hypotheses

While there are many competing theories on the origin of language itself, some of them, including the ‘from where to what’ theory, posit that language evolved as a tactical mechanism to help early hominids communicate localities.¹⁰ This linguistic evolution would fall into place with the concept that human cooperation ensures better survival for the group and thus better survival for the individual. This idea is important to note, in this case, because it provides substance to the notion that entire language families are locationally derived, as it is demonstrated by the maze game hypothesis.

⁹ Grant, Anthony P. 2010. “On Using Qualitative Lexicostatistics to Illuminate Language History: Some Techniques and Case Studies.” *Diachronica* 27 (2): 277–300.

¹⁰ Weng, Zili, and Robert R. Sokal. 1995. “Origins of Indo-Europeans and the Spread of Agriculture in Europe: Comparison..” *Human Biology* 67 (4): 577.

3. GAPS IN THE ESTABLISHED KNOWLEDGE

The present research examines the East Slavic languages and their collective origin, as well as the reason and environment responsible for their unique evolution. Unlike with other language families, the basis of the East Slavic languages is not clearly understood.¹¹ In the Old East Slavic language, the progenitor to modern-day Russian, Ukrainian, and Belarusian, many of the root words share a common stem—*rod*. Some of the descendants of these ancient words in modern Russian are as follows: *vrode* (like, or in the image of), *vozrodit'sya* (to be reborn), *vozrozhdat'* (to revive, *rozh* originally being the vocative form of *rod*), *bezrodniy* (rootless, lost, disconnected), *priroda* (nature, the natural world), *srodni* (*akin*), *rodina* (motherland), and *rodniy/rodnaya* (native).

This information appears mundane until one considers a secondary historical event which evolved in tandem with the Old East Slavic language—Rodnovery, commonly known today as the Slavic Native Faith or Slavic paganism.¹² This belief system predates the proto-Slavic language and thus the Slavic language family as a whole.¹³ More importantly, its primary deity is called *Rod*. *Rod* is regarded as the father of the earth, of the natural world, and of all humanity. Keeping this in mind, breaking down the specific meanings of East Slavic prefixes leaves us some rather peculiar and noteworthy translations. Take *vrode* as an example: *v-* means 'in' or 'into' or 'in the', when combined with the root word *rod* and the stem ending *-e*, the very literal meaning becomes '*in the image of Rod*'. Implicitly, this

¹¹ Gasparini, Evel. 1962. "Studies in Old Slavic Religion: 'Ubrus.'" *History of Religions* 2 (1): 112–39.

¹² Casas Olea, Matilde. 2009. "An Appraisal of Epigraphic Texts as Sources for the Reconstruction of Pre-Christian Slavic Religion." In *Culture and Identity in Eastern Christian History: Papers from the First Biennial Conference of the Association for the Study of Eastern Christian History and Culture*, 1–17. Columbus, Ohio.

¹³ Gasparini.

concludes that things that are alike are alike because they reflect *Rod's* nature, form, or image. Another example is *bezrodniy*, to be lost or rootless. Repeating the same method as above, the prefix *bez-* means to remove or be without, and *-niy* is an adjective ending. Altogether, *bezrodniy*, taken literally, becomes '*to be without Rod*'. Taking this in a religious sense would mean that one is lost or rootless without *Rod*, perhaps spiritually rather than literally.¹⁴ Thus, the first hypothesis posed by this paper and its underlying research will address if and how this ancient religion influenced the formation of the East Slavic languages. The second hypothesis will approach the opposite side of this subject: did the embedding of Rodnover philosophy into the language itself lead to the long-term preservation of this faith despite adverse policies and mandates for its eradication in favor of Orthodoxy?

This secondary question stems from demographics research demonstrating the resurgence of Rodnovery and self-proclaimed Rodnovers over the last 30 years in which the Russian state has *not* mandated a national or official religion. Given the near-thousand years this religion has been suppressed, it is worth questioning why it survived at all. This research will build upon the previously studied concept of *dvoeverie*, or the dual-faith observed after the adoption of Orthodoxy by the Kievan Rus' in 988 AD. This phenomenon has persisted and been observed since the Middle Ages to 19th Century Russia, and provides evidence of the endurance of Rodnovery.¹⁵

¹⁴ Marinas, Enrique Santos. 2013. "Reassessment, Unification, and Enlargement of the Sources of Slavic Pre-Christian Religion." *Russian History* 40 (1): 27–40.

¹⁵ Rock, Stella. "What's in a Word?: A Historical Study of the Concept Dvoeverie", *Canadian-American Slavic Studies* 35, 1 (2001): 19-82.

4. DATA AND METHODS

4.1 Data Selection

Two types of data have been selected for this research and its underlying analysis: demographical panel data and lexical observational data. These data will be used to demonstrate and explore the enduring importance of religion in Russian society, as well as the continued survival of the Rodnover faith. While Rodnovers are not named specifically, they are represented by the denotation ‘Other’, which is used to classify the various pagan faiths in Russia.

