Stine Hesstvedt

5 Redistributing Knowledge? How Institutions Affect Citizens’ Political Knowledge Levels: The Scandinavian Case Compared

Political knowledge is one of the most vital components of democratic citizenship, and a common assumption is that democracy functions best when citizens are politically informed (Converse, 1964; Zaller, 1992; Delli Carpini & Keeter, 1996). One consistent finding in the literature on political behaviour is, however, that political knowledge is unevenly distributed among voters. By the 1950s and 1960s, American researchers had concluded that the majority of citizens knew little about political matters and made little effort to collect such information (Berelson, Lazarfeld, & McPhee, 1954; Campbell, Converse, Miller, & Stokes, 1960). Despite an explosion in access to education, growing living standards and a general tendency towards a more ‘critical’ electorate, it is still a fact that high-income groups appear more knowledgeable than low-income groups (Verba et al., 1995); men are better informed than women (Mondak & Anderson, 2004) and the educated more so than the uneducated (Delli Carpini & Keeter, 1996).

The debate on voters’ knowledge about politics was revitalized in the wake of the 2016 American presidential election. Commentators and political scientists once again seem to be doubting public judgement as well as some voters’ ability to rely on sensible facts and rational arguments. The pressing question seems to be: Why do voters differ so tremendously in what they know about political issues? And: Is the observed ‘knowledge polarization’ as grave outside the United States? The political knowledge literature offers a growing set of answers to these questions and points to several contextual and institutional features that can explain why some countries foster citizens that know more about the political sphere. Such studies find that ‘knowledge polarization’ or ‘knowledge gaps’ appear less pronounced in European countries. In particular, the electoral and party system (Gordon & Segura, 1997; Sheppard, 2015; Fortunato, Stevenson, & Vonnahme, 2016) and socio-economic policies (Milner, 2002; Grönlund & Milner, 2007; Fraile, 2013; Iversen & Soskice, 2015) are highlighted as important explanations as to why citizens, regardless of education, income and other resources, know more about politics.¹

This chapter investigates cross-country differences in knowledge gaps, with a particular focus on Scandinavia. It puts institutions and policies at the centre of discussion, and departs from perspectives that see the socio-economic environment

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¹ The media system is also identified as important for knowledge levels (see e.g. Iyengar et al., 2010; Aalberg & Curran, 2012; Clark & Hellwig, 2013.
as important for political knowledge polarization. According to these perspectives, the level of socio-economic equality, educational systems, economic redistribution, and other policies aimed at enhancing equality among citizens also have important consequences for the distribution of citizens’ political knowledge (Milner, 2002; Fraile, 2013). To study the relationship between institutions and knowledge gaps, as well as the state of citizens’ knowledge within Scandinavia, the chapter applies data from the Comparative Study of Electoral Systems (CSES). The results suggest that Scandinavian citizens are not more ‘knowledgeable’ than other citizens, but rather that the ‘knowledge gaps’ are smaller here than in most other countries. Furthermore, a multilevel analysis of 20 OECD countries points to some general institutional findings: Western democracies with low income-inequality also have small political knowledge gaps. In societies with low income-inequality, the discrepancies in political knowledge between the richest and the poorest, the well-educated and the uneducated and between men and women are significantly less pronounced. In short, egalitarian societies also seem to exhibit a more equally informed citizenry.

The rest of the chapter is structured as follows. The first section outlines what the ‘politically knowledgeable’ citizen theoretically entails and sketches the American literature that finds great differences in political knowledge levels among the public. In the second part, I outline how the present literature conceives the institutional impact on knowledge gaps. In the third part, I apply data from the Comparative Study of Electoral Systems to explore the claims. Here, the results are illustrated by contrasting Scandinavian countries with the United States and 16 other comparable OECD countries. In the conclusion, I discuss the findings and point to Scandinavian policies that are likely to be crucial for the presence of low knowledge gaps.

