

# Shared realities and divergent minds of populism

—A Study of Political Belief Systems in Sweden using  
Correlational Class Analysis & Principal Component Analysis

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**Abstract:** This thesis examines the complex interplay between belief systems, populism, and authoritarianism among the Swedish population. The study investigates how these belief systems relate to attitudes toward immigration, homosexuality, and emotional connection to the country. The main focus is understanding the characteristics of voters aligned with the Sweden Democrats, a major political party in Sweden. The study looks at this phenomenon using the methods of Correlational Class Analysis and Principal Component Analysis and data from the European Social Survey. The study also examines different political parties associated with various belief systems, by using the method of multinomial logit regression. With the help of an additional data source from the Chapel Hill Expert Survey, the political parties are given an index ranking on three indices of (1) Authoritarianism vs. Libertarianism, (2) Populism, (3) and a third index of the political parties ranking on the left vs. right scale. The three research questions which the study attempts to answer are; (1) Which political belief systems do the individuals who are attracted to authoritarian populism hold, and in the case of Sweden, do they vote for the Sweden Democrats? and (2), How do holders of populist and authoritarian values in Sweden view issues on homosexuality in relation to issues on immigration?, and (3) Do the voters of parties furthest apart from each other on the political left/right scale share a political belief system? The findings highlight distinct features associated with the first belief system, which significantly correlates with half of the Sweden Democratic voters. These individuals exhibit strong adherence to authoritarian values, harbor deep-seated populist sentiments characterized by political distrust, and possess a strong emotional connection to the country. Moreover, their beliefs reflect negative attitudes towards immigration, encompassing concerns about culture, the economy, ethnicity, and unfavorable views on homosexuality.

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## Introduction

Political trust is faltering in Western democracies, as populist movements are on the rise. Far-right political parties with nativist policy agendas are becoming more popular, while other left wing groups are calling for the banning of billionaires or the occupation of Wall Street.<sup>1</sup>

The level of democracy in the world in 2022 was down to the same level as it was in 1986, which means that 35 years of democratic developments has been halted and exchanged for autocracies, in a development often called democratic backsliding.<sup>2</sup>

Democratic backsliding refers to the erosion of democratic institutions caused by elected leaders and political parties, resulting in a decline in the level of democracy. It involves a transition from a system where political power rests with the people to one characterized by authoritarianism, where power is concentrated in a central political force that demands obedience. In contemporary times, the phenomenon of democratic backsliding often coincides with the rise of populist sentiments among both leaders and the general population of a country. It is crucial to understand the factors that attract populations to the types of populist parties associated with democratic backsliding, especially considering that these forces frequently exploit democratic processes and invoke the rhetoric of democracy to undermine democratic progress in many countries worldwide.

Populism is a broadly used concept that is often difficult to define. It is not merely a framework of rhetorical tricks used by charismatic politicians. Mudde argues that populism contains two key elements:

“[populists]...considers society to be ultimately separated into two homogeneous and antagonistic groups, ‘the pure people’ versus ‘the corrupt elite’, and which argues that politics should be an expression of the general will of the people.”<sup>3</sup>

In contrast, elitism views politics as a manifestation of the beliefs held by the moral elite rather than the amoral general public. On the other hand, pluralism rejects uniformity and recognizes the diversity of opinions and desires among individuals and groups in society.<sup>4</sup>

Research on populism can be divided into two main camps: the supply-side, which refers to governmental and political institutions and elected leaders, and the demand-side, which represents the population's desire or demand for populist parties and leaders. Attempts have been made to create more complex explanations of populism on the level of the population by combining economic and sociocultural explanations.<sup>5</sup> Inglehart & Norris argue that sociocultural grievances are the immediate cause of right-wing populist voting, resulting from growing economic insecurity and the erosion of traditional values.<sup>6</sup> Others link changing

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<sup>1</sup> Sheri Berman, ‘The Causes of Populism in the West’, *Annual Review of Political Science* 24 (2021): 71–88.

<sup>2</sup> ‘Democracy Report 2023: Defiance in the Face of Autocratization’ (V-Dem Institute, n.d.).

<sup>3</sup> Cas Mudde, ‘The Populist Zeitgeist’, *Government and Opposition* 39, no. 4 (2004): 541–563.

<sup>4</sup> Ibid

<sup>5</sup> Berman, ‘The Causes of Populism in the West’.

<sup>6</sup> Ronald F. Inglehart and Pippa Norris, ‘Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash’, 2016.

economic conditions to populism through status anxiety, emphasizing that as blue-collar jobs have become unable to guarantee economic security, manual workers feel socially marginalized, creating ground for "a politics of collective status threat" that mobilizes deep resentments towards professional elites and minorities.<sup>7</sup> What underlying factors that are causing the populations demand for populism is not clear. It is also not clear that the individuals drawn to these parties are drawn to them for the same reason nor that they all share the same worldview where issues relate to each other in a similar manner.

The study of cultural schemas, or belief systems, is investigating the structures of relevance and opposition that actors draw upon when making sense of domains of social life.<sup>8</sup> Once an actor adopts a belief system and makes sense of a situation or a domain of social life, they can adopt a meaningful position on events and developments relevant to that particular domain. A belief system is "socially shared representations deployable in automatic cognition".<sup>9</sup> Previous research on the belief systems of populist radical right party voters in the Netherlands has concluded that many voters see themselves as defenders of liberal values such as gender equality or homosexual liberties against those who do not uphold such values, particularly immigrants from Muslim-majority countries.<sup>10</sup> This result contrasts with claims made by Inglehart et al. that the acceptance or rejection of homosexuals is a particularly sensitive indicator of overall tolerance of outgroups.<sup>11</sup> Elsewhere in the literature, Inglehart and Norris argue that the rise in anti-immigration sentiments in Europe is a response or backlash to cultural liberalization that has been taking place over the last few decades.<sup>12</sup>

A European country which also has seen similar populist and anti-immigration developments taken place is Sweden. In Sweden the right-wing party the Sweden Democrats has a strong nativist style of rhetoric and calls for harsher and more stringent immigration policies, while also calling for authoritarian policies. As the Sweden democrats has increased in popularity over the past decade, the country Sweden, is still ranked 100 out of 100 on Freedom house's yearly freedom in the world rapport.<sup>13</sup> It is not clear if voters of the Sweden Democrats share the sentiments towards homosexuals as the study of the Netherlands, as the Netherlands also ranks high on the Freedom House index, 97 out of 100.<sup>14</sup> But neither is it clear if the claims of Inglehart and Norris would be in line with the sentiments of the voters of the party. No study has investigated this for the case of Sweden. This thesis intends fill this gap by studying the underlying values and beliefs of the Swedish population to better understand what attracts people to vote for the Sweden Democrats. And if it is so that the party represents a prerequisite

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<sup>7</sup> Bart Bonikowski, 'Ethno-nationalist Populism and the Mobilization of Collective Resentment', *The British Journal of Sociology* 68 (2017): 202.

<sup>8</sup> Paul DiMaggio and Amir Goldberg, 'Searching for Homo Economicus: Variation in Americans' Construals of and Attitudes toward Markets', *European Journal of Sociology/Archives Européennes de Sociologie* 59, no. 2 (2018): 151–189.

<sup>9</sup> Andrei Boutyline and Laura K. Soter, 'Cultural Schemas: What They Are, How to Find Them, and What to Do Once You've Caught One', *American Sociological Review* 86, no. 4 (2021): 728–758.

<sup>10</sup> Stijn Daenekindt, Willem de Koster, and Jeroen van der Waal, 'How People Organise Cultural Attitudes: Cultural Belief Systems and the Populist Radical Right', *West European Politics* 40, no. 4 (2017): 791–811.

<sup>11</sup> Ronald Inglehart et al., 'Development, Freedom, and Rising Happiness: A Global Perspective (1981–2007)', *Perspectives on Psychological Science* 3, no. 4 (2008): 269.

<sup>12</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash'.

<sup>13</sup> 'Freedom in the World 2023' (Freedom House), accessed 13 May 2023, <https://freedomhouse.org/countries/freedom-world/scores>.

<sup>14</sup> *ibid*

stage of a populist authoritarian development while still operating in a free society, the voters of the party ought to be studied to understand what they oppose and what they support. This would help to better make sense of not only the developments in Sweden, but also in other countries where similar developments are occurring.

For the task of studying belief systems these methods; Correlational Class Analysis(CCA) combined with Principal Component Analysis (PCA) and Multinomial Logistic Regression are well suited. The method of CCA is employed to identify groups of individuals in multivariate data sets—this study uses attitudinal data from European Social Survey—whose patterns of responses are similar to each other. This serves the goal of this thesis which is attempting to parse out different belief system related to authoritarian and populist values from each another, and how they relate to voting for the Sweden Democrats. The process of using CCA involves taking a survey data set, reducing noise, partitioning the network into modules using a community detection algorithm, and obtaining an object describing the resulting class assignments. Thus, a data set could contain several such assigned classes, where each class represents a belief system, or a worldview. The class assignments can be used to study opposing viewpoints that exist within the same classes. The association between belief systems and voting behavior can also be investigated, which is why Multinomial Logistic Regression also is deployed.<sup>15</sup> Furthermore, three indices for each political party will be created using the Chapel Hill Expert Survey data set: (i)populism, (ii)authoritarianism, and (iii)a politically left/right index. These indices will serve as a bridge of understanding between the belief system and the political party, an attempt to close the gap between the supply and demand sides of populism. The method Principal Component Analysis(PCA) — which is a dimensionality reduction technique— complements the method of CCA by analyzing the structure and variation of the values in the individual class assignments created by the CCA.<sup>16</sup>

Research on democratic backsliding, authoritarianism and populism has received extensive attention in the literature. The academic literature on cultural schemas or belief systems is also extensive. This paper argues that investigating belief systems related to contemporary populist political developments can enrich the fields of populism research, authoritarianism, democratic backsliding, as well as the research on cultural schemas and belief systems. It is necessary to study the ways different segments of a population structures their beliefs regarding these topics, for us to better understand the developments taking place in the world. And if people live in different or in shared realities, it is crucial to see what those realities are. This is done by studying the belief systems associated with voting for the Sweden Democrats.

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<sup>15</sup> Andrei Boutyline, 'Improving the Measurement of Shared Cultural Schemas with Correlational Class Analysis: Theory and Method', *Sociological Science* 4, no. 15 (2017): 354.

<sup>16</sup> Hervé Abdi and Lynne J. Williams, 'Principal Component Analysis', *Wiley Interdisciplinary Reviews: Computational Statistics* 2, no. 4 (2010): 433–459.

## Aim, Contribution & Research Questions

The aim of this research is to study the structures of values and beliefs of those who support authoritarian populism in Sweden, and how their views relate to immigration and homosexuality. I also aim to study which political parties they vote for, and what they have in common or uncommon with those who oppose them. Understanding the commonalities as well as the divergences that exist between those with opposing viewpoints can provide further insight into the topic of polarization in the political and social domain. With these reasons in mind, the following research questions are proposed:

1. *Which political belief systems do the individuals who are attracted to authoritarian populism hold, and in the case of Sweden do they vote for the Sweden Democrats?*
2. *How do holders of populist and authoritarian values in Sweden view issues on homosexuality in relation to issues on immigration?*
3. *Do the voters of parties furthest apart from each other on the political left/right scale share a political belief system?*

By answering these research questions, this thesis aims to contribute to the academic debate on populism, authoritarianism and democratic backsliding and to provide insights into the belief systems of individuals who support populist political parties, and in particular the Sweden Democrats. The thesis also contributes to the research on democratic backsliding by studying the factors that might attract people to vote for a party in a democratic nation like Sweden as a study of stage before potential democratic backsliding has occurred. The use of Correlational Class Analysis and Principal Component Analysis as tools for studying belief systems can be valuable for researchers in these fields and can shed light on the complex and nuanced nature of belief systems related to contemporary political developments.



## Literature Review

In this section I introduce the relevant theories regarding democratic backsliding, the historical patterns of it as well as its contemporary form and how it relates to the case of the Sweden Democrats and their voters. This is followed by a section where the previous research on populism, authoritarianism and its corresponding values is presented. After that I give a short introduction to the political developments in Sweden and reasons why this case should be studied. Thereafter I present the literature on belief systems and the computational approaches for studying them. And lastly, I propose a gap in the literature and present hypotheses, which I address by subsequent quantitative analysis.

### Democratic backsliding in the world

Although the concept of democracy is old, meaning the rule of the population and dates back to antiquity, the development of democratization is showing up closer to our present day in the trajectory of history. According to Huntington, the developments of democracy and its counter-development of authoritarianism moves in waves. The first wave occurred in the 19th and early 20th centuries, starting with the American and French Revolutions and continuing through the spread of democracy in Europe and Latin America. The second wave occurred after World War II and included the decolonization of Africa and Asia and the transition to democracy in southern Europe and Latin America. Huntington argued that the third wave of democratization began in the 1970s and continued into the 21st century, with the collapse of authoritarian regimes in Portugal, Spain, and Greece and the fall of communism in Eastern Europe and the Soviet Union. This wave also included the transition to democracy in many countries in Africa, Asia, and Latin America.<sup>17</sup>

Democratic backsliding is defined as the reversal or setbacks in a country's democracy. And just like the development of democracy, democratic backsliding can be caused by many contributing factors. A common perception of how democracy fails is with guns and tanks in a coup d'état from an incumbent with a desire for power over a population more significant than the desire for democratic institutions and an electoral system. Although not an uncommon event in the past, in the present day, this process of regime change is becoming increasingly uncommon. Huntington's "third wave" of democracy reached its peak in 2008, when there were twice as many democracies as dictatorships in the world, as compared to the beginning of the 1970s when that relationship was reversed.<sup>18</sup> Fukuyama's concept of the "end of history," when the world had reached "the end point of mankind's ideological evolution and the universalization of Western liberal democracy as the final form of human government"—captured triumphant atmosphere of the era marked by the fall of the Soviet Union.<sup>19</sup> But another pattern became more apparent as well. After the Cold War ended, three out of four failing democracies did so through the ballot box, not a governmental overthrow. Elections are held, opposition parties are present, academic or press freedom is not limited, and the judiciary is independent of the

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<sup>17</sup> Samuel P. Huntington, 'Democracy's Third Wave', *Journal of Democracy* 2, no. 2 (1991): 12–34.

<sup>18</sup> Berman, 'The Causes of Populism in the West'.

<sup>19</sup> Francis Fukuyama, 'The End of History?', *The National Interest*, no. 16 (1989): 3.

executive. It is, instead, through the slow erosion of democratic institutions and antagonistic rhetoric of the chosen outgroup that democracy is backsliding.<sup>20</sup>

Yet only a decade or so after democracy reached its high point, the euphoria and triumphalism has crumbled. In Latin America and Eastern Europe, democracy is eroding and has even collapsed in some countries. In Asia, democratic backsliding has taken place in the Philippines, Thailand, Bangladesh, and even India, the world's largest democracy. In the United States and Western Europe, places where democracy has long been taken for granted, significant democratic decay has occurred. In a rapport by the institute Varieties of Democracy, it has been stated that the advances made in global levels of democracy since the late 1980s had, in 2022, been removed, with the largest and fastest developments happening in the last ten years.<sup>21</sup> The rapport claims that 72 percent of the world's population now live in autocratic-ruled countries. Capturing the developments of the time, Hungary's current prime minister, Viktor Orbán, recently proclaimed: "The era of liberal democracy is over."<sup>22</sup> Or maybe it can be said that the era of "the end of history" has ended.

Since most democratic breakdowns have been caused not by generals or soldiers but by elected governments themselves, democratic backsliding today begins at the ballot box.<sup>23</sup> This is a testament to the validity of democracy in the eyes of the public. With the use of democracy, you can undo democracy, and it can even be done in the name of democracy itself. And with the gradual decay of democratic states is done not by dictators but rather by charismatic politicians that, over time, chip away at the rights and liberties of the population and slowly erode the democratic institutions. Reflecting this, many scholars have begun referring to our time as the "age of populism".<sup>24 25</sup>

Sweden as previously mentioned, ranks high in civil and political liberties in the world and is by all measures defined as a liberal democracy. Although the Sweden Democrats have participated in democratic processes, their positions and actions raise concerns about their potential impact on democratic institutions and the overall democratic fabric of Sweden, thus linking them to the phenomenon of democratic backsliding. Rydgren and Van der Meiden argued in their article "The radical right and the end of Swedish exceptionalism", that for long Sweden was not part of the resurgence of radical right-wing parties in Europe. These parties demonstrate a shared emphasis on ethnonationalism, founded on historical myths, and aim to achieve greater ethnic homogeneity within the nation. Additionally, these parties exhibit characteristics of populism by criticizing elites for prioritizing internationalism and cosmopolitanism over national interests while accusing them of advancing their self-interests and catering to specific interest groups. Consequently, radical right-wing parties combine elements of nativism, with anti-establishment populism. In Western Europe, their central focal point revolves around

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<sup>20</sup> Steven Levitsky and Daniel Ziblatt, *How Democracies Die* (Crown, 2019), 10–12.