4.1.1 Levada Center

Survey data on religion and its importance in the lives of Russian people has been selected from the Levada Center archives. These data were collected between January and February 2020, using observations from 1,614 individuals. For this dataset, the dependent variable is the importance of religion or religious denomination and the independent variable is time. The following tables 1-4 are examples of the data setup and variable usage. It is important to note that Tables 1 and 2 display counts of individuals’ responses, while Tables 3 and 4 are denoted using percentages of the total number of respondents. Table 4 in particular indicates a general increase in religiosity over the decades since the end of the Soviet era, during which a policy of state atheism prevailed.

WHAT ROLE DOES RELIGION PLAY IN YOUR LIFE? *(one answer)*

	Oct. 05	Sep. 07	Jan. 12	Mar. 13	Feb. 16	Feb. 20
A very important one	11	6	6	5	6	12
A fairly important one	27	26	24	29	28	28
Not a very important one	39	41	45	43	40	35
No role at all	20	24	20	19	22	24
It is difficult to say	2	3	5	4	4	2

HOW RELIGIOUS DO YOU CONSIDER YOURSELF TO BE? *(one answer)*

	Aug. 14	Dec. 15	Jun. 17	Dec. 18	Jan. 20
Very religious	4	4	9	9	9
Somewhat religious	31	36	44	43	42
Not very religious	37	32	33	28	28
Not at all religious	26	23	13	17	20
It is difficult to say	3	5	2	3	1

Tables 1 & 2. Levada Center survey results by count.¹⁶

DO YOU ASSOCIATE WITH A SPECIFIC RELIGIOUS DENOMINATION? IF YES, THEN WHICH ONE? *(respondents were presented with a card listing possible answers, and they could choose only one answer; ranked in descending order)*

	Jan. 20	Feb. 20
Orthodoxy	65	68
Islam	7	7
Protestantism	1	<1
Buddhism	1	1
Catholicism	<1	<1
Judaism	<1	<1
Hinduism	<1	<1
Other ("shamanism," "Shinto," "Altaic faith, spirits, mountains")	1	1
No denomination	18	16
Atheist	7	6
Difficult to say / refuse to answer	1	1

Table 3. Levada Center survey results by percentage.¹⁷

¹⁶ Levison, Alexei. "Attitudes to Religion." Levada Center, March 19, 2020.

¹⁷ Levison, Alexei. "Attitudes to Religion." Levada Center, March 19, 2020.

Trends in responses over decades

	Jan. 90	May. 00	Aug. 10	Feb. 20
Orthodoxy	33	52	70	68
Catholicism	<1	<1	<1	<1
Islam	1	4	4	7
Other	1	1	1	1
None / atheist	66	35	21	22

Table 4. Levada Center survey results by percentage.¹⁸

Two methods of analysis will be performed—multivariate regression and time series regression. The multivariate regression analysis seeks to explain the importance and significance of various contributing factors relating to the role of religion, and more specifically Rodnovery, in Russian society. The time series regression establishes the survival and endurance of the Rodnover faith into modernity. Combined with previous scholarly documentation of the concept of *dvoeverie*, or the dual-faith in Russia, this shows that the influence of Rodnover ideas is pervasive enough to have survived not only the state mandate of Orthodoxy in the Russian Empire, but also the state atheism decreed in the Soviet Union.

4.1.2 Pew Center

The Pew Center’s data on religious affiliations in Eastern Europe will be used to supplement the Levada Center data. These data were collected during a survey from June 2015 to July 2016 over a spread of 18 countries in Central and Eastern Europe, thus making

¹⁸ Levison, Alexei. “Attitudes to Religion.” Levada Center, March 19, 2020.

them cross-sectional. The dependent variable is religious affiliation, and the independent variable is time. The data were thus broken down into percentages, shown in Tables 5 and 6:

Most Central and Eastern European countries have Orthodox majorities

	Orthodox	Catholic	Other Christian	Muslim	Other religion	Unaffiliated
Orthodox-majority countries	%	%	%	%	%	%
Moldova	92	1	6	1	0	2
Greece	90	1	3	2	1	4
Georgia	89	1	1	9	1	1
Armenia	89	1	7	1	1	2
Serbia	88	4	1	2	1	4
Romania	86	5	7	1	1	1
Ukraine	78	10	4	1	1	7
Bulgaria	76	1	4	15	1	5
Belarus	73	12	9	1	2	3
Russia	71	1	2	10	1	15

Catholic-majority countries

Poland	1	87	3	1	1	7
Croatia	4	84	3	2	1	7
Lithuania	3	75	16	1	1	6
Hungary	1	56	20	1	1	21