5.1 Citizens and Political Knowledge

Since ancient times, political knowledge’s role in society and to citizenship has been a reoccurring and well-examined topic. Within political theory, the discussion can be traced back to Plato’s idea of a ‘rule of philosophers’, as well as John Stuart Mill’s ‘plural voting’ proposition that the well-educated ought to have extra votes. Today, studies finds that knowledge plays a vital role in voters’ political and societal life. Increased or decreased knowledge influences vote choice and party preferences and potentially also the composition of governments (Bartels, 1996; Blais et al., 2009). Politically informed citizens display higher political tolerance and support for democratic values, and they participate more in politics through formal and informal channels. They also display higher trust in people and the political system (Zaller, 1992; Gilens, 2001; Althaus, 2003). The degree to which democracies are inhabited by knowledgeable citizens is a well-researched question within studies of political behaviour. The richness in the literature is illustrated by its many names, some examples being ‘political sophistication’ (Converse, 1964), ‘civic literacy’ (Milner,
2002), ‘political awareness’ (Zaller, 1992), ‘political constraint’ (Achen, 1975; Bartle, 2000), ‘ideological understanding’ (Feldman, 2013) and ‘political knowledge’ (Verba et al., 1995; Bartels, 1996; Delli Carpini & Keeter, 1996; Lupia & McCubbins, 1998; Gilens, 2001; Lupia, 2016).

In their seminal work about political knowledge in the United States, Delli Carpini and Keeter (1996, p. 10) define political knowledge as ‘the range of factual information about politics that is stored in long-term memory’. According to them, citizens’ reservoir of factual information should include knowledge about the ‘rules of the game’ and the political system, the currently most important political and societal issues and the most central political actors. Luskin (1987) points out three dimensions defining a citizen’s level of knowledge. Knowledgeable citizens are characterized by the size of their expertise (i.e. the amount of information they can recall), its range (i.e. the number of areas or political subfields across which their knowledge is spread) and its constraint (i.e. the presence of an underlying, logically consistent ‘yard-stick’ that guides a person’s evaluations and opinions). A person’s likelihood to become a knowledgeable citizen furthermore depends on his or her ability, motivation and opportunity to do so as well as the costs to acquire the knowledge (Lupia, 2016).

However, according to American scholars, few citizens seem to live up to the democratic ideal. From the very beginning of scientific public opinion surveying, research has pointed to that political knowledge is unevenly distributed. Berelson, Lazarfeld and McPhee’s American data revealed that ‘certain requirements commonly assumed for the successful operation of democracy are not met by the behavior of the “average” citizen’ (1954, pp. 307–310). In a highly influential essay on mass belief systems, Philip Converse suggested that most Americans know very little about politics and governance. According to him, American political knowledge overall is marked by ‘a high variance and a very low mean’ (Converse, 1964). The average citizens tended to rely on their respective in-group for opinion construction, while ‘a miniscule proportion’ of the population was able shape a belief system into a perfect logical and consistent whole (Converse, 1964, p. 211). This small minority comprised ‘the elites’ – people who devote themselves fully to some aspect of politics or public affairs, like journalists, politicians, activists, higher-level officials and other kinds of experts.

Current studies also find that the American citizenry is characterized by large ‘knowledge gaps’: while the elites seem to ‘know it all’, the average citizen is portrayed as less knowledgeable (e.g. Delli Carpini & Keeter, 1996). Education consistently appears to be the most important reason for knowledge gaps within a population. Class background, income and (in an American setting) race also influence the likelihood of being well-versed in political matters – that is, being a white, well-earning white-collar worker increases the chances of being knowledgeable (Lewis-Beck, Jacoby, Norpoth, & Weisberg, 2008). Men tend to display higher levels of knowledge (Mondak & Davis, 2001; Mondak & Anderson, 2004; Fraile, 2014), middle-aged people know more than the very young and the very old (Opheim Ellis, 2003) and voters identifying
with a party seem to be more knowledgeable as the attachment serves as a cognitive heuristic or a shortcut to political opinion (Niemi & Westholm, 1984; Iversen & Soskice, 2013). In addition to socio-demographic variables, characteristics related to media consumption and political interest consistently prove important for knowledge (