<sup>21</sup> 'Democracy Report 2023: Defiance in the Face of Autocratization'.

<sup>22</sup> Berman, 'The Causes of Populism in the West'.

<sup>23</sup> Levitsky and Ziblatt, *How Democracies Die*, 11.

<sup>24</sup> Ivan Krastev, 'Paradoxes of the New Authoritarianism', *Journal of Democracy* 22, no. 2 (2011): 5–16.

<sup>25</sup> Lisa Nandy, 'What the Age of Populism Means for Our Liberal Democracy', *The Political Quarterly* 90, no. 3 (2019): 462–469.

opposition to immigration. These parties converge on a core message that intertwines these ideologies, shaping their political agenda and appeal to the electorate. Rydgren and Van der Meiden argues that the long standing hegemonic position of the Social Democratic Party had acted as a shield against authoritarian mobilization in the country. However, due to the increased popularity of the Sweden Democrats, Sweden cannot be said to be an exception to this trend any longer.<sup>26</sup> If the party is associated with democratic backsliding it is necessary to understand what values are associated with the development of democratic backsliding, but also the values related to authoritarianism and populism. This will be discussed next.

### Authoritarianism, populism and their corresponding values

In a review article of populism research by Hunger and Paxton<sup>27</sup> they concluded that most scholars use Mudde's definition of populism, which characterizes it as an ideology that divides society into two homogenous and antagonistic groups: "the pure people" and "the corrupt elite," and advocates for the expression of the general will of the people in politics.<sup>28</sup> Populism is sometimes misused or conflated with other ideologies, like for example socialism or nationalism. This happens since the people whom is seen to belong to any of the two antagonistic groups are not pre-defined in the populist framework. This is what makes populism a so called "thin ideology", since the groups themselves are created by another "thicker ideology". In the words of Kaltwasser et al., since populism is "thin" in its nature it is able to shapeshift depending on "what it travels with".<sup>29</sup>

In the same article where this common characterization of populism was first presented, Mudde, argued that due to the change in the media landscape, with the rise of so called "mass media", politics had as a result been reported on differently than it had historically. A lot has changed since 2004 when that article was published. And in this era of social media, charismatic personalities can master the medium through attention-seeking and masterfully crafted punchy headlines and micro-blog posts that reach the masses within seconds. Although many things have changed in the sphere of media the values and attitudes in the population that populist politicians can placate to remains same as before.

The prediction of populist attitudes is explained well by how people feel in comparison to other groups, particularly the elites, and these feelings increase when individuals perceive a lack of representation by said elites.<sup>30 31</sup> Although objective indicators can account for a significant portion of these feelings, caution should be taken when assuming a perfect correlation between them, as subjective variables have thus far dominated the analysis. Moreover, it is essential to

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<sup>26</sup> Jens Rydgren and Sara Van der Meiden, 'The Radical Right and the End of Swedish Exceptionalism', *European Political Science* 18, no. 3 (2019): 439–455.

<sup>27</sup> Sophia Hunger and Fred Paxton, 'What's in a Buzzword? A Systematic Review of the State of Populism Research in Political Science', *Political Science Research and Methods* 10, no. 3 (2022): 617–633.

<sup>28</sup> Mudde, 'The Populist Zeitgeist', 543.

<sup>29</sup> Cristóbal Rovira Kaltwasser et al., *The Oxford Handbook of Populism* (Oxford University Press, 2017), 17.

<sup>30</sup> Michael Hamелеers and Claes H. de Vreese, 'To Whom Are "the People" Opposed? Conceptualizing and Measuring Citizens' Populist Attitudes as a Multidimensional Construct', *Journal of Elections, Public Opinion and Parties* 30, no. 2 (2020): 255–274.

<sup>31</sup> Adrian Lüders et al., 'Bottom-up Populism: How Relative Deprivation and Populist Attitudes Mobilize Leaderless Anti-Government Protest', *Journal of Social and Political Psychology* 9, no. 2 (2021): 506–519.

acknowledge that while political distrust is a potent predictor of populist attitudes, other forms of criticism of the political status quo exist, with populism representing only one among many.<sup>3233</sup> Prior research conducted in several European countries, has shown a correlation between populist attitudes, such as a skepticism towards elites and an emphasis on popular sovereignty, and voting behavior that favors populist parties. Moreover, existing literature has established a relationship between anti-immigrant and racist attitudes and support for radical right parties in Europe. Drawing on survey data, the present study posits that *political distrust* represents the strongest predictor of populist values.<sup>34</sup>

Authoritarianism, on the other hand, is about authority. But to be more specific, there are three core components that characterize authoritarian values, as argued by Inglehart and Norris.<sup>35</sup> The first component is the importance of *security*, which prioritizes stability and order. This is often manifested in topics such as foreigners taking away jobs, immigrants posing a threat to women, and terrorists endangering public safety. The second component emphasizes the value of group *conformity* to preserve traditional practices and protect the in-group's way of life. The third component underscores the need for obedient *loyalty* toward strong leaders safeguarding the group and its customs. Authoritarianism can also be defined in opposition to libertarianism, as they prioritize obedience over liberty. The concept of "authoritarian" emerged in the interwar years when social psychologists sought to explain why individuals willingly supported regimes like Bolshevism and Fascism. People with authoritarian values prioritize in-group solidarity, conform to group norms rigidly, and reject outsiders. In contrast, people with more progressive and libertarian values are more tolerant of out-groups and open to new ideas. A person's values reflect their broad goals, and trade-offs can be identified and ranked when rival choices conflict.<sup>36</sup>

Both left and right-wing authoritarianism is characterized by high levels of dogmatism, punitive attitudes towards dissenters, and the desire for strong authority figures, but with one key difference. What distinguishes left-wing authoritarianism from right-wing authoritarianism is the content of the dogmatically defended values. For individuals high in left-wing authoritarianism, these values may include pro-environment, anti-racist, and anti-sexist beliefs and rejection of traditional religious, and moral restrictions.<sup>37</sup>

Those who hold authoritarian values can experience intense social intolerance and resentment towards those they believe are responsible for developments that endanger them or challenges of the dogma of the chosen in-group. This resentment can be directed toward perceived lower social status out-groups.<sup>38</sup> These values are often combined with populist tendencies in the

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<sup>32</sup> Eri Bertson and Daniele Caramani, *The Technocratic Challenge to Democracy* (Routledge, 2020).

<sup>33</sup> Sebastián Lavezzolo, Luis Ramiro, and Pablo Fernández-Vázquez, 'Technocratic Attitudes in COVID-19 Times: Change and Preference over Types of Experts', *European Journal of Political Research* 61, no. 4 (2022): 1123–1142.

<sup>34</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash'.

<sup>35</sup> Ibid

<sup>36</sup> Ibid

<sup>37</sup> Lucian Gideon Conway III et al., 'Finding the Loch Ness Monster: Left-wing Authoritarianism in the United States', *Political Psychology* 39, no. 5 (2018): 1049–1067.

<sup>38</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash', 78.

general population and some leaders. The slow erosion of democracy through authoritarian policies can be done under the guise of democratic principles.

The paradox of the combination of values related to authoritarianism and populism is that on one hand desire for strong authority while on the other having distrust in the political system at large. A charismatic leader that gives promises of bringing the nation back to safety, or bringing order, becomes attractive for a disgruntled part of the population that feels like their voices are being heard. But whether all people that are attracted to these types of parties are the same, or structure their view of the world in the same way is not entirely clear. And that can perhaps also be said for the growing popularity of the Sweden Democrats.

### Sweden as a case study

In Sweden, the Sweden Democrats (SD) has rapidly grown from a negligible position into the country's second largest party. SD was founded in 1988 but did not enter the national parliament until the 2010 election, in which it gained 5.7 per cent of the votes. In the elections of 2014 and 2018, the party gained 12.9 percent and 17.5 per cent of the votes, respectively. And in the election of 2022 the party had become the second biggest in the country, with 20.5 percent.<sup>39</sup> SD has been winning voters from both the right and the left sides of the political spectrum, and particularly from Sweden's previously two largest parties, the Social Democratic Party and the Conservative Party, called The Moderates.<sup>40</sup> These two parties have different sociopolitical positions which shows that it is not exclusively people from one part of society that voters come from. It is also an indicator of a change in the classical class structures of society to be more complex, while also showing a weakening in the support for mainstream parties.

In an interview with Freedom House Org. about the Swedish election in 2018, Sheri Berman was asked where she would place SD on the spectrum of right-wing groups, she answered: "The party favors strict limits on further immigration, and sending back as many migrants and asylum seekers as possible. It also claims to be anti-EU. Its profile, in short, is fairly standard right-wing populist."<sup>41</sup> This description echoes the same sentiment described by Rydgren et al., who says that the party and other of its kind: "First and foremost, hold a nationalist ideology and their political programs aim at making the nation ethnically more homogeneous. This ethnonationalism is rooted in nostalgic myths about the past, combined with a view of a nation in decline due to immigration and internationalism. These parties also tend to be conventional and authoritarian and use populist anti-establishment rhetoric."<sup>42</sup>

SD has received increasing support during a time when immigration has become an increasingly important topic to a large portion of the public in the country. The arrival of

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<sup>39</sup> 'Riksdag Election Results' (Electoral Agency of Sweden), accessed 21 May 2023, <https://www.val.se>.

<sup>40</sup> Henrik Oscarsson, 'Flytande Väljare', *Örebro: Statistiska Centralbyrån*, 2016.

<sup>41</sup> Freedom House, Q&A: Populist Gains in the Swedish Elections. Sheri Berman of Columbia University explains the background and implications of the election results., accessed 21 May 2023, <https://freedomhouse.org/article/qa-populist-gains-swedish-elections>.

<sup>42</sup> Kirsti M. Jylhä, Jens Rydgren, and Pontus Strimling, 'Radical Right-wing Voters from Right and Left: Comparing Sweden Democrat Voters Who Previously Voted for the Conservative Party or the Social Democratic Party', *Scandinavian Political Studies* 42, no. 3–4 (2019): 221.

refugees from Syria to Europe in 2015 and 2016 was widely portrayed as a “crisis” in European political and public discourse.<sup>43</sup> During the perceived refugee crisis in Europe, Sweden received one of the highest rates of asylum applications per capita. In 2015 the country received over 162,000 asylum seekers, primarily from Syria and neighboring countries, due to the civil war.<sup>44</sup> This event marked an unprecedented level of immigration in Swedish history, attracting significant media attention and political discourse. Despite the country closing its borders in January 2016, immigration remained a top political issue during the following election cycle. A survey conducted in September 2018, the month of the national election, showed that 56 percent of Swedes still considered immigration and integration one of the most important political issues.<sup>45</sup> There is also a growing concern with gang-violence in the country.<sup>46</sup>

From the outset, the voters of SD would seem to be anti-immigration. But being against immigration can mean different things, depending on the context and the other types of beliefs it is paired with. For example, a person can be anti-immigration due to a stance on economics or xenophobia; both could be different underlying reasons for giving the same answer. To answer the research questions of this study, it is crucial to attempt to parse out different kinds of issues concerning immigration to determine how those issues relate to populist and authoritarian values. The study by Daenekindt et al. mentioned in the introduction found support for a pattern of people supporting political parties with anti-immigration agendas due to the perceived effect of immigration on liberal values, such as LGBTQ rights.<sup>47</sup> Whether this is the case in Sweden is still undetermined. It also needs to be clarified how a belief of that kind would relate to other issues in a more extensive system of beliefs.

### Belief systems and thought communities

A person’s view of themselves, the world, and the relationships between all the things and issues that make it up, is subjective. But communities in physical space are often communities not only in the physical but in the mental space as well. Sharing a thought community is equivalent to sharing a manner of perceiving reality, where some issues are grouped together while others are not. According to Converse<sup>48</sup> and Jost, Federico, and Napier<sup>49</sup>, political beliefs are typically viewed as networks of interconnected opinions, with certain beliefs serving as central nodes and others derived from them. Boutyline and Vaisey<sup>50</sup> note that center-periphery theories of political ideology vary in terms of what is considered central, such as political identity or

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<sup>43</sup> Lilie Chouliaraki and Tijana Stolic, ‘Rethinking Media Responsibility in the Refugee “Crisis”: A Visual Typology of European News’, *Media, Culture & Society* 39, no. 8 (2017): 1162–1177.

<sup>44</sup> ‘Statistics Sweden - Population Data’, accessed 21 May 2023, <https://www.scb.se/en/finding-statistics/statistics-by-subject-area/population/population-composition/population-statistics/>.

<sup>45</sup> Ibid

<sup>46</sup> Amir Rostami, ‘Street-Gang Violence in Sweden Is a Growing Concern’, *Sociologisk Forskning*, 2017, 365–368.

<sup>47</sup> Daenekindt, de Koster, and van der Waal, ‘How People Organise Cultural Attitudes: Cultural Belief Systems and the Populist Radical Right’.

<sup>48</sup> Philip E. Converse, ‘The Nature of Belief Systems in Mass Publics’, *Critical Review* 18, no. 1–3 (1964): 1–74.

<sup>49</sup> Delia Baldassarri and Amir Goldberg, ‘Neither Ideologues nor Agnostics: Alternative Voters’ Belief System in an Age of Partisan Politics’, *American Journal of Sociology* 120, no. 1 (2014): 45–95.

<sup>50</sup> Andrei Boutyline and Stephen Vaisey, ‘Belief Network Analysis: A Relational Approach to Understanding the Structure of Attitudes’, *American Journal of Sociology* 122, no. 5 (2017): 1371–1447.



authoritarianism. Jost et al.<sup>51</sup> defines ideology as a network of interconnected beliefs forming a coherent worldview. Goldberg and Stein<sup>52</sup> define culture as social conventions linking practices with meanings, with distinct beliefs and ideas dependent on each other in cognitive frames. This perspective is shared by other scholars, such as DiMaggio<sup>53</sup>, Ghaziani and Baldassarri<sup>54</sup>, Lizardo<sup>55</sup>, Mohr<sup>56</sup>, and Patterson<sup>57</sup>. The commonality of these perspectives is that; instead of studying individual beliefs or correlations between pairs of beliefs, the focus is on how beliefs cohere into a more extensive network or system and its overall structural properties.

Network-analytic techniques have been used to study the formal properties of belief structures, such as the duality between individuals and their beliefs or practices.<sup>58 59 60</sup> Goldberg's relational class analysis (RCA) approach uses the duality of persons and beliefs to identify groups of individuals with similar attitudes, regardless of whether they agree or disagree on specific issues.<sup>61</sup> RCA shows that individuals who disagree on every issue can still share a similar cognitive model of the interconnectedness of those issues. DellaPosta used the same method to measure polarization of public opinion over a forty-four year period in the United States.<sup>62</sup> In the study that looked at opinions and attitudes across wide-ranging social topics concluded that polarization had increased during the time period, due to belief consolidation resulting in the breakdown of prior cross-cutting alignments and the formation of larger and more comprehensive clusters centered on cohesive belief systems.

In a study by Baldassarri and Goldberg, the relationship between political partisanship and ideological beliefs in the US was explored through survey questions pertaining to the economy, morality, civil rights, and foreign policy. The study identified three distinct subpopulations or classes of political belief systems - ideologues, alternatives, and agnostics - each characterized by a unique way of organizing their political attitudes. Ideologues held strong political attitudes aligned with liberal or conservative categories, whereas alternatives exhibited moral conservatism but economic liberalism or vice versa. Agnostics displayed weak associations between political beliefs. Interestingly, individuals with robust and clearly structured political belief systems within a subpopulation, even if their viewpoints were opposite, agreed on how

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<sup>51</sup> John T. Jost, Christopher M. Federico, and Jaime L. Napier, 'Political Ideology: Its Structure, Functions, and Elective Affinities', *Annual Review of Psychology* 60 (2009): 307–337.

<sup>52</sup> Amir Goldberg and Sarah K. Stein, 'Beyond Social Contagion: Associative Diffusion and the Emergence of Cultural Variation', *American Sociological Review* 83, no. 5 (2018): 897–932.