Religiously mixed countries

Bosnia	35	8	1	52	1	3
Estonia	25	1	25	1	2	45
Latvia	31	23	23	1	1	21

Majority-unaffiliated countries

Czech Republic	1	21	4	1	1	72
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Table 5. Pew Center survey results of religious identification.¹⁹

¹⁹ Pew Research Center, May 10, 2017, “Religious Belief and National Belonging in Central and Eastern Europe”

People in most post-Soviet republics see religion rising in importance, in contrast with other countries in the region

	Religion is very/somewhat important to them today	Religion was very/somewhat important to their family growing up	Difference
Former Soviet republics	%	%	%
Russia	57	44	13
Ukraine	67	55	12
Armenia	86	75	11
Georgia	92	81	11
Estonia	31	24	7
Belarus	65	59	6
Moldova	86	84	2
Latvia	44	43	1
Lithuania	58	67	-9

Other countries

Bulgaria	68	60	8
Serbia	81	78	3
Bosnia	85	84	1
Czech Republic	23	25	-2
Romania	90	95	-5
Croatia	76	84	-8
Greece	83	92	-9
Poland	77	86	-9
Hungary	45	56	-11

Tables 6. Pew Center survey results of religiosity.²⁰

The Pew Center’s data are not Russia specific, but are useful as they are broken down into further-subcategories that will be utilized in the multivariate regression analysis.

²⁰ Pew Research Center, May 10, 2017, “Religious Belief and National Belonging in Central and Eastern Europe”

4.2 Lexical Data

The lexical data on the Russian language were compiled from an observational list consisting of 564,493 words from the modern Russian language. These words were sourced from Github.²¹

<i>ROOT WORD</i>	<i>FREQUENCY of OCCURRENCE</i>
Род (rod)	26
Бог (bog)	4
Черн (chern)	2
Бело (byelo)	0
Total Number of Words in Set 1	6116

Table 7. Frequency table of root words in Russian language.

Table 7 displays a random selection of 6,116 words from the total 564,493 words. They will be referred to as ‘Set 1’. For Set 1, four root words were chosen for their relevance to the topic of Rodnovery and thus searched to determine the number of the times they appeared. The four root words are as follows:

Rod—the supreme god in Slavic religion, the father, creator, and governor of the three realms of existence, *Prav*, *Yav*, and *Nav*.

Bog—Old East Slavic and later contemporary Russian word for ‘*God*’. Originally, its meaning applied to *any* god, but in the modern meaning it most typically refers to the Christian god. Its original meaning was usually combined with another stem word to create

²¹ Měchura, Michal. “Lemmatization List - Russian Language.” Brno: Czech Republic, September 13, 2020.

the name of a particular deity, for example *Chernobog*, literally the ‘black god’ and *Byelobog*, the ‘white god’.

Chern—Dark or Black, used here due to its significance with the Slavic god *Chernobog*, the god of darkness and part of the supreme duality over which Rod governs.

Byelo—White, chosen for its relation to the Slavic god *Byelobog*, the god of light and the other half of the supreme duality, alongside *Chernobog*. The duality was included because it is the second most important tier in the hierarchy of Rodnover beliefs and deities.

The data were prepared for analysis by removing blank entries and non-letter characters from the list. After all the words containing *rod* were selected, words which did not have this combination as the root word were filtered out, leaving only words which explicitly contained *rod* as the root, and eliminating those which contained it by random chance alone. Some words will be selected to be explained in full: their specific prefixes and suffixes, as well as their relation to the root word, will be explained and their literal translations provided, using Old East Slavic for reference.²²

As an example of the sheer pervasiveness of *rod* in the Russian language and the extreme versatility of its usage, Table 8 is the full list of translations for *rod* available on Google Translate:

²² Koščová, Michaela, Ján Mačutek, and Emmerich Kelih. 2016. “A Data-Based Classification of Slavic Languages: Indices of Qualitative Variation Applied to Grapheme Frequencies.” *Journal of Quantitative Linguistics* 23 (2): 177–90.

Translations of РОД

Noun		Frequency 
genus	род, вид, класс, сорт	■■■■
race	раса, гонки, гонка, род, народ, бег	■■■■
kind	вид, тип, разновидность, род, сорт, класс	■■■■
family	семья, семейство, род, содружество	■■■
generation	поколение, генерация, образование, генерирование, род, порождение	■■■
type	тип, модель, разновидность, род, типаж, шрифт	■■■
sort	вид, сорт, род, разновидность, образ, разряд	■■■
gender	пол, род	■■■
clan	клан, род, клика	■■■
species	вид, разновидность, порода, род, класс	■■■
kin	род, родственники, родня, семья, родство, свойство	■■■
nature	природа, характер, сущность, натура, естество, род	■■■
bloodline	родословная, род	■■■
stem	стебель, стержень, ствол, основа, ножка, род	■■■
kindred	род, родственники, кровное родство, клан, сходство характеров	■■■
order	заказ, порядок, орден, приказ, распоряжение, род	■■■
ilk	род	■■■
class	класс, сорт, тип, категория, занятие, род	■■■
house	дом, жилище, театр, здание, палата, род	■■■
name	имя, название, наименование, фамилия, обозначение, род	■■■
manner	способ, манера, метод, стиль, образ действий, род	■■■
blood	кровь, кровопролитие, происхождение, родство, род, убийство	■■■
strain	штамм, напряжение, деформация, нагрузка, сорт, род	■■■
style	стиль, тип, манера, фасон, слог, род	■■■
stock	акции, запас, шток, инвентарь, фонд, род	■■■
description	описание, изображение, вид, род, сорт, вычерчивание	■■■
stamp	марка, штамп, печать, отпечаток, клеймо, род	■■■
kidney	почка, склад характера, тип, темперамент, характер, род	■■■
series	ряд, серия, цикл, группа, цепь, род	■■■