<sup>53</sup> Paul DiMaggio, 'Culture and Cognition', *Annual Review of Sociology* 23 (1997).

<sup>54</sup> Amin Ghaziani and Delia Baldassarri, 'Cultural Anchors and the Organization of Differences: A Multi-Method Analysis of LGBT Marches on Washington', *American Sociological Review* 76, no. 2 (2011): 179–206.

<sup>55</sup> Omar Lizardo, 'Improving Cultural Analysis: Considering Personal Culture in Its Declarative and Nondeclarative Modes', *American Sociological Review* 82, no. 1 (2017): 88–115.

<sup>56</sup> John W. Mohr, 'Measuring Meaning Structures', *Annual Review of Sociology* 24, no. 1 (1998): 345–370.

<sup>57</sup> Orlando Patterson, 'Making Sense of Culture', *Annual Review of Sociology* 40 (2014): 1–30.

<sup>58</sup> Baldassarri and Goldberg, 'Neither Ideologues nor Agnostics: Alternative Voters' Belief System in an Age of Partisan Politics'.

<sup>59</sup> Boutyline and Vaisey, 'Belief Network Analysis: A Relational Approach to Understanding the Structure of Attitudes'.

<sup>60</sup> John Levi Martin, 'Power, Authority, and the Constraint of Belief Systems', *American Journal of Sociology* 107, no. 4 (2002): 861–904.

<sup>61</sup> Amir Goldberg, 'Mapping Shared Understandings Using Relational Class Analysis: The Case of the Cultural Omnivore Reexamined', *American Journal of Sociology* 116, no. 5 (2011): 1397–1436.

<sup>62</sup> Daniel DellaPosta, 'Pluralistic Collapse: The "Oil Spill" Model of Mass Opinion Polarization', *American Sociological Review* 85, no. 3 (2020): 507–536.

the social domain of political life was structured. For instance, opposing factions within the ideologue class, which were stereotypical Democrats or Republicans, had substantial disagreements on substantive issues but agreed on what issues were important and how those issues related to other issues, creating their own belief system.<sup>63</sup> This finding raises the question if the individuals that hold authoritarian populist values shares belief system with their strongest opponents. If both sides in such a belief system are vocal opponents to each other's positions, the perception of a polarized discourse might actually be created from a loud minority, that shares a belief system.

A study investigating the relationship between political identity and consumer behavior highlights the extensive nature of ideological and political divisions in society, which extends beyond politics to other aspects of individuals' lives, such as leisure activities, consumption patterns, personal morality, and aesthetic taste. Through homophily, social dynamics result in the formation of stereotypical groups, for instance, the so-called "Latte liberals" and "bird-hunting conservatives." This finding implies that individuals with similar political beliefs share similar consumption patterns and personal preferences.<sup>64</sup> The topic of self-stereotyping in the manner presented in this study can be extended to a sphere of higher abstraction. When consuming coffee or going bird-hunting there are external markers from clothing to the use of specific linguistic terms that signals, strengthens and reenforces the relationship between the political identity and that specific activity. If the behavior under investigation instead are values that exist as trade-offs to each other, such as between obedience and liberty, the political identity it corresponds to would only be present in the extreme cases; libertarian or authoritarian. While most people are likely not as extreme in their views, but instead desires, varying degrees of obedience and varying degrees of liberty, dependent on the given scenario. Individuals with such positions might not have as clear of a relationship to a political identity as those with more extreme viewpoints.

### Gap in the research & Hypotheses

Despite the vast literature on populism and authoritarianism not many studies has investigated the belief systems at play in the groups holding values aligned with those ideas. With authoritarianism having the potential to be present on the left and the right, and with populism having both a supply-side and a demand-side, seemingly a study combining the different aspects is yet to be done. For the purpose of pairing the political belief systems with political parties I created three indices for the parties. One for authoritarianism, one for populism and one for left right political orientation.<sup>65</sup> The indices was created using the Chapel Hill Expert Survey data set that previously had been structured in a similar fashion in a study by Inglehart and Norris.<sup>66</sup> And for the purpose of creating the belief systems the variables used reflect values regarding authoritarianism, libertarianism, populism, homosexuality, immigration,

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<sup>63</sup> Baldassarri and Goldberg, 'Neither Ideologues nor Agnostics: Alternative Voters' Belief System in an Age of Partisan Politics'.

<sup>64</sup> Daniel DellaPosta, Yongren Shi, and Michael Macy, 'Why Do Liberals Drink Lattes?', *American Journal of Sociology* 120, no. 5 (2015): 1473–1511.

<sup>65</sup> The indices is described in further detail in the data section.

<sup>66</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash'.



immigration and ethnicity, religiousness, and emotional connection to the country. The analysis can, thus, be done on both the level of the population and on the level of the political parties. This type of study has not been done on the Swedish population previously, and with the increased popularity of SD it is valuable

My research questions have arisen from a research gap in the previous literature that concerns the values and attitudes associated with increasing popularity of SD in Sweden. I posit that people differ in the ways they structure their beliefs concerning issues of this kind. Rather than thinking about these developments in the terms of one single underlying pattern of viewpoints in the population driving the change, I instead, find it more suitable to explore the potential for the existence of varying kinds of structural worldviews instead of trying describe a single homogeneous type of structure. Thus, I am using Converse's notion of belief system and extend the idea of heterogeneity to use correlational class analysis to explore the potential ways that populist and authoritarian values and beliefs are structured in Sweden.<sup>67</sup> However, it is important to point out that causal mechanisms of how a belief system has come to be are not being studied, but rather in what way such a belief system is structured. Different types of structures is thought to be at play, and, therefore I want to explore the different theoretical viewpoints argued for by previous research on the demand-side of populist developments, but also to study how these meet the parties on the supply-side. Due to the expectation of heterogeneity the possibility for the different otherwise competing theoretical explanations to coexist as different belief systems present in a population is possible.

I anticipate that variables that represents different aspects of the same concept, like populism, will cluster together for the most part. This is expected due to the association the variables have to one and other already. Meaning that if a person gives a certain answer to a question about autocratic values that persons answer to a second question that measures another dimension of autocracy is believed to be similar to the first. The first hypothesis concerns the manner the groups of variables relate to each other and how they relate to the indices for the political parties. Observations that reside in a class can thus be presenting widely different viewpoints but are in agreement of which variables belong together, i.e. they share a belief system. In terms of political parties I anticipate that belief systems that are associated with parties with high levels of populism will have both left and right leaning parties represented in that belief system. This is in line with a coherent, or, shared reality, as seen in previous research by Baldassarri and Goldberg where ideologues from both American political parties shared a belief system.<sup>68</sup> The first hypothesis thus represents the idea of 'opposites stand back to back', and is as follows:

*H1: Belief systems that are aligned with parties with high levels of populism will have representations in both left and right side parties.*

In accordance with Inglehart and Norris's cultural backlash theory, authoritarian and populist values is thought to be a backlash against the rampage of liberalism of the past decades, where

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<sup>67</sup> Converse, 'The Nature of Belief Systems in Mass Publics'.

<sup>68</sup> Baldassarri and Goldberg, 'Neither Ideologues nor Agnostics: Alternative Voters' Belief System in an Age of Partisan Politics'.

old traditional values have been replaced by new progressive ones. The development of authoritarian and populist value systems are believed to have been created by a tipping point due to the increasing cultural liberalism in western societies. Thus it can be described as an anti-progressivism type of development that does not accept homosexuality, nor looks fondly on immigration. This group desires order and obedience to a strong state while also having the populist political distrust directed at the upholders and perpetrators of the values they disagree with.<sup>69</sup> Following this line of argumentation a second hypothesis is as follows:

*H2: A belief system is expected to contain positive correlations between emotional connection to country, authoritarian and populist values, and those values will negatively correlate to immigration and homosexuality.*

As presented in the previous research some supporters of anti-immigration parties in the Netherlands are doing so in a perceived defense of liberalism such as homosexual rights against immigrants who is perceived as a threat to these rights.<sup>70</sup> The autocratic values represents a movement towards order, and the populist values as distrust in the political process that has led to the present moment, where, immigration is impacting the liberal values associated with the country. The third hypothesis is thus as follows:

*H3: A belief system is expected to contain positive correlations between authoritarianism, populism, emotional connection to the country, and homosexuality, but those variables negatively correlate with immigration.*

The second and third hypotheses are competing explanations for the belief systems related to voters of the Sweden Democrats. Both perspectives seems reasonable and applicable to the context while being grounded in relevant research. However, it is not impossible that both hypotheses could be supported by the result, but if so, I expect both hypotheses to be represented in a belief system each.

## Data

In this section I will be presenting the two data sources used in the study, the reason behind choosing them, how the data is created and collected, how the data is operationalized, and lastly descriptive statistics. The CCA and the PCA methods takes use of survey data from European Social Survey to create the different political belief systems. After the belief systems are created, their association with voting and demographic indicators is studied with multinomial logit regression models that uses the indices created from the Chapel Hill Expert Survey data set as reference to the political parties in the regression model.

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<sup>69</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash'.

<sup>70</sup> Daenekindt, de Koster, and van der Waal, 'How People Organise Cultural Attitudes: Cultural Belief Systems and the Populist Radical Right'.

## Main Data Set - European Social Survey

The European Social Survey (ESS from hereon) is a multi-country survey designed with the purpose of academically-driven research. To ensure the validity and reliability of the data collected, the ESS implements strict random probability sampling, and rigorous translation protocols. The hour-long face-to-face interview consists of questions on a range of core topics repeated from previous rounds. In addition two modules were developed for Round nine which focused on Justice and Fairness in Europe, and the Timing of Life.<sup>71</sup>

The reasons mentioned above make the ESS a good data set for this project. Furthermore, the ninth round was collected, with a 39.0 percent response rate, between 30-08-2018 and 23-05-2019. The national election in the country took place on 9th September 2018. Presumably, some individuals answered the survey before the election, which probably led to some answers on which party they voted for in the last election, referring to the previous election of 2014. This is not expected to impact the study results significantly, but it is essential to mention it. The ESS data set contained 1539 observations when imported; after cleaning, it contained 1179. The observations lost in this process were individuals having non-applicable values or answers to some questions. An example of this is a person who had not voted in the last election or had refused to answer some questions.

Proper operationalization of variables is key to create a valid and reliable data set to study. This project is influenced by the operationalization of similar variables in the previous research.<sup>72</sup> One such distinction, is to consider using libertarianism as a polar opposite concept to authoritarianism. I am leaving out of this thesis an extensive discussion with regards to reasons for or against such definition. Therefore, it is stated that, libertarianism as seen for this project represents values of post-materialism and individualism, while authoritarianism represents values of desired strong authority and obedience to rules. Another central concept of the study is populism, which here, is operationalized as distrust in the political system. As presented in the literature review, populism is a complex concept, but to study the phenomenon from the side of the population, political distrust is seemingly the best concept to measure it.

Table 1: Summary of data used in CCA. Variable values are displayed as mean.

Parties	N	A1	A2	A3	C1	L1	L2	L3	P1	P2	P3	H1	H2	I1	I2	IE1	IE2
C - Center Party	135	3	3	3	2	3	2	2	2	3	3	1	2	3	3	2	2
KD - Christian Democrats	61	3	3	3	2	3	2	2	2	3	3	2	2	5	4	2	2
L - Liberal People's Party	82	3	3	3	2	3	2	2	2	3	3	1	2	4	3	2	2
M - Moderate Party	225	3	3	3	2	3	2	2	3	3	3	1	2	5	3	2	2
MP - The Greens	70	3	3	3	2	3	2	2	2	3	3	1	1	3	2	1	1
Other	20	3	3	4	2	3	2	2	3	3	3	1	2	5	4	2	2
S - Social Democrats	339	3	3	3	2	3	2	2	3	3	3	1	2	4	3	2	2
SD - Sweden Democrats	130	3	3	3	2	3	2	2	3	3	4	2	3	7	6	2	2
V - The Left Party	117	3	3	3	3	3	2	2	3	3	3	1	2	3	2	1	1

Note:

Data from European Social Survey, Sweden 2018

<sup>71</sup> 'ESS Round 9: European Social Survey Round 9 Data (2018)' (Norway-Data Archive and distribution of ESS data for ESS ERIC: Sikt-Norwegian Agency for Shared Services in Education and Research, n.d.).

<sup>72</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash'.

## Variables for CCA & PCA

The variables used in the CCA and PCA are all on an Likert scale, where, the responses to questions are alternatives in ordinal ranking from total agreement to total disagreement, with varying steps in-between, depending on the question. Some questions have been inverted in the coding due to wanting to represent variables as moving from agreement, or positive feelings to disagreement or negative feelings. The abbreviations seen inside the parentheses are used to represent the variables in the result section. Full questionnaire can be found in the Appendix A.

*Authoritarian attitudes.* The concepts that inhabits the central position in authoritarianism is *obedience*, *safety* and *conformism*. These are operationalized by three questions where the respondent is asked to how much a certain statement is aligned with their views. Response alternatives: “1 Very much like me, 2 Like me, 3 Somewhat like me, 4 A little like me, 5 Not like me, 6 Not at all like me” The questions are: **(A1)** “It is important to her/him always to behave properly. She/he wants to avoid doing anything people would say is wrong.” **(A2)** “It is important to her/him to live in secure surroundings. She/he avoids anything that might endanger her/his safety.” **(A3)** “It is important to her/him that the government ensures her/his safety against all threats. She/he wants the state to be strong so it can defend its citizens.”

*Libertarian attitudes.* These variables measuring self-emancipation and individualism, here grouped under the name of libertarianism, The questions have the same response alternatives as the authoritarian questions have, the three questions asked: **(L1)** “She/he likes surprises and is always looking for new things to do. She/he thinks it is important to do lots of different things in life.” **(L2)** “It is important to her/him to make her/his own decisions about what she/he does. She/he likes to be free and not depend on others.” **(L3)** “It is important to her/him to listen to people who are different from her/him. Even when she/he disagrees with them, she/he still wants to understand them.”

*Populist attitudes.* From the population side of the populist phenomena the variable defining the concept well is that of *political distrust*. Three variables that has been found to be precursors of political distrust in a study that used ESS data is used here to operationalize the concept.<sup>73</sup> Response alternatives to all three questions are the following: “1 not at all, 2 very little, 3 some, 4 a lot, 5 a great deal”. **(P1)** “How much would you say that the political system in Sweden ensures that everyone has a fair chance to participate in politics?”. **(P2)** “How much would you say that the government in Sweden takes into account the interests of all citizens?”. **(P3)** “How much would you say that decisions in Sweden politics are transparent, meaning that everyone can see how they were made?”.

*Attitudes on homosexuality.* Two sets of questions regarding *homosexuality*, where the possible responses are: “1 Agree Strongly, 2 Agree, 3 Neither agree nor disagree, 4 Disagree, 5 Disagree strongly”. **(H1)** “Gay men and lesbians should be free to live their own life as they wish.” **(H2)**

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<sup>73</sup> ‘Exploring Public Attitudes, Informing Public Policy: Selected Findings from the First Nine Rounds’ (European Social Survey, n.d.).

“Gay male and lesbian couples should have the same rights to adopt children as straight couples.”

*Attitudes on immigration.* A set of questions regarding different aspects of *immigration* is asked as well. “0: Bad , 1, 2, 3, 4, 5, 6, 7, 8, 9, 10: Good. **(I1)** “Would you say it is generally bad or good for Sweden’s economy that people come to live here from other countries?” **(I2)** “Would you say that Sweden’s cultural life is generally undermined or enriched by people coming to live here from other countries?”

*Immigration and ethnicity* is a second group of variables that is distinguished from the previous group on immigration by the view on immigration from an ethnic perspective. Responses to the questions are: “1 Allow many to come and live here, 2 Allow some, 3 Allow a few, 4 Allow none”. **(IE1)** “to what extent do you think Sweden should allow people of the same race or ethnic group as most Sweden's people to come and live here?” **(IE2)** “How about people of a different race or ethnic group from most Sweden’s people?”

*Emotional attachment to country* is a variable for measuring how close the person feels to Sweden on an emotional level. Responses: “0: Not at all emotionally attached, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10: Very emotionally attached. **(C1)** “How emotionally attached do you feel to Sweden?”

## Variables for the Multinomial Logit Regression Models

The variables from the ESS that is used for the second part of the study —multinomial logit regression models— do not have the need to be on the same type of Likert scale as the variables used for the CCA. Here the *political party* the respondent voted for in the last national election is a central variable, but demographic variables for *gender* coded binary - male and female, *age* as numeric and continuous, and a binary variable for attainment of higher *education* or not. Further information on variables and questionnaire see appendix A.

Table 2: Summary of Demographic Data

Parties	N	Age	Males %	Born in Sweden	Higher Education
C - Center Party	135	54	53.33%	96.3%	48.89%
KD - Christian Democrats	61	55	44.26%	90.16%	50.82%
L - Liberal People's Party	82	51	52.44%	89.02%	65.85%
M - Moderate Party	225	52	56.89%	90.22%	45.78%
MP - The Greens	70	47	28.57%	91.43%	75.71%
Other	20	48	45%	85%	60%
S - Social Democrats	339	57	44.84%	87.32%	36.58%
SD - Sweden Democrats	130	54	72.31%	92.31%	16.15%
V - The Left Party	117	46	41.88%	88.03%	49.57%

*Note:*

Data from European Social Survey, Sweden 2018

### Secondary Data set - Chapel Hill Expert Survey

The Chapel Hill expert surveys (CHES) are designed to estimate the positioning of political parties on ideological and policy issues, as well as international relations, for national parties worldwide. In 2019, the CHES was administered during the winter season and completed by 421 political scientists specializing in political parties and European integration. This latest iteration of the survey includes information on the positioning of 277 parties on political ideology, European integration, and various policy areas. The survey includes questions about parties' general stances on European integration and their positions on several EU policies, economic left/right, general left/right, and social left/right. Additionally, the survey covers non-EU policy issues, such as immigration, redistribution, decentralization, and environmental policy.<sup>74</sup>

The variables used for this project have been chosen to operationalize different aspects of the political parties regarding Authoritarianism vs. libertarianism, Populist rhetoric of the party, and where the party is placed on a left vs. correct scale in a general political sense. The variables values are summarized and standardized to be displayed between zero and one hundred for every party in an index created by me. The study by Norris and Inglehart that used the data set to classify and rank parties in Europe has inspired the application of indices in this manner.<sup>75</sup> Indices are presented in the result section with the multinomial logit regression tables. For further information on variables and questionnaire, see Appendix.

## Methods

I use the three methods of correlational class analysis, principal component analysis, and multinomial logistic regression to answer the research questions of the study. The uncommon method of CCA is complemented by the commonly used dimensionality-reduction method of PCA by its ability to uncover latent structures in the dataset while CCA can provide a more direct understanding of the relationships between sets of variables. The Multinomial regressions study the association between the different belief systems created by the CCA and the political orientations and other demographic indicators in the population. In this section I present the method CCA, first by introducing the method it is derived from in short, Relational Class Analysis. Then I present PCA and why it is a method to use in pair with CCA. Lastly I give an overview of multinomial logistic regression.

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<sup>74</sup> Seth Jolly et al., 'Chapel Hill Expert Survey Trend File, 1999–2019', *Electoral Studies* 75 (2022): 102420.

<sup>75</sup> Inglehart and Norris, 'Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash'.

### Correlational Class Analysis

Previous research in belief systems has stated that social meaning of that kind is embedded in complex relational networks. Therefore, methods that assume linearity in the relationship between independent predictors and outcomes must be better suited for measuring the complexities of such network relations. Goldberg lifts the ambiguous reality of shared social understandings by stating that “shared” does not necessarily imply “universal.” Moreover, “shared” does not necessarily imply “identical” either.<sup>76</sup> People may have different behaviors or opinions on particular issues but still agree on their relative significance or the dimensions along which this significance is scaled. This was outlined for the method Relational Class Analysis(RCA) which was introduced to identify groups of individuals in multivariate sets of data whose patterns of responses are similar to each other.

Following his motivating example, Goldberg<sup>77</sup> offered relationality  $R_{ij}$  to measure this schematic similarity. It is computed by first taking the row vector containing the attitudes belonging to a respondent and calculating the differences between each pair of that respondent’s attitudes by subtracting them from one another. Each survey row is thus transformed into a square matrix  $X_i$  of pairwise arithmetic differences between variables in that row. Then, to calculate the relationality between a pair of respondents  $i$  and  $j$ , the absolute values of their respective difference matrices,  $X_i$  and  $X_j$ , are elementwise subtracted from each other. Each element of the resulting matrix  $D_{ij}$  is given a sign based on whether the corresponding entries of  $X_i$  and  $X_j$  were in the same or opposite directions. Finally, the elements of matrix  $D_{ij}$  are summed together to yield the relationality  $R_{ij}$ , which is rescaled to range from 1 to  $-1$ .

Formally, relationality between observations  $i$  and  $j$  in data set  $X$  of  $N$  observations and  $K$  variables is defined as follows:

$$R_{ij} = \frac{2}{K(K-1)} \sum_{k=1}^{K-1} \sum_{l=k+1}^K (\lambda_{ij}^{kl} \cdot \delta_{ij}^{kl}), \quad (1)$$

where

$$\delta_{ij}^{kl} = 1 - \left| |\Delta X_i^{kl}| - |\Delta X_j^{kl}| \right| \quad (2)$$

is the schematic similarity for the variable pair  $\{k,l\}$  between observations  $i$  and  $j$ ,

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<sup>76</sup> Goldberg, ‘Mapping Shared Understandings Using Relational Class Analysis: The Case of the Cultural Omnivore Reexamined’.

<sup>77</sup> Goldberg.

$$\Delta X_i^{kl} = X_i^k - X_i^l \quad (3)$$

is the distance between the values of variables k and l for observation i, and

$$\lambda_{ij}^{kl} = \begin{cases} 1 & \Delta X_i^{kl} \cdot \Delta X_j^{kl} \geq 0 \\ -1 & \Delta X_i^{kl} \cdot \Delta X_j^{kl} < 0 \end{cases} \quad (4)^{78}$$

The distinction between positive and negative relationalities is not useful for RCA because either extreme indicates that respondents i and j follow the same schema. Thus, following a bias-reduction step that I examine later, RCA uses only the absolute values of relationality  $|R_{ij}|$ , which range from 1 (same schema) to 0 (unrelated schemas). RCA interprets the absolute relationalities as an adjacency matrix for a weighted network with respondents as nodes and their pairwise absolute relationalities as ties. Finally, it uses a modularity-maximization algorithm to partition this network into groups of respondents with relatively high absolute relationalities  $|R_{ij}|$ .<sup>79</sup>

As described in Goldberg's study, the identification of schematic similarity between respondents can be a challenging task.<sup>80</sup> Boutyline's critique of the understating schematic similarity from the measure of relationality led to an extension of the method called Correlational Class Analysis.<sup>81</sup> To determine whether two respondents, X and Y, follow the same schema, we can use Pearson's correlation coefficient. If there exist such constants  $k \neq 0$  and  $b$  such that  $Y = kX + b$ , then the absolute value of Pearson's correlation coefficient between X and Y equals 1. As X and Y become more linearly independent of one another, the value of  $|r|$  decreases monotonically toward 0. Finally,  $|r|$  will be equal to 0 if and only if  $k = 0$  gives the best linear approximation of Y, which means the best linear approximation of Y ignores the contents of X altogether. Therefore, Pearson's correlation coefficient is a suitable measure to assess the degree of the linear relationship between two variables and determine if two respondents follow the same schema. This claim that correlation does a better job than relationality in measuring belief system belonging was supported empirically with the use of simulated data by Boutyline.<sup>82</sup> Thus, I decided to use Correlational Class Analysis instead of Relational Class Analysis for this study.

In order to assess the robustness of the classifications obtained from the CCA procedure, Jennrich's correlation matrix equality test was utilized. This test, proposed by Jennrich in 1970, is a Chi-squared-based test that examines the equality of two independent correlation matrices.

<sup>78</sup> Equations 1-4 from Goldberg(2011)

<sup>79</sup> Mark EJ Newman, 'Modularity and Community Structure in Networks', *Proceedings of the National Academy of Sciences* 103, no. 23 (2006): 8577–8582.

<sup>80</sup> Goldberg, 'Mapping Shared Understandings Using Relational Class Analysis: The Case of the Cultural Omnivore Reexamined'.

<sup>81</sup> Boutyline, 'Improving the Measurement of Shared Cultural Schemas with Correlational Class Analysis: Theory and Method'.

<sup>82</sup> Ibid



The analysis revealed that for all classes created by the CCA were significantly different. Further information and tables can be found in the Appendix.<sup>83</sup>

### Principal Component Analysis

The second method used in the thesis is the more common method of unsupervised machine learning called Principal Component Analysis (PCA). PCA is a dimensionality reduction technique that seeks to identify the underlying patterns of variation in a set of variables by creating linear combinations of them that capture the maximum amount of variance in the data. On the other hand, CCA is a clustering method that groups similar variables into classes based on their correlation structure, with the aim of identifying groups of variables that are related to each other in a meaningful way. PCA can be used to identify the underlying dimensions of variation that explain the majority of the variation in the individual belief systems created by the CCA. Following the example of DiMaggio and Goldberg in their article “Searching for homo economicus”, the combinational approach of the two methods have proven to be complements to each other.<sup>84</sup>

The goal of PCA is to extract the most important information from a data table. And compress the size of the data set by keeping only this important information, and also to simplify the description of the data set, while also analyzing the structure of the observations and the variables. In order to achieve these goals, PCA computes new variables called principal components which are obtained as linear combinations of the original variables. The first principal component is required to have the largest possible variance. The second component is computed under the constraint of being orthogonal to the first component and to have the largest possible variance. The other components are computed likewise. The values of these new variables for the observations are called factor scores, and these factors scores can be interpreted geometrically as the projections of the observations onto the principal components.<sup>85</sup>

### Multinomial Logit Regression

The third method used in this thesis is multinomial logistic regression. I use this method to analyze the association between party preference and political belief systems while studying the potential impact of socio-demographic characteristics of individuals as well. To do this, I use a multinomial logistic regression with *political party the person voted for in the last national election* as the dependent variable. Daenekindt et al. used the two methods to study belief systems and voting for populist radical right parties. Therefore, I argue, that the combination of Correlational Class

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<sup>83</sup> Robert I. Jennrich, ‘An Asymptotic X<sup>2</sup> Test for the Equality of Two Correlation Matrices’, *Journal of the American Statistical Association* 65, no. 330 (1970): 904–912.

<sup>84</sup> DiMaggio and Goldberg, ‘Searching for Homo Economicus: Variation in Americans’ Construals of and Attitudes toward Markets’.

<sup>85</sup> Abdi and Williams, ‘Principal Component Analysis’.

Analysis and Multinomial Logistic Regression methods has proven fruitful and is therefore also applied in this project.<sup>86</sup>

I utilize the multinomial logistic regression method to model the relationship between the independent variables — political belief system and demographic variables — and the outcome variable — political party voted for in the last election. I also include the indices for the individual political parties as a reference point for every single party's characteristics in the domains represented by the index ranking. The results of the multinomial logistic regression analysis provide estimates of the odds of voting for a particular political party when belonging to a certain belief system while also controlling for demographic indicators such as gender, age, education, and whether the person is an immigrant or not.

The multinomial logistic regression model estimates the probability of an outcome variable with more than two categories, such as the probability of voting for one out of many political parties. The probability of an individual voting for a specific party is modeled as a function of independent variables, such as the voter's demographics or political attitudes. The model is based on the following equation:

$$\ln(p_{i1} / p_{iK}) = \beta_1 x_{1i} + \beta_2 x_{2i} + \dots + \beta_p x_{pi} \quad (5)$$

where  $\ln$  is the natural logarithm,  $p_{i1}$  is the probability of voting for party 1,  $p_{iK}$  is the probability of voting for the  $K$ th party,  $\beta_1$  to  $\beta_p$  are the coefficients associated with the independent variables  $x_1$  to  $x_p$ , and  $x_{1i}$  to  $x_{pi}$  are the values of the independent variables for the  $i$ th individual.<sup>87</sup>

The model estimates  $K-1$  sets of coefficients, where  $K$  is the number of categories of the outcome variable. The coefficients represent the log odds of choosing each outcome (in this case, political parties) compared to a reference category, typically the lowest or highest category. A positive coefficient indicates that the odds of choosing that outcome increase, while a negative coefficient indicates that the odds decrease, holding all other variables constant. The goodness of fit of the model is assessed using measures such as the Akaike Information Criterion (AIC).<sup>88</sup>

## Results

The CCA procedure partitioned the observations into four classes. Since the algorithm follows an iterative process whereby classes are recursively partitioned until modularity cannot be maximized further, this means that steps only contributing marginally to modularity may be included. As a result, we may therefore obtain less meaningful partitions. Due to this possibility, measuring whether the obtained classes are significantly different is crucial, so each class represents another belief system. Boutyline and Vaisey suggest that checking the accuracy of a class partitioning should be done through multiple-group testing techniques of correlation matrices. I used Jennrich's correlation matrix equality test to test the robustness of this study's results, which generated a significant outcome. See Appendix C for details.

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<sup>86</sup> Daenekindt, de Koster, and van der Waal, 'How People Organise Cultural Attitudes: Cultural Belief Systems and the Populist Radical Right'.

<sup>87</sup> J. Scott Long, 'Regression Models for Categorical and Limited Dependent Variables (Vol. 7)', *Advanced Quantitative Techniques in the Social Sciences* 219 (1997).

<sup>88</sup> Long.

The results are presented in correlational tables with a corresponding network graph for each belief system. The Pearson correlation measures the strength and direction of the linear relationship between two variables. The correlation coefficient can range from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 indicates no correlation. In the network graph, the beliefs are presented as nodes, and the correlations between the beliefs are lines; negative correlations are black, and positive are green. The thickness of the line represents the strength of the correlation between the two beliefs. PCA is used on every belief system individually and is introduced in direct association with that belief system. The multinomial logistic regression models will be presented after the results of all four belief systems.

### Results First Belief System - CCA & PCA

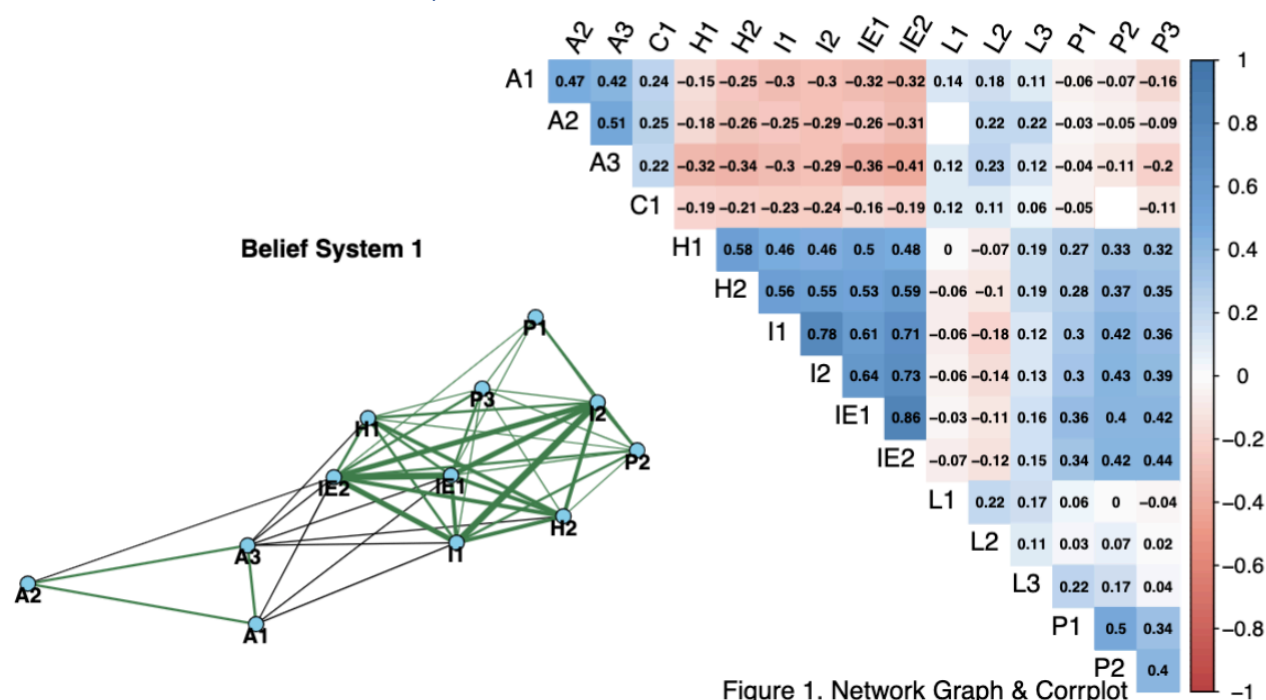


Figure 1. Network Graph & Corrplot

Note figure 1: The Pearson correlation measures the strength and direction of the linear relationship between two variables. The correlation coefficient can range from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 indicates no correlation. In the network graph, the beliefs are presented as nodes, and the correlations between the beliefs are lines; negative correlations are black, and positive are green. The thickness of the line represents the strength of the correlation between the two beliefs. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples Should be able to Adopt, I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority.