Table 8. Numerous translations of the root word *rod*.²³

While these data will not be directly used in this paper’s research, they do provide an interesting view into the usage of this particular root word.

²³ Google Translate.

5. SUBSTANTIVE FINDINGS

5.1 Stemming

Stemming is the process by which unique words as well as morphologically changed and inflected variants of words are stripped and clustered based on a common root word.

This methodology was employed to analyze both the modern Russian language in addition to the English language for comparison. Root words relating to the concept of god, respective to the prevailing culture behind each language, were selected and sorted out of the total. The counts are listed in Table 9.

Russian ROOT WORD	FREQUENCY of OCCURRENCE
Род (rod)	4339
Бог (bog)	801
Черн (chern)	117
Бело (byelo)	436
Total Number of Words	564493

English ROOT WORD	FREQUENCY of OCCURRENCE
God	26
Christ	19
Total Number of Words	66928

Table 9. Frequency table of Russian and English root words.

Figure 1 is a bar chart of root word frequencies, with Russian-based root words displayed in various shades of red, while English roots are in blue.

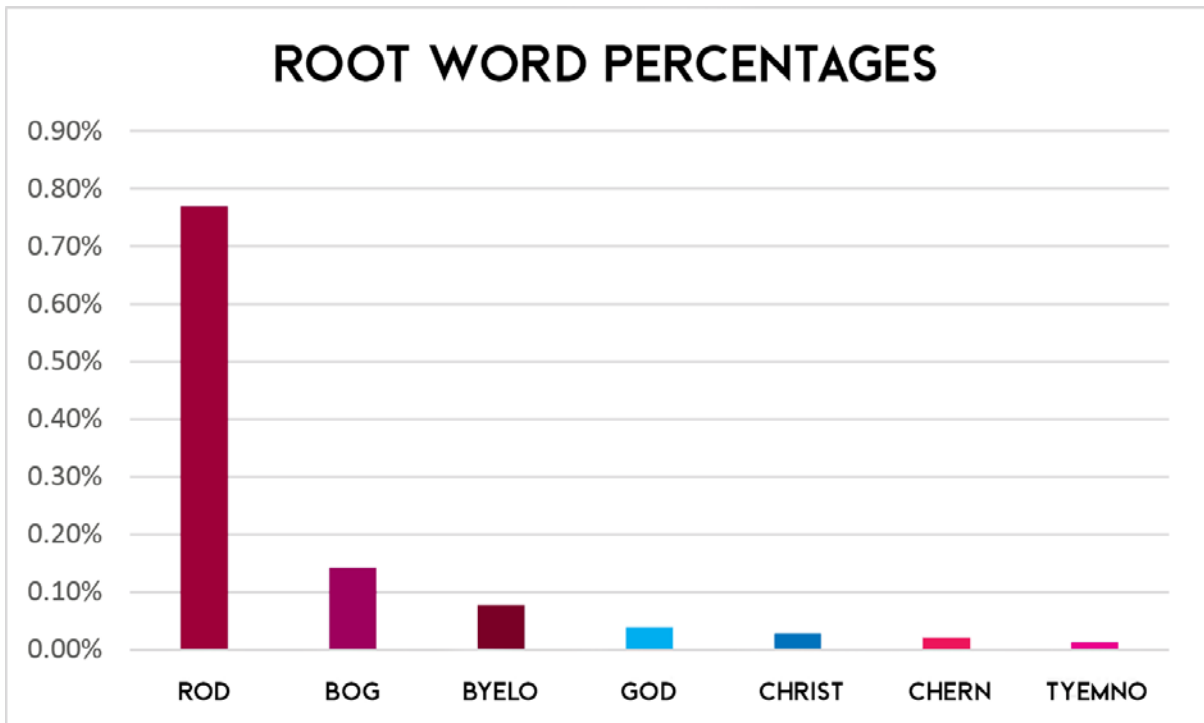


Figure 1. Root word percentages for individual Russian and English words.