In Figure 1, the first group displays a weak but positive correlation between the authoritarian variables and the variable for emotional connection to the country, C1, and most of the libertarian variables. This group of variables, except for C1, is negatively correlated with the variables measuring views on homosexuality and both types of variables related to immigration. The populism variables, abbreviated with the letter P, correlate positively with the variables for views on homosexuality and immigration. This group of populist values is also negatively correlated with both authoritarian values as well as the libertarian values. The weakest correlations are not displayed in the network graph, but the ones that show a tightly knit center of the beliefs around homosexuality, immigration, and immigration and ethnicity, which are closely correlated to some of the populism variables while being negatively related to the authoritarianism variables.

Figure 3 displays a scree plot of the eigenvalues in the first belief system. The eigenvalues measure the variation retained by each principal component, which is examined to determine how many principal components (PC) to study. The eigenvalues are large for the first PC and decrease with subsequent ones. This means the first PC corresponds with the maximum variation in the data set. This is also the case for the variation of the first belief system, which is shown in Figure 2, where a large eigenvalue in the first principal component is displayed. A significant drop to the second one follows this. Therefore, including more than two PCs in an in-depth analysis is redundant.

The squared cosine (Cos2) shows the importance of a particular principal component to a given observation. The squared cosine indicates a PCs contribution to the observation's squared distance to the origin. Components with a large value of Cos2 contribute a relatively large portion to the total distance, which indicates that these components are essential for that observation. Another way to describe Cos2 is the quality of representation of the variables on the PC. A high value indicates good representation versus a low Cos2 value, which suggests that the principal components do not perfectly represent the variable.

Figure 2 presents the squared cosine of every variable to the different principal components. Darker colors and larger circles indicate a larger Cos2 of that variable to that

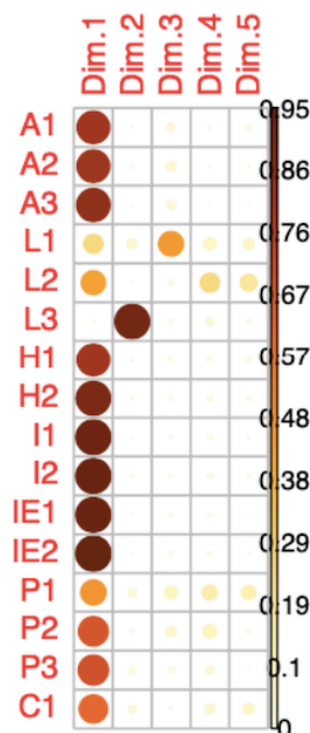


Figure 2. Cos2 Belief System 1.

Note figure 2: Figure displays squared cosine(Cos2) of every variable to the different principal components. The total Cos2 value for a variable on all principal components equals 1. Darker colors and larger circles indicate a larger Cos2 of that variable on that dimension, or principal component.

Scree plot Belief System 1

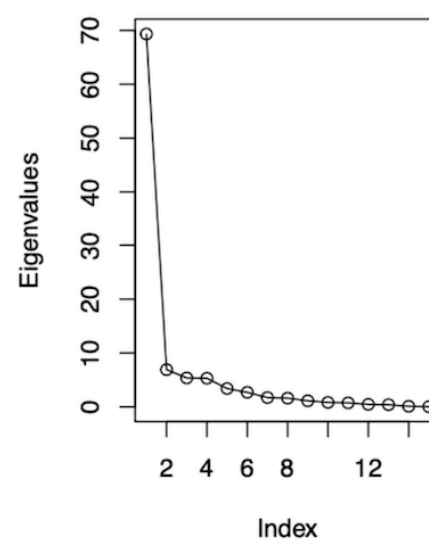


Figure 3. Scree Plot.

Note Figure 3: Scree Plot displays eigenvalues which measure the variation retained by each principal components. The eigenvalues are large for the first principal component and decrease with subsequent ones.

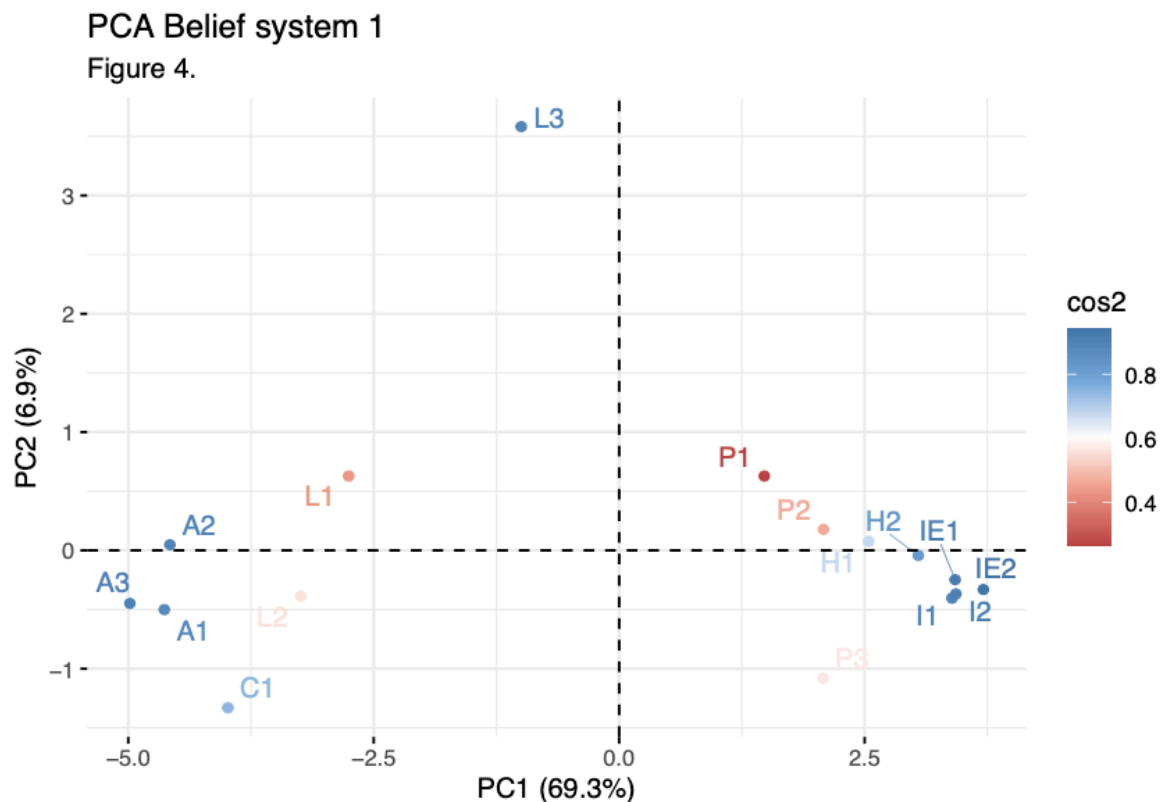
dimension. Most variables have a larger quality of representation to the first dimension, or PC, which explains the eigenvalues in the scree plot. The total Cos2 value for a given variable on all the PCs equals one. This is indicated by the variables in figure one, with lighter colors and smaller-sized circles displayed on several dimensions, while variables with darker colors and larger-sized circles can be seen on one dimension. The libertarian variables have low Cos2 on the first PC compared to the other variables. L3 is the variable for the importance of understanding different viewpoints even if you disagree with them. This variable is an outlier in the figure since it has a sizeable squared cosine value for the second PC. This makes it the most essential variable for the second dimension. The populism variables, together with the variable for emotional connection to the country, all displays lower Cos2 values as compared to the — authoritarian views on homosexuality and immigration— variables. This indicates that those variables do not have as good a representation of the first principal component as the variables with darker colors.

Turning attention to Figure 4, where the two first dimensions are visualized. As mentioned, the first dimension displays most of the variation of the data, almost 70 percent, while the second dimension displays around 7 percent variation. The color of the variables indicates their squared cosine value, where dark blue indicates the highest and dark red the lowest values. As was displayed in Figure 1, the authoritarian variables have a good representation of the first dimension. The variables that concern the views on homosexuality and immigration are also represented well by the first dimension but in total opposition to the authoritarian variables. What also can be seen are the populist values grouped near the values on homosexuality and immigration, while the two libertarian variables, together with an emotional connection to the country, are closer to the authoritarian variables. As described in Figure 1, the L3 variable has a good representation of the second dimension compared to all other variables that are grouped together on the opposing side of the second dimension. Figure 3, thus, presents the first belief system as individuals that see authoritarian values, emotional connection to the country, and some libertarian values in opposition with values regarding homosexuality, immigration, and ethnicity. The variables for populist values are coded as having trust or distrust of different aspects of the political process. This indicates that the people in this belief system of political distrust also have negative values regarding homosexuality and immigration while having positive values regarding authoritarianism and emotional connection to the country. This supports the second hypothesis, which states: *A belief system is expected to contain positive correlations between emotional connection to country, authoritarian and populist values, and those values will negatively correlate to immigration and homosexuality.*

The belief system contains people who hold opposing viewpoints but agree on which variables belong together. This indicates that the individuals in this class see issues on immigration, homosexuality, immigration, and ethnicity, and to a lesser extent, populist issues around political trust, as belonging together. And they also see issues on authoritarianism and the emotional connection to their country, together with some of the libertarian issues on self-emancipation, to belong together. So the people that want a very strong government and have a very strong emotional connection to the country have very little trust in the political process in the country, and they hold strong negative values towards homosexuality and immigration.

On the flip side, people that hold strong positive beliefs regarding immigration and homosexuality and have high trust in the political process have a very weak emotional connection to the country, as well as hold a negative view of a strong government. This group also holds negative beliefs on two libertarian values the importance of trying new things and the importance of being free and not depending on others.

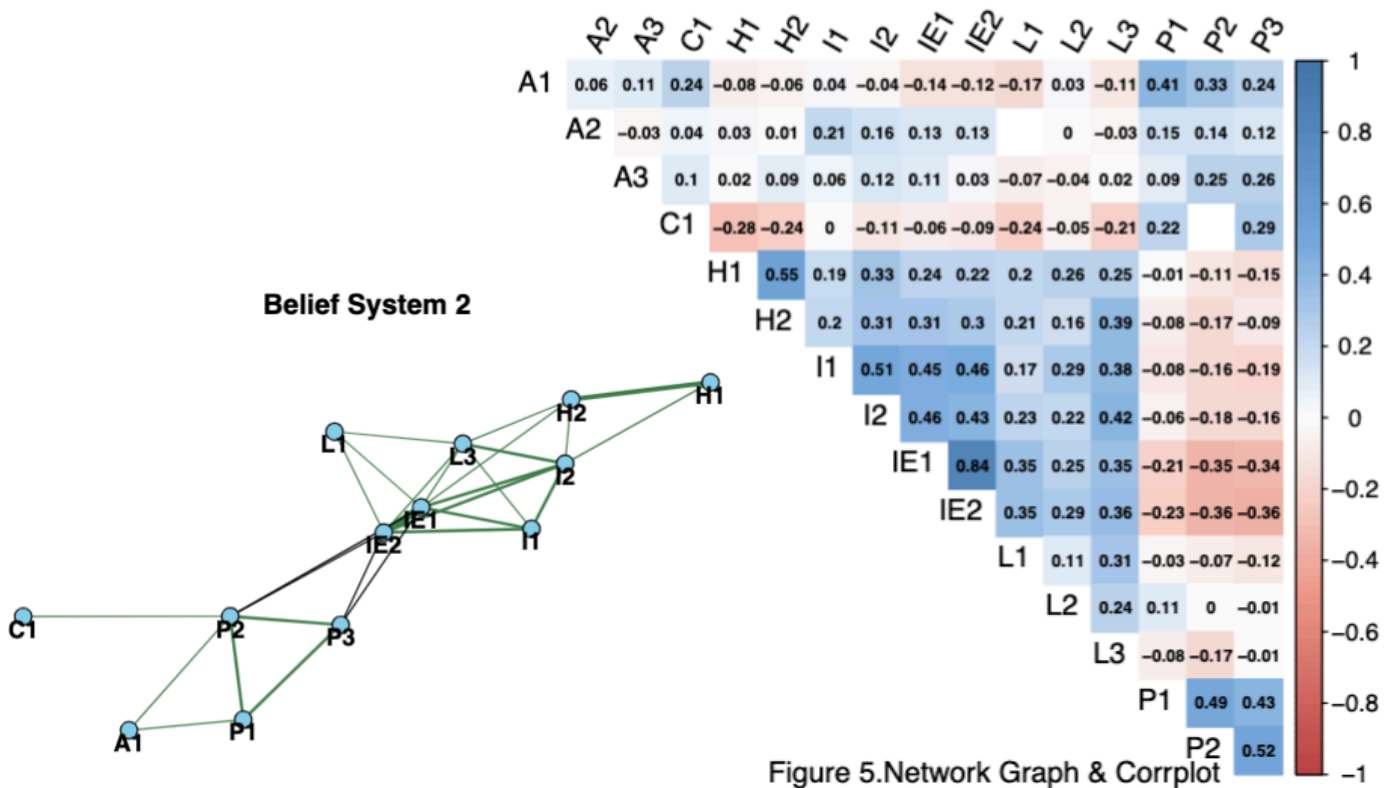
The integration of PCA in conjunction with CCA enhances our understanding of the belief system by comprehensively exploring the variables' representation across multiple dimensions. PCA reveals that the first principal component captures a significant portion of the variation in the data, while the subsequent dimensions contribute progressively less. This finding aligns with the eigenvalues observed in the scree plot. By examining the squared cosine values, we observe that certain variables have a stronger association with specific dimensions, indicating their importance in characterizing distinct aspects of the belief system. Notably, the authoritarian variables demonstrate a robust representation on the first dimension, while variables related to homosexuality, immigration, and ethnicity also exhibit robustness, but when studying them in Figure 4, they show contrasting patterns. Furthermore, incorporating PCA allows for identifying variables that play a pivotal role in secondary dimensions, such as the variable L3 capturing the essence of the second dimension.



Note figure 4: Two principal components of the first belief system. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples Should be able to Adopt, I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority.



## Results Second Belief System - CCA & PCA

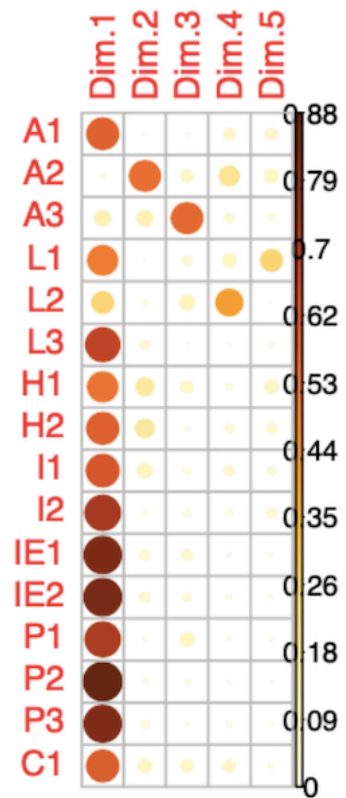


Note figure 5: The Pearson correlation measures the strength and direction of the linear relationship between two variables. The correlation coefficient can range from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 indicates no correlation. In the network graph, the beliefs are presented as nodes, and the correlations between the beliefs are lines; negative correlations are black, and positive are green. The thickness of the line represents the strength of the correlation between the two beliefs. Here follows a longer description of the abbreviated variables: A1: Behave Properly, A2: Security, A3: Strong Government, C1: Emotional connected to Country, L1: Do Different Things, L2: Not Dependent on Others, L3: Understand Different Views, P1: Political System Fair Chance for Everyone, P2: Government Takes Interests of all into Account, P3: Politics is Transparent, H1: Homosexuals Should Live Free, H2: Homosexual Couples Should be able to Adopt, I1: Immigration Good or Bad for Economy, I2: Immigration Good or Bad for Culture of Country, IE1: Allow people of same Ethnicity as Majority, IE2: Allow people of different Ethnicity as Majority.

Figure 5 displays that the second belief system contains less strong correlations than the first belief system, both positive and negative. The authoritarian variables positively correlate to an emotional connection to the country, as those variables positively correlate to the variables of populism. Emotional connection to the country negatively correlates, to most of the issues regarding immigration, homosexuality, and the libertarian variables, although in some cases, very weakly correlate and, in some instances, insignificant. The variables on homosexuality, immigration, immigration and ethnicity, and the libertarian values of self-emancipation negatively correlate to the variables measuring political distrust — populist variables.

The scree plot for the second belief system is displayed in Figure 7. As with the previous belief system, the first principal component contains a large eigenvalue, indicating that the first PC corresponds to much of the variation in the belief system.

Figure 6 shows the squared cosine of the second belief system. As the first component has a high degree of variation, displayed by the eigenvalue, most variables have a high-quality representation of the first dimension. The variables measuring values on immigration and ethnicity, populism, and immigration have large Cos2 on the first dimension. Group variables that have somewhat smaller Cos2, and thus, have a lower quality of representation on that dimension, are the variables on an emotional connection to country, views on homosexuality, two libertarian variables —L1 and L3— and one of the authoritarian variables, A1. The variables that stand out in the figure are A2, A3, and L2, which all have larger Cos2 values on other dimensions than the first. A2, which concerns whether it is important to live in secure surroundings, is the only variable represented in a high-quality way by the second dimension. And A3, the variable of the importance of a strong government that can defend its citizens, is the only variable with high-quality representation in the third dimension. L2, the variable for the importance of being free and independent, is represented in a high-quality way by the fourth dimension.



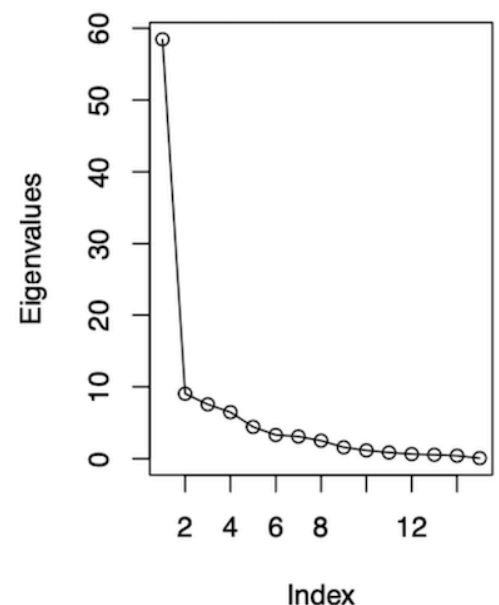
**Figure 6. Cos2 Belief System 2.**

Note figure 6: Figure displays squared cosine(Cos2) of every variable to the different principal components. The total Cos2 value for a variable on all principal components equals 1. Darker colors and larger circles indicate a larger Cos2 of that variable on that dimension, or principal component.

The two first principal components are displayed in Figure 7. The first component explains 58 percent of the variation in the belief system, while the second component explains 9 percent. The variables in this graphic are more spread out when compared to the graphic of the first belief system, as seen in Figure 3. The variables measuring populism are grouped with an emotional connection to the country and some authoritarianism variables. On the opposing side, the variables for views on immigration and views on immigration and ethnicity are grouped together and are near the three libertarian variables and the variables regarding homosexuality.

The variables with the largest squared cosine values are on the one side, both immigration and ethnicity variables and the populism variables, with P1 having a slightly smaller value. P2 measures how much the person thinks the government takes all citizen's interests into account. P3 refers to the question of how transparent the person thinks the political decisions in the country are. These two variables, together with the two variables for immigration and ethnicity

**Scree plot Belief System 2**

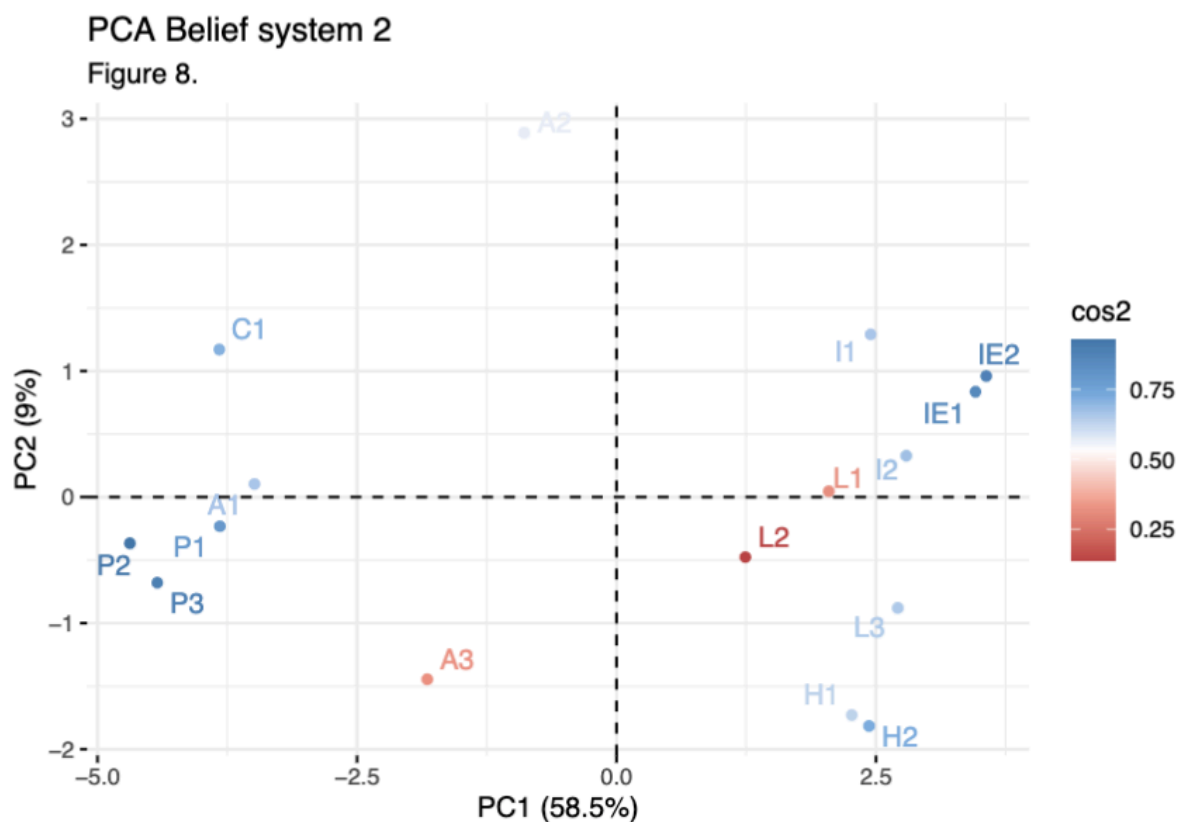


**Figure 7. Scree Plot.**

Note figure 7: Scree Plot displays eigenvalues which measure the variation retained by each principal components. The eigenvalues are large for the first principal component and decrease with subsequent ones.

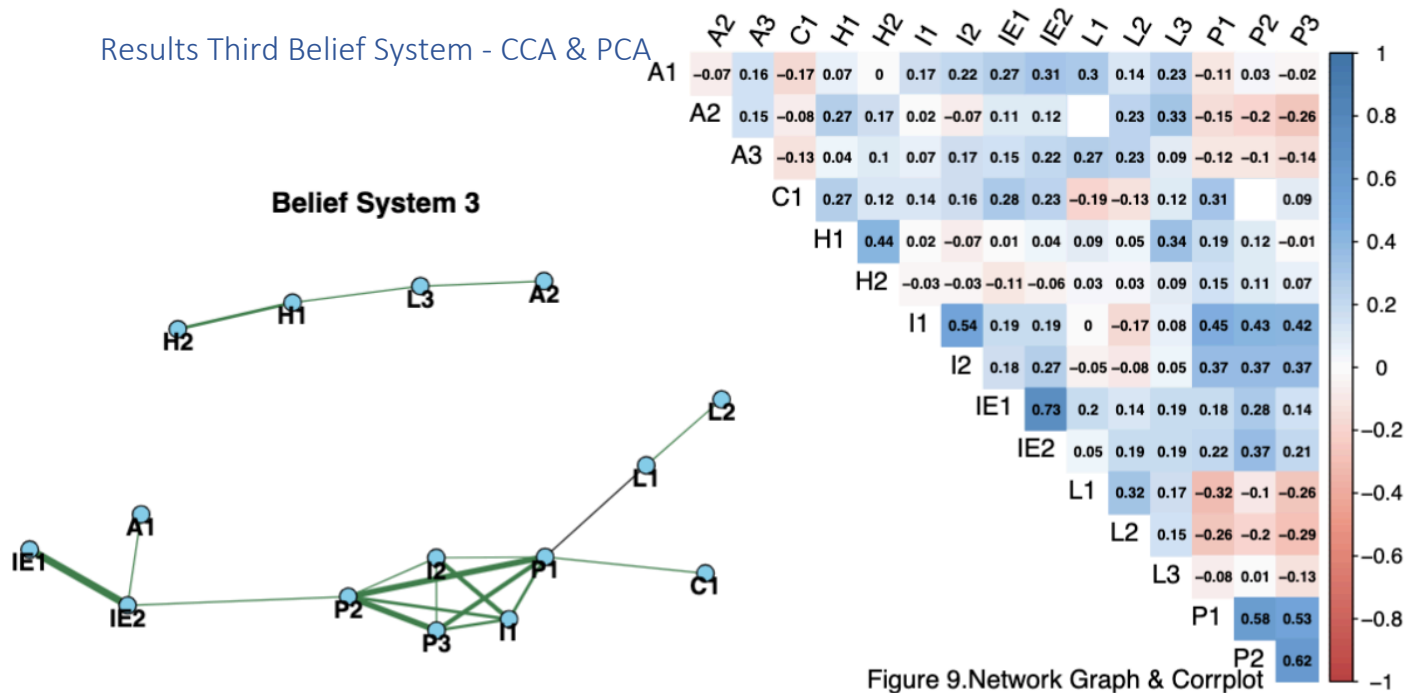


— should people allow many or few people of the same/different ethnicity as the majority of the country— are the variables with the highest quality representation on the first principal component, but on opposing sides. This indicates that these two groups of values, together with those in their proximity, are seen to belong together by the people in this belief system. Those that hold positive views on immigration and ethnicity hold very opposing opinions on the political process and emotional connection to the country. The opposite is also true. People with total trust in the political process have a strong emotional connection to the country and think it is important to behave appropriately; they are firmly against immigration of different and the same ethnicity as the majority of the country. L1 is the variable that is closest to the immigration variables. This variable is whether the person likes or dislikes surprises and thinks it's important to do many different things in life. This indicates that the people who are against immigration are also against trying different things in life.



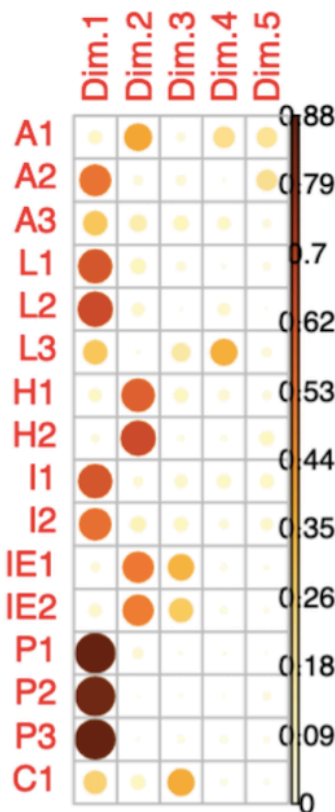
Note figure 8: Two principal components of the second belief system. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples Should be able to Adopt, I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority.

## Results Third Belief System - CCA & PCA



Note figure 9: The Pearson correlation measures the strength and direction of the linear relationship between two variables. The correlation coefficient can range from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 indicates no correlation. In the network graph, the beliefs are presented as nodes, and the correlations between the beliefs are lines; negative correlations are black, and positive are green. The thickness of the line represents the strength of the correlation between the two beliefs. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples should be able to Adopt, I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority.

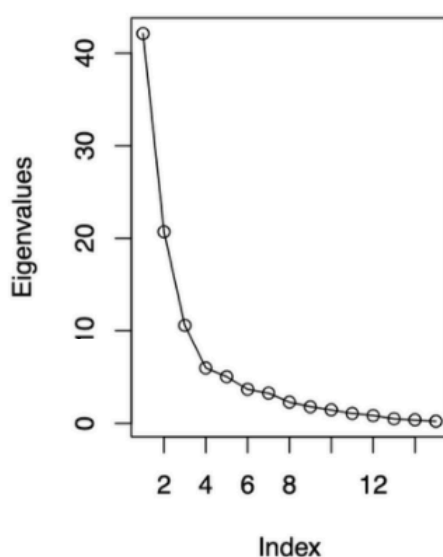
The third belief system created by the CCA is more divided in its structure compared to the previous two belief systems. The variables that measure populist values are negatively correlated to authoritarian values, while populist values are also negatively correlated to libertarian values. The authoritarian variables show a positive correlation to most of the libertarian variables. The authoritarian variables are also positively correlated to most variables on homosexuality and immigration. And the libertarian variables measuring values of self-emancipation show a very weak positive correlation to variables regarding views on homosexuality and the variables of immigration and ethnicity.



**Figure 10. Cos2 Belief System 3**

Note figure 10: Figure displays squared cosine(Cos2) of every variable to the different principal components. The total Cos2 value for a variable on all principal components equals 1. Darker colors and larger circles indicate a larger Cos2 of that variable on that dimension, or principal component.

**Scree plot Belief System 3**



**Figure 11. Scree Plot.**

Note figure 11: Scree Plot displays eigenvalues which measure the variation retained by each principal components. The eigenvalues are large for the first principal component and decrease with subsequent ones.

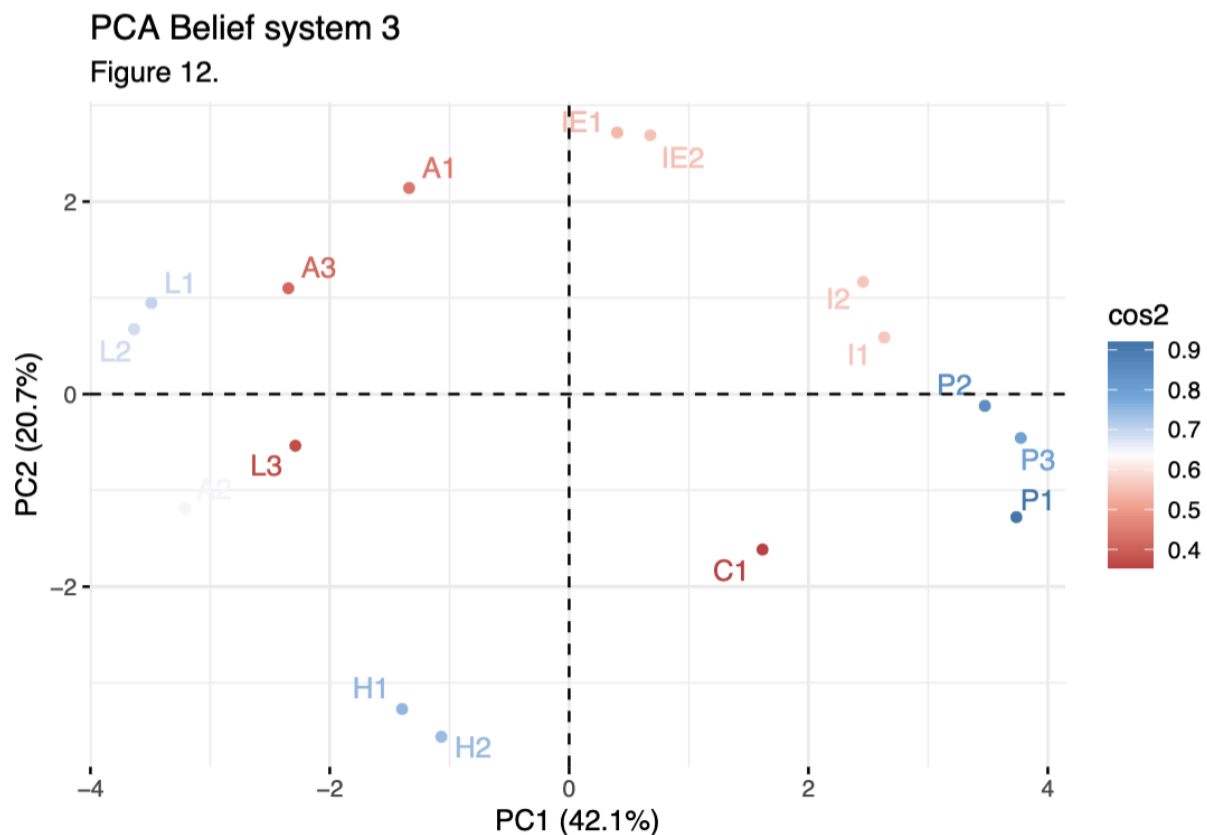
Figure 11 shows the eigenvalues of this belief system in a scree plot. The first principal component has a lower eigenvalue than the first component had in previous belief systems. The first component explains 42 percent of the variation in the data, while the second explains approximately 20 percent of the variation.