Figure 2 quickly and easily displays the differences between the two languages—it's clear to see that the Russian language has vastly more religiously or spiritually based root words than does the English language. Table 11 provides the contributing root words.

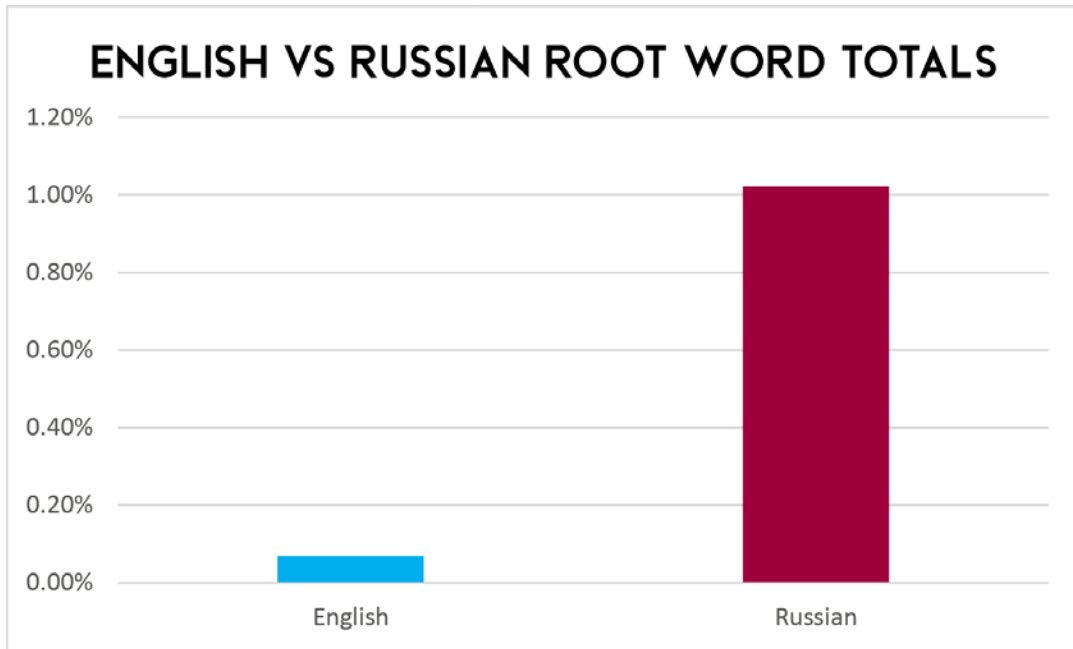


Figure 2. Root word percentage totals for Russian and English words.

Russian	Total Words		564493	
	Stem words	Rod	4339	0.77%
		Bog	801	0.14%
		Byelo	436	0.08%
		Chern	117	0.02%
		TEMHO	73	0.01%
Word count		5766	1.02%	
English	Total Words		66928	
	Stem words	God	26	0.04%
		Christ	19	0.03%
	Word count		45	0.07%

Table 10. Root word percentages for individual Russian and English words.

5.2 Lemmatization

Lemmatization is a method for processing and analyzing large sets of linguistic data, such as comprehensive lists of words that comprise entire languages. It involves groups sets

of like-words together, based on each individual word’s lemma. A lemma is the un conjugated, dictionary form of a word—thus all words which are tied to that form are grouped together as one. An easy example in English would be *good*, *better*, and *best*. We know as English speakers that *better* and *best* are the comparative and superlative forms of *good*, and that they are intrinsically connected because of this, but a computer or program would not understand this without lemmatization.²⁴

Lemmatization proves vastly more useful on synthetic languages rather than analytic languages. A synthetic language, like Russian, Ukrainian, or any other member of the East Slavic family, is one which uses cases, case endings, inflection, and the addition of morphemes to a word to express the relationship between words, actions, etc. For example, the simple phrase ‘*Я понимаю тебя*’ (*Ya ponimayu tebya*), or ‘I understand you’, employs two separate instances of morpheme changes. The dictionary form of ‘to understand’ is *понимать* (*ponimat’*), whereas here the ending *-аю* designates that I have understood. Secondly, *тебя* is the genitive case form of *ты* (*ty*), the informal you. In this example, the morphological change expresses that *I* have understood *you*, thus asserting the relationship between them.

English, however, is an analytic language—one that relies on word order and helper words to convey relationships. Using the same example as above, in English it is absolutely necessary and imperative that one order those three words correctly. This allows one to continue to use the dictionary form without having to make any morphological changes. It would not make much sense to say ‘understand you’, as it does not express who did the

²⁴ Kutuzov, Andrey, and Elizaveta Kuzmenko. “To Lemmatize or Not to Lemmatize: How Word Normalisation Affects ELMo Performance in Word Sense Disambiguation.” Association for Computational Linguistics, September 2019.

understanding, or ‘I you understand’ as this is inherently confusing and thus meaningless. However, both of those combinations are acceptable and intelligible in Russian. Because *понимать* (ponimat’) is conjugated as *понимаю* (ponimayu), it is acceptable to drop *Я* (ya, meaning I) entirely and it still remains clear that I did the understanding. It would also be possible to say *тебя понимаю* (tebya ponimayu, literally ‘I you understand), but because of the morphological changes of each word, the meaning is still obvious.

Returning to the original subject of lemmatization, the process is more useful on synthetic languages where each dictionary form of a word has many inflected forms, than on analytic languages, like English, where the dictionary form remains relatively unchanged despite changes in usage. The Russian language data analyzed in this research was left unlemmatized, however, performing a simple stemming test demonstrated that doing so did not impact the final outcome. The un-lemmatized word list comprised of 564493 words, including different inflected forms of the same dictionary-form word. Using a stem selection for the root word *Род* (rod) yielded 4339 results, or 0.77% of the total. Using a lemmatized list, containing only 53405 words, yielded 413 instances of the root word, again coming to 0.77% of the total number of words.

5.3 Demographics

The demographical data show that over the last decades, religion has become increasingly important among Russian people. This is not limited to Orthodoxy, however. While Eastern Orthodoxy may be the most prevalent religion in Russia, it is by no means the only one. The data show that there is a small, but measurable population of actively practicing pagans or spiritualists—they are most commonly denoted as ‘other’, however an in-depth knowledge of Russian culture and society reveal that those falling into this category

are Rodnovers. Keeping this in mind, the number of individuals identifying themselves as such has slowly increased since 1990, or, more specifically, since the fall of the Soviet Union. As the Russian Federation has no decreed religion nor state atheism as the Soviet regime had, members of all religions have been able to practice openly. As a result, not only have more people identified as religious in some sense, or become open members of a certain religion, but the importance of religion itself has gradually increased, as is shown by the Levada Center's data on role of religion and how religious does one consider oneself to be. These data are presented in the Figures 3-6.

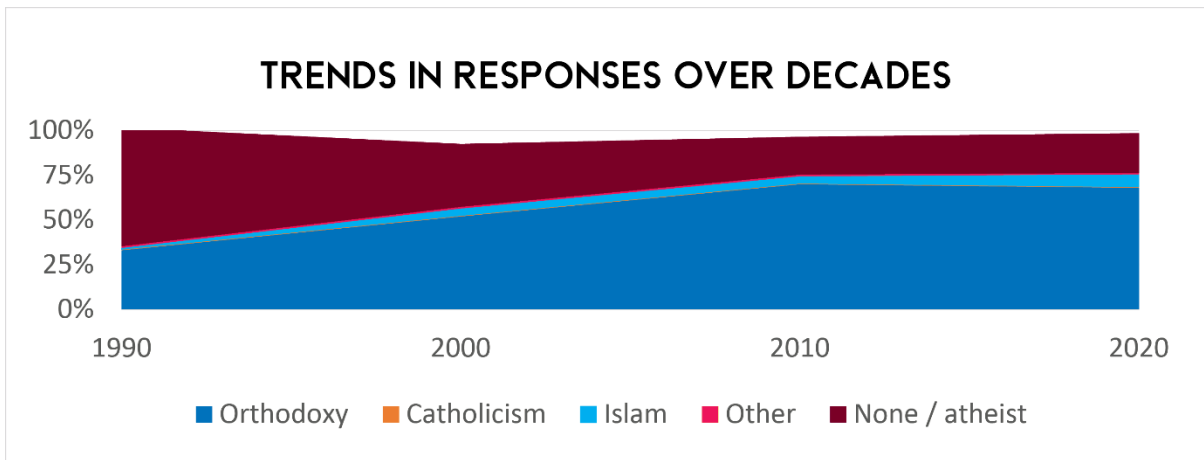


Figure 3. Religious affiliation of former Soviet states' populations over time.