Figure 10 displays the squared cosine values of the third belief system. The total Cos2 value for a given variable on all the PCs equals one. This is indicated by the variables in figure x with lighter colors and smaller-sized circles displayed on several dimensions, while variables with darker colors and larger-sized circles can be seen on one dimension. The figure shows that the variables with the highest representation quality on the first dimension are the three variables for populism, abbreviated with the letter P. Other variables that are best represented on the first PC are the two immigration variables and two of the three libertarian variables, L1 and L2. Two authoritarian variables, A2 and A3, have the highest Cos2 value on the first dimension, although these variables are also represented on other dimensions. The first authoritarian variable A1 is together with the variables for immigration and ethnicity, and the views on homosexuality are represented with the highest quality on the second principal component.

Figure 12 shows the graphic of the two first principal components. As mentioned, the first dimension displays 42 percent of the data variation, while the second dimension displays around 20 percent variation. The color of the variables indicates their squared cosine value, where dark blue indicates the highest and dark red the lowest values. The figure displays more scattered variables than the previous two belief systems. The variables with the highest Cos2 are the populist variables grouped on the right-hand side with the two variables on immigration, I1, and I2. The two libertarian variables, L1 and L2, appear on the opposite side of the graphic together with the authoritarian variable, A2. As was shown in Figure 9, these variables were represented best by the first PC and are seen in opposition to each other. The second dimension represents the variables concerning views on homosexuality in the lower part of the figure, which opposes the variables on immigration and ethnicity that appear in the upper side together with the authoritarian

variable A1. This pattern of opposition between the variables on homosexuality and immigration, and ethnicity could point to some support for the third hypothesis, which states: *A belief system is expected to contain positive correlations between authoritarianism, populism, emotional connection to the country, and homosexuality, but those variables negatively correlate with immigration.* This is, however not strong enough to make any definite claims, just that on one dimension in this belief system, positive views on homosexuality are opposing negative views on immigration and ethnicity. Nevertheless, support for the hypothesis in its entirety is, thus, inconclusive. With that said, the application of PCA to this belief system highlights this structural pattern in a manner that the CCA on its own did not.

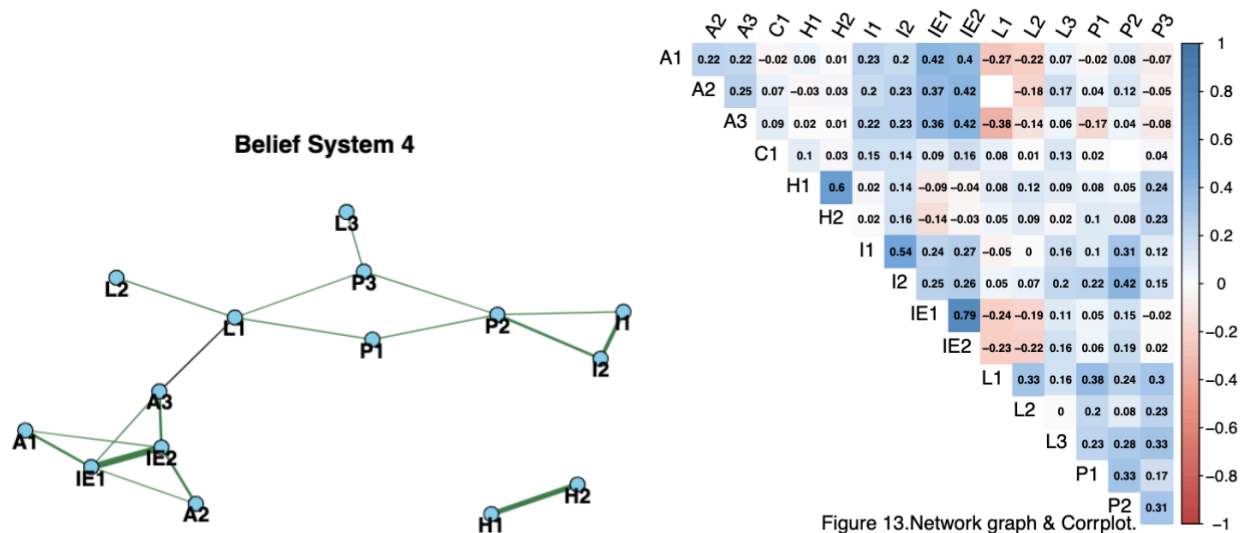
The critical dynamics in this belief system are the variables that appear in opposition to each other with high values of squared cosine. On the first dimension, these are the populist and immigration variables that oppose the libertarian and authoritarian variables. On the second dimension, variables of interest that oppose each other are the two variables of immigration and ethnicity compared to the two variables of homosexuality. As this belief system has less variance explained on the first dimension and higher variance on the second dimension, both dimensions need to be taken into higher account when analyzing the structure of the values and beliefs. This makes this belief system more challenging to parse out straightforwardly. This incoherent structure is represented well by the network graphic in Figure 9.



Note figure 12: Two principal components of the third belief system. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples Should be able to Adopt,

I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority

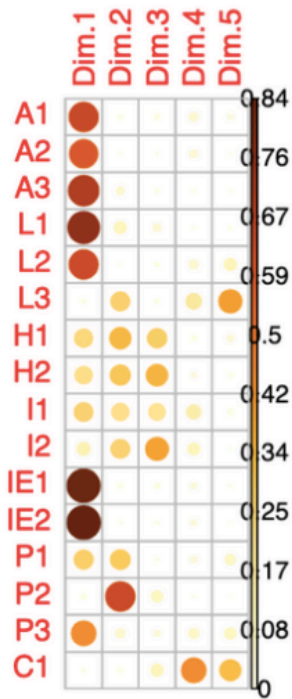
## Results Fourth Belief System - CCA & PCA



Note figure 13: The Pearson correlation measures the strength and direction of the linear relationship between two variables. The correlation coefficient can range from -1 to +1, where -1 indicates a perfect negative correlation, +1 indicates a perfect positive correlation, and 0 indicates no correlation. In the network graph, the beliefs are presented as nodes, and the correlations between the beliefs are lines; negative correlations are black, and positive are green. The thickness of the line represents the strength of the correlation between the two beliefs. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples Should be able to Adopt, I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority.

The fourth belief system created by the CCA bares similar to the third belief system in that it is sparsely connected. As seen in Figure 13, the authoritarian variables positively correlate to the variables on immigration and immigration and ethnicity. The authoritarian values are also negatively correlated to two libertarian values, L1 and L2, while positively correlated to the third libertarian variable, L3. The belief system also shows many weak correlations between variables, such as emotional connection to the country, which is positively correlated to many variables, but only moderately.

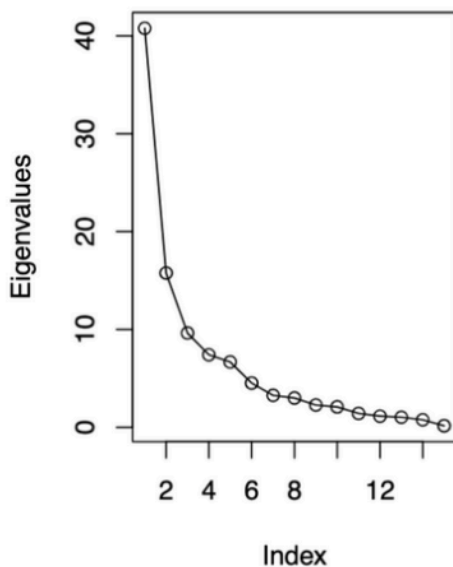
The eigenvalues of the fourth belief system are displayed in the scree plot in Figure 15. These indicate that the first component retains 40 percent of the variation in the data, while the second component includes 15 percent of the variation. This suggests that the belief systems have, in descending order, from the first to the last, declined in their representation of eigenvalues.



**Figure 14. Cos2 Belief System 4.**

Note figure 14: Figure displays squared cosine(Cos2) of every variable to the different principal components. The total Cos2 value for a variable on all principal components equals 1. Darker colors and larger circles indicate a larger Cos2 of that variable on that dimension, or principal component.

#### Scree plot Belief System 4



**Figure 15. Scree Plot.**

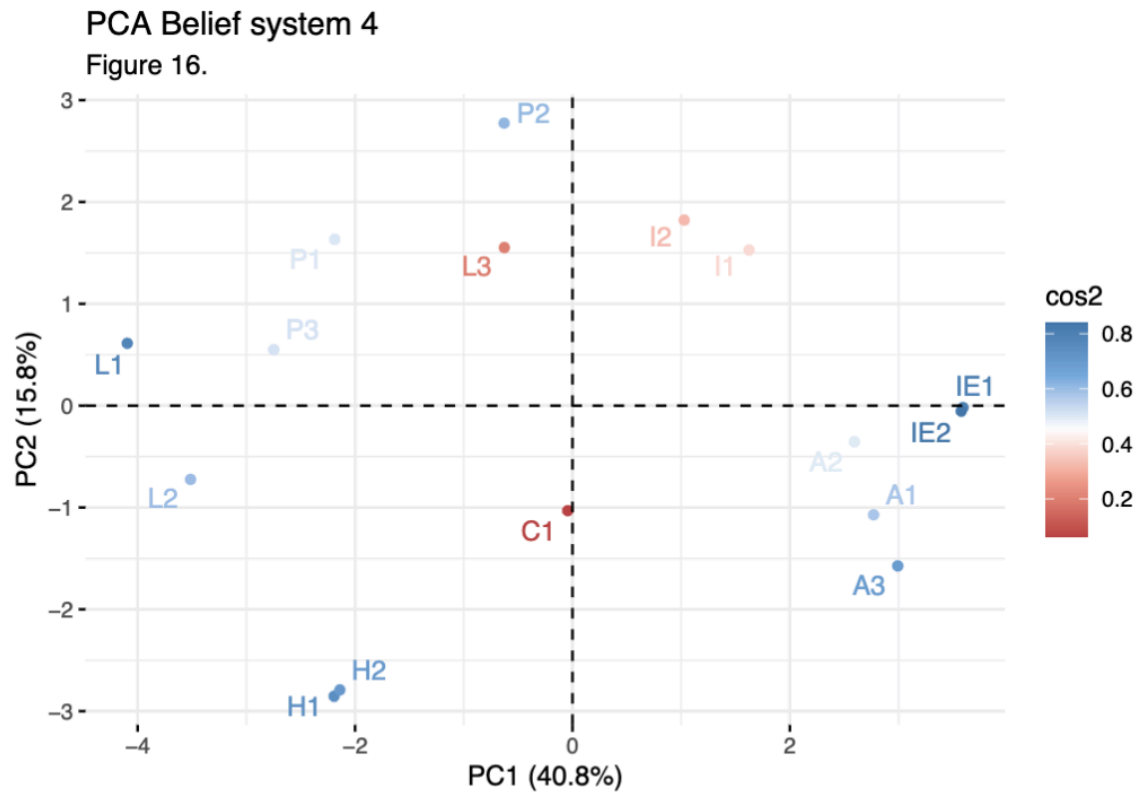
Note figure 15: Scree Plot displays eigenvalues which measure the variation retained by each principal components. The eigenvalues are large for the first principal component and decrease with subsequent ones.

Figure 14 presents the squared cosine of the fourth belief system. Since the total Cos2 value for a given variable on all the PCs is equal to one, the variables in the figure with lighter colors and smaller-sized circles are displayed on several dimensions, while variables with darker colors and larger-sized circles can be seen on one dimension. On the first dimension, the variables that are represented with the highest quality are immigration and ethnicity, followed by all the authoritarian variables and the two first libertarian variables, L1 and L2. The variables measuring views on homosexuality, and immigration, together with the third libertarian variable, L3, are scattered between the dimensions in terms of their representation. For the populism variables, P3 has the highest representation on the first dimension but is also represented to a much lesser degree on the other dimensions. This is also the case for P1, which is represented in the first and the second dimensions. P2 has the highest quality of representation on the second dimension, which is shared by the variables on homosexuality, although these have representation on other dimensions also.

Figure 16 displays the two first dimensions of the PCA for the fourth belief system. The first PC shows around 40 percent of the variation, while the second displays 15 percent. The variables for immigration and ethnicity are grouped with all the authoritarian variables on the right-hand side and are in opposition to the two libertarian variables, L1 and L2, and the third populist variable, P3. On the second dimension, the second populist variable, P2, is seen in the upper part of the graphic, in relative proximity to L3 — the third libertarian variable, and the two variables on immigration, I1 and I2, and the first populism variable, P1. In opposition to this group of variables, on the lower side of the second dimension, the variables of values around homosexuality are displayed. Emotional connection is seen in the middle of the graphic. This variable is best represented on other PCs, the first or the second. Although the fourth belief system displays a high degree of incoherence, essential aspects of the

structure and relations between variables can be seen. Immigration and ethnicity have high-quality representation on the first dimension together with the authoritarian variables, and these stand in contrast to the opposing variables of some of the libertarianism values and one of the

populism variables. On the second dimension, the variables for views on homosexuality oppose one of the variables of populism, P2, and the variables on immigration. In this context, PCA and CCA offer valuable insights into the structure of the fourth belief system, revealing the opposing clusters of variables and their alignment along different dimensions.



Note figure 16: Two principal components of the fourth belief system. Here follows a longer description of the abbreviated variables: A1:Behave Properly, A2:Security, A3:Strong Government, C1: Emotional connected to Country, L1:Do Different Things, L2:Not Dependent on Others, L3:Understand Different Views, P1:Political System Fair Chance for Everyone, P2:Government Takes Interests of all into Account, P3:Politics is Transparent, H1:Homosexuals Should Live Free, H2:Homosexual Couples Should be able to Adopt, I1:Immigration Good or Bad for Economy, I2:Immigration Good or Bad for Culture of Country, IE1:Allow people of same Ethnicity as Majority, IE2:Allow people of different Ethnicity as Majority.



### Result of Multinomial Logistic Regressions

Next I analyze the association between classes created from the CCA, political orientation and demographic descriptions of the observations. The different models look at the odds of an individual to vote for a certain political party given that they belong to a certain belief system. The models, presented as columns in table 3, contain two belief systems each, where the first belief system is reference category in all models. Thus, all models display's political party voted for, in the last national election as dependent variable, and the independent variables are the belief systems created by the CCA. Each model only contains two belief systems and the first belief system is reference category in all models. In the three first models the only independent variable is the belief system. The last three models contain aside from the belief systems control variables, such as: Higher Education— having a higher level of education or not, Born in Sweden— a variable that indicates if the person is has immigrated to the country or was born there, and the variable Male— 0 for female and 1 for male, and lastly a variable for age, called Age. The reference category for the parties is the center party, which therefor, is not shown in the table. The coefficients measures the odds of voting for a party compared to the refence party when belonging to one belief system compared to the reference belief system. In the table, the coefficients display the odds as being higher or lower than one, which is where the reference category is. The Akaike Information Criterion (AIC) is a measure of the models goodness of fit and its complexity. A lower AIC value indicates a better fit and a less complex model. The abbreviation edf in the model represents the degrees of freedom—an indication of number of parameters estimated, and obs stands for the number of observations in a given model.

In table 4 the reader can view percentage of voters that belong to a certain belief systems, and table 5 shows the political parties and their respective ranking in three indices. In reference to the political parties mentioned in the regression models their corresponding index-ranking with regards to (i)populism, (ii)authoritarianism and libertarianism , and (iii)left right ranking, can be found there.