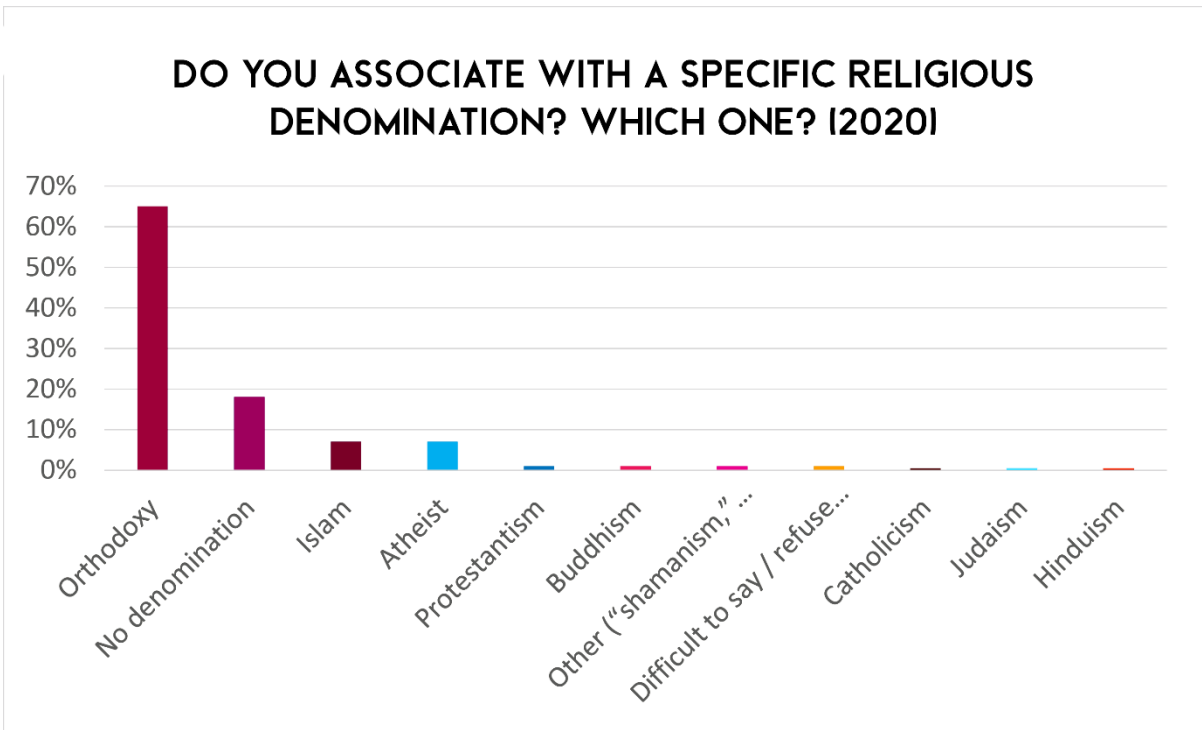


Figure 4. Religious affiliation of former Soviet states' populations in 2020.

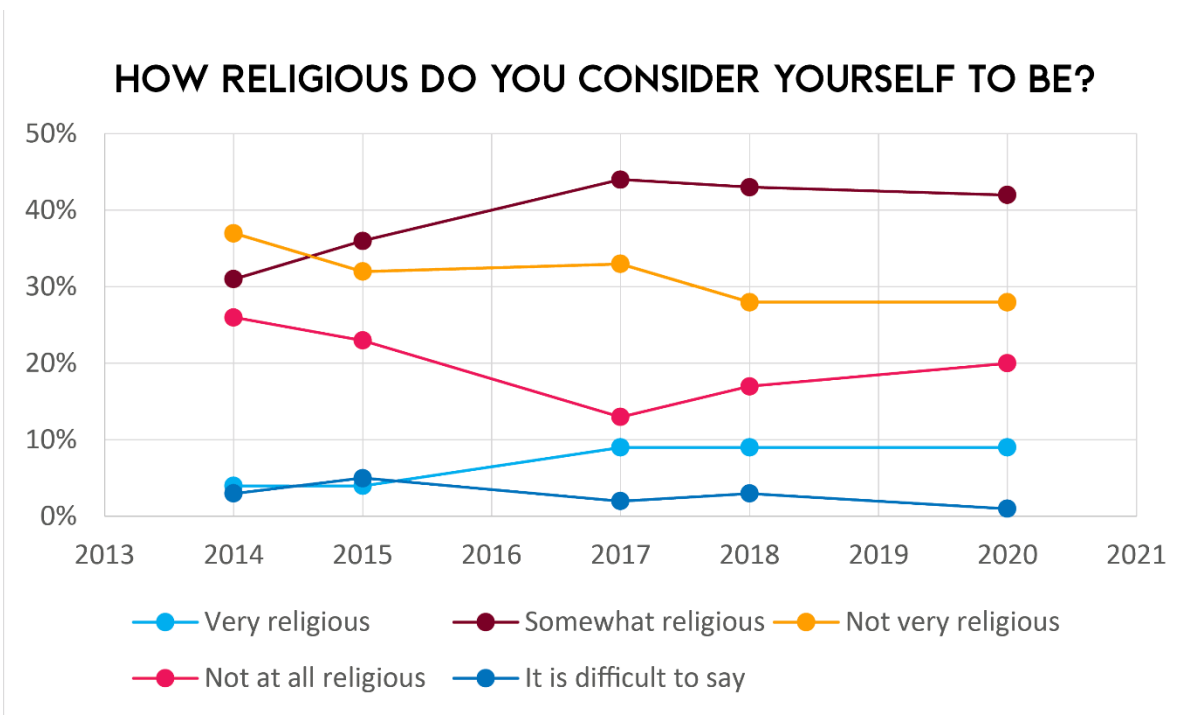


Figure 5. Trendlines of religiosity over time.