Table 3: Multinomial Regression models of CCA Classes

		Class 2/1	Class 3/1	Class 4/1	Class 2/1+Co	Class 3/1+Co	Class 4/1+Co
Class	KD - Christian Democrats	1.175 (0.484)	0.636 (0.164)+	0.973 (0.128)	1.185 (0.491)	0.647 (0.167)+	0.973 (0.128)
	L - Liberal People's Party	1.074 (0.429)	1.021 (0.196)	0.996 (0.123)	1.058 (0.426)	1.023 (0.196)	0.989 (0.123)
	M - Moderate Party	1.821 (0.555)*	1.091 (0.166)	1.039 (0.101)	1.933 (0.596)*	1.102 (0.168)	1.046 (0.102)
	MP - The Greens	0.485 (0.227)	0.792 (0.164)	0.946 (0.116)	0.391 (0.187)*	0.787 (0.165)	0.923 (0.116)
	Other	1.504 (1.075)	1.274 (0.430)	1.184 (0.255)	1.424 (1.037)	1.277 (0.434)	1.167 (0.253)
	S - Social Democrats	1.575 (0.452)	0.970 (0.139)	1.038 (0.093)	1.735 (0.506)+	0.994 (0.144)	1.048 (0.095)
	SD - Sweden Democrats	0.608 (0.212)	0.831 (0.135)	0.607 (0.080)***	0.685 (0.245)	0.863 (0.144)	0.613 (0.082)***
	V - The Left Party	1.530 (0.515)	0.824 (0.151)	0.877 (0.102)	1.482 (0.507)	0.826 (0.152)	0.880 (0.103)
Higher_Education	KD - Christian Democrats				1.088 (0.440)	0.700 (0.306)	1.314 (0.515)
	L - Liberal People's Party				1.470 (0.582)	1.174 (0.442)	2.095 (0.787)*
	M - Moderate Party				0.578 (0.175)+	0.609 (0.184)	1.106 (0.325)
	MP - The Greens				2.798 (1.273)*	2.549 (1.077)*	3.479 (1.381)**
	Other				0.958 (0.692)	4.132 (3.482)+	2.030 (1.362)
	S - Social Democrats				0.467 (0.133)**	0.477 (0.136)**	0.771 (0.211)
	SD - Sweden Democrats				0.155 (0.060)***	0.158 (0.059)***	0.257 (0.100)***
	V - The Left Party				0.763 (0.255)	0.827 (0.287)	1.113 (0.378)
Born_in_Sweden	KD - Christian Democrats				1.095 (0.976)	0.639 (0.492)	0.389 (0.274)
	L - Liberal People's Party				0.369 (0.250)	0.724 (0.507)	0.446 (0.313)
	M - Moderate Party				0.482 (0.287)	0.702 (0.401)	0.398 (0.236)
	MP - The Greens				1.133 (1.018)	0.710 (0.502)	0.627 (0.465)
	Other				0.205 (0.196)+	0.260 (0.241)	0.514 (0.606)
	S - Social Democrats				0.377 (0.212)+	0.408 (0.211)+	0.304 (0.168)*
	SD - Sweden Democrats				0.670 (0.442)	0.647 (0.384)	0.612 (0.416)
	V - The Left Party				0.398 (0.247)	0.573 (0.353)	0.621 (0.433)
Male	KD - Christian Democrats				0.586 (0.238)	0.805 (0.351)	0.744 (0.291)
	L - Liberal People's Party				1.192 (0.460)	1.100 (0.414)	0.956 (0.352)
	M - Moderate Party				1.473 (0.444)	1.014 (0.305)	1.138 (0.333)
	MP - The Greens				0.446 (0.190)+	0.409 (0.167)*	0.415 (0.160)*
	Other				0.516 (0.388)	1.017 (0.695)	0.366 (0.262)
	S - Social Democrats				0.759 (0.213)	0.817 (0.231)	0.804 (0.216)
	SD - Sweden Democrats				2.246 (0.766)*	2.150 (0.711)*	2.347 (0.813)*
	V - The Left Party				0.621 (0.208)	0.698 (0.243)	0.717 (0.243)
Age	KD - Christian Democrats				1.010 (0.011)	1.025 (0.013)+	1.010 (0.011)
	L - Liberal People's Party				0.994 (0.011)	1.005 (0.011)	0.987 (0.010)
	M - Moderate Party				0.998 (0.008)	1.007 (0.009)	0.993 (0.008)
	MP - The Greens				0.973 (0.012)*	0.988 (0.011)	0.980 (0.011)+
	Other				0.972 (0.021)	0.973 (0.022)	0.974 (0.019)
	S - Social Democrats				1.012 (0.008)	1.019 (0.008)*	1.009 (0.008)
	SD - Sweden Democrats				1.007 (0.009)	1.017 (0.009)+	1.005 (0.009)
	V - The Left Party				0.977 (0.009)*	0.987 (0.010)	0.979 (0.009)*
Num.Obs.		690	640	679	690	640	679
AIC		2727.7	2576.3	2714.0	2640.6	2515.2	2657.6
edf		16.000	16.000	16.000	48.000	48.000	48.000

Note table 3: Data from European Social Survey Sweden 2018. In the table statistical significance is marked by these symbols: +  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ . The models displayed in the columns contains two belief systems in each. Belief system is shown as classes. The first class is the reference category in all six models. This means that model 1 contains class 2 compared to class 1 etc. Models four, five and six are the same as the first three models, but includes control variables. Higher education is referring to any form of tertiary education, coded as 1. Vocational and general education refers to non-tertiary education, coded as 0.

The odds of voting for the Moderate Party compared to the Center Party are consistently higher for individuals belonging to the second belief system compared to the first. This association remains significant even when controlling for other variables, suggesting a consistent link between the second belief system and voting for the Moderate Party.

The odds of voting for the Sweden Democrats compared to the Center Party is 0.4 times lower when belonging to the fourth belief system compared to the first one. This result is significant, and slightly stronger, when taking the controls into account. The inverse association between the fourth belief system and voting for the Sweden Democrats implies that individuals who belong to the fourth belief system are less likely to vote for the Sweden Democrats compared to the Center Party. This finding suggests a divergence in political preferences between individuals in the fourth belief system and those in the first belief system. Therefore, the association indicates that individuals who hold the beliefs and values associated with the fourth belief system are less inclined to align with the Sweden Democrats political platform.

Higher education is associated with higher odds of voting for the Green Party across different belief systems. The odds increase from the second to the fourth belief system, suggesting a stronger association between higher education and voting for the Green Party.

When considering the control variables, education appears to play a significant role. Higher education is associated with increased odds of voting for the Green Party across different belief systems. Conversely, individuals with higher education have lower odds of voting for the Social Democratic Party in the second and third belief systems compared to the first belief system. This pattern is also seen for voters of the Sweden Democrats, where those with higher education have lower odds of voting for that party in the second, third and fourth belief systems compared to the first.

The analysis also highlights the influence of nativity on voting behavior. Notably, being born in Sweden or not significantly affects voting for the Social Democratic Party, with individuals in the fourth belief system having lower odds of voting for the party when they were not born in Sweden. This finding suggests that nativity plays a role in shaping party preferences within the context of the fourth belief system.

Furthermore, gender has a noteworthy impact on voting choices. Men in the second and third belief systems have lower odds of voting for the Green Party compared to women in the first belief system. In contrast, men in these belief systems have higher odds of voting for the Sweden Democrats compared to women in the first belief system.

Age as a determinant of voting for certain political parties also show some significant results. The odds of voting for the Green Party or the Left Party compared to the Center Party 0.03 times smaller for those belonging to the second belief system compared to the first. This is also true for the fourth belief system compared to the first for the Left Party. Voting for the Social Democrats compared to the Center Party is 0.02 higher who belong to the third belief system compared to the first. The lower odds of voting for the Green Party or the Left Party among younger individuals in the second belief system indicate a potential generational divergence in party preferences. Conversely, the slightly higher odds of voting for the Social Democrats among younger individuals in the third belief system suggest a greater alignment with this party.

When turning attention to table 4 the percentage of voters that belong to the four different belief systems can be seen. The before mentioned belief system one that gave support for the second hypothesis has 52 percent of Sweden Democrats voters in it. While the third belief system that presented partly and inconclusive support for the third hypothesis, table 4 displays 22 percent of the voters of the Sweden Democrats as being part of that group. The Left Party has the second highest populist ranking( as seen in table 5) and the Green Party has the third highest populist ranking. Both these parties display a high percentage of voters as belonging to the first belief system, the Left Party 36 percent and the Green Party 44 percent. As voters of these parties are sharing a belief system their positions is thought to be in contrast opposition to each other. Based on these results there is inconclusive support of the first hypothesis, which states: *Belief systems that are aligned with parties with high levels of populism will have representations in both*

*left and right side parties.* The populist ranking of the Sweden Democrats(SD) in table 5 is 93 out of 100, and the second is the Left Party(V) ranked at 58. I claim inconclusiveness in support of this hypothesis due to this wide ranging gap in populism ranking of the parties.

Table 4: Voting and Belief Systems

Parties	N	Belief System 1	Belief System 2	Belief System 3	Belief System 4
C - Center Party	135	34.81%	18.52%	21.48%	25.19%
KD - Christian Democrats	61	39.34%	24.59%	9.84%	26.23%
L - Liberal People's Party	82	34.15%	19.51%	21.95%	24.39%
M - Moderate Party	225	28.44%	27.56%	20.89%	23.11%
MP - The Greens	70	44.29%	11.43%	17.14%	27.14%
Other	20	25%	20%	25%	30%
S - Social Democrats	339	30.97%	25.96%	17.99%	25.07%
SD - Sweden Democrats	130	52.31%	16.92%	22.31%	8.46%
V - The Left Party	117	36.75%	29.91%	15.38%	17.95%

Note table 4: Belief systems created by the CCA are represented in columns while parties individuals have voted for is displayed in rows. The number of individuals voting for a single party is seen in the second column, marked by N.

## Indices CHES

Table 5: Swedish Political Parties Index rankings

Party	Populism Index	A/L Index	Left/Right Index
C	32	21	76
KD	39	59	69
L	31	32	71
M	32	54	79
MP	45	10	35
S/SAP	30	40	33
SD	93	81	49
V	58	13	8

*Note:*

Data from Chapel Hill Expert Survey, 2019. All indices scaled 0-100

## Discussion of Results

This thesis has studied the belief systems at play in the Swedish population with regards to populism and authoritarianism, and how it relates to views on immigration, homosexuality, and emotional connection to the country. The results indicate that most voters of the Sweden Democrats are likely to belong to the first belief system. This suggests, that they hold strong authoritarian values and have strong populist values of political distrust, and strong emotional connection to the country, while also, holding negative values towards immigration's effect on culture or the economy, towards immigration in terms of ethnicity, and having negative views on homosexuality. This result indicates that according to the first belief system, half of the voters of the Sweden Democrats oppose both immigration and homosexuality and see them as to belong together. This finding suggests that the cultural backlash theory of Norris and Inglehart at least bares some validity in the case of the populist and authoritarian developments in Sweden and how most voters of this party relate to not only immigration but also how they view homosexuality.

The first belief system diverges from the study of radical right voters in the Netherlands by Daenekindt et al. which the third hypothesis was based on. That study found that some people were drawn to these parties due to their perceived defense of values such as homosexual rights. The third belief system, which holds just above 20 percent of SD voters seems to be a belief system more in line with the study from the Netherlands; positive views on homosexuality while having a negative views on immigration and ethnicity. These findings highlights the importance of heterogeneity when studying belief systems of this complex nature.

Norris and Inglehart's argument points to a long process of liberalization of cultural norms and values, that eventually leads to a tipping point where a cultural backlash occurs, and the values of liberalization are counteracted with beliefs of authoritarianism, populism and out-group distain. With Sweden being according to many metrics a culturally liberal country the claim is not totally unreasonable. But, this study lays no claims on causality in terms of why any belief system has any specific structure. However, the results from Daenekindt et al. was obtained by survey data created specifically for their project, while the finding of Norris and Inglehart was done through the use of data from ESS, like this study, which may have an impact of the results. Nevertheless, with the increased popularity of the Sweden Democrats, and other parties of its kind in other countries, it is important to understand where the lines between in-group and out-group is placed for the voters of such political parties.

## Limitations & Contributions

Although the applied methods give insight into the belief systems at work with regards to values of populism and authoritarianism, and how those values relate to issues on immigration and homosexuality, the results should not be seen as definite descriptions on these issues. One limitation of the study could be the use of self-reported data. Participants may not always accurately report their beliefs or behaviors, leading to potential inaccuracies in the data. Additionally, the study only included participants in Sweden. This limits the generalizability of

the findings to other countries or regions. Furthermore, the study used cross-sectional data, which only provides a snapshot of the variables at a single point in time.

The combinational approach of the methods applied to the topic creates a deeper understanding of how belief systems can be studied with these methods. By partitioning the data with the help of the CCA followed by a study of the individual classes with the use of the PCA, proved itself to be a useful process of the methodological project design. This way of structuring the process of the study was also done DiMaggio and Goldberg. Using the PCA of the individual classes created from the CCA lets the researcher study the variables in question and their relational patterns to each other in a way that really utilizes the specific characteristics of the CCA method and is not possible by only using a PCA before-hand. This approach of research design is emphasized further by a PCA of the entire data set, pre-CCA, that was done as an alternative to the current study design. Further information of the PCA of the entire data set can be found in Appendix E.

## Conclusions & Future Studies

In this study, we have investigated the interplay between belief systems, populism, authoritarianism, and various attitudes among the Swedish population, including immigration, homosexuality, and emotional connection to the country. My finding shed light on the distinctive characteristics of voters affiliated with the Sweden Democrats. The results reveal that individuals aligning with the first belief system significantly associate with the Sweden Democrats. Around half of the voters of the Swedish Democratic Party belongs to that belief system. These voters strongly adhere to authoritarian values, harbor deep-seated populist sentiments characterized by political distrust, and hold a profound emotional connection to the country. Moreover, their beliefs are marked by negative attitudes toward immigration, encompassing cultural and economic concerns, ethnocentric perspectives, and unfavorable views on homosexuality. This result gives an important understanding of voters of this party as it aligns with the previous research stated in the cultural backlash theory by Inglehart and Norris. However, the heterogeneous nature of this study's approach to this complex issue has proven itself fruitful since the other half of the voters of the Sweden Democrats are dispersed out over the other three belief systems. This approach as inspired by Converse opens up the opportunity for different worldviews to coexist for voters of a single party. What this indicates is that not all who vote for the Sweden democrats share a worldview with those belonging to belief system one. This means that not all who vote for that party have homophobic views combined with the other values associated with the first belief system. Which renders the question, from the study by Daenekindt et al. from the Netherlands, of anti-immigration as a perceived defense of homosexual rights as partly supported, but finally, inconclusive in this study. Although it can conclusively be said that half of the voters of the Sweden Democrats do not support the party for that reason. The idea of heterogeneity within a party's voting base for a should be studied in further detail in future studies. These findings offer valuable insights into the ideological underpinnings and multifaceted attitudes of Sweden Democrats supporters within the broader context of populism, authoritarianism, and societal issues.

These findings carry significant implications for comprehending political orientation dynamics and the impact of belief systems. They underscore the multidimensional nature of political behavior, where different belief systems align with specific political parties. Moreover, my results emphasize the influential role of demographic characteristics such as education, gender, and birthplace in shaping political preferences. While acknowledging the limitations of this study, it makes a notable contribution to the existing body of research on authoritarianism, populism, and belief systems/cultural schemas. Notably, it represents the first comprehensive exploration of the political belief systems corresponding to voting for the Sweden Democrats, thereby enhancing our understanding of political and societal developments in Sweden. The aim of this study has not been to make claims that democratic backsliding is or will happen in Sweden. Rather, it has been a study aiming to investigate the voting base of a party that might be a potential precursor to the political and societal development of democratic backsliding.

Future research utilizing longitudinal data could further elucidate the relationships among the examined variables and establish more substantial grounds for causal inferences. Additionally, conducting an in-depth investigation into the intricate relationship between attitudes toward homosexuality, immigration, and support for far-right parties would provide valuable insights. Furthermore, a broader comparative study encompassing multiple countries would facilitate a comprehensive examination of similar developments within a larger regional context, such as Europe or the global landscape. Such endeavors would contribute to a more nuanced understanding of political phenomena and their implications across diverse societal contexts. Lastly, future research that further investigates populist and authoritarian values in the Swedish population specifically to enhance our understanding of any anti-democratic belief structures could contribute to identifying common patterns and unique characteristics of belief systems associated with democratic backsliding. If the Sweden Democrats are aligned with parties in other countries across Europe, such as Hungary, a study that aims to understand the underlying factors leading to illiberal political developments and a country's democratic backsliding is of great importance. It would not only give insight to a potential political future for the country of Sweden, but also other countries around Europe and the world.

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