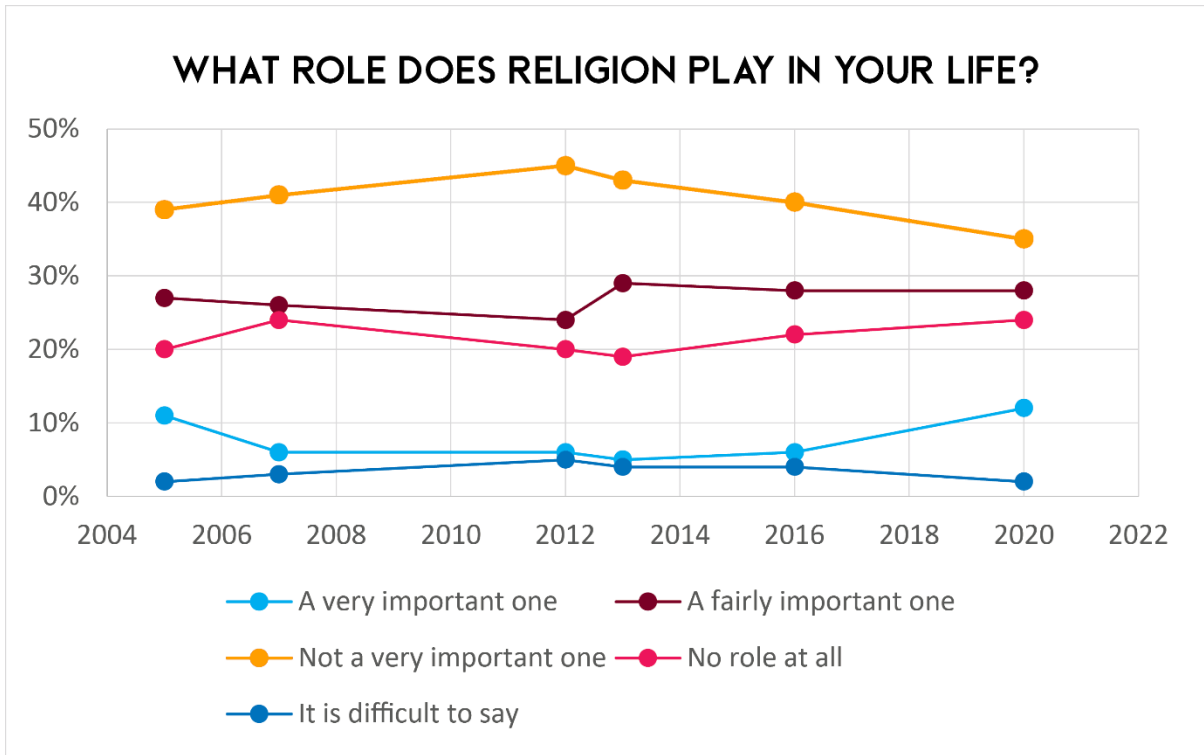


Figure 6. Trendlines of religious significance over time.

As this research concerns Rodnovery specifically, rather than religion generally, a historical explanation of the significance of these modern data is required. Rodnovery itself is incredibly ancient—its roots lie in the primordial religion of the Scythians and it was the official religion of the Kievan Rus’ until the Christianization of 988 AD. It was first documented in detail in the Primary Chronicle, written in the early 1100s. The first question posed by this research was to determine if there was enough evidence within the Russian language to conclude that it is, in part, based around the root word *rod*, the name of the primary god in Rodnovery. The answer was simple: in comparison to other languages, in this case English, the Russian language had an overwhelming number of words within its lexicon that shared the root word *rod*. The second question seeks to understand how and why Rodnovery managed to survive from ancient times until the present day. Based on both the

linguistic and demographic evidence, an inference can be drawn—that it is plausible that the basis of the language itself influenced the preservation of this belief system.

6. CONCLUSION

This research began by asking two interrelated questions: did the Slavic Native Faith, Rodnovery, survive over a thousand years of repression because its ideals are embedded within the Russian language itself and did the core lexicon East Slavic languages evolve around religious concepts? Answering these questions required first situating them within two separate fields of study, demographics and linguistics, respectively, and using two methods of statistical analysis, multivariate regression and time series regression. The ultimate conclusions were that the role of religion itself is ever increasing among the Russian people, and that among these people is a small but persistently growing percentage of self-identified Rodnovers, despite the faith having been officially overridden by Christianity during the days of the Kievan Rus', and religion itself being suppressed during the Soviet era.

The linguistic reconstructive and analytical techniques yielded sufficiently compelling evidence to conclude that the core lexicon of the Old East Slavic language, and subsequently that of the Russian language, is heavily based around the root word *rod*. This suggests that the ancient Rodnover belief system, or at the very least its principle god, *Rod*, played an important role in shaping the development of the East Slavic linguistic family. Furthermore, it is this influence which may have helped preserve the core beliefs of Rodnovery itself and thus its survival into modernity.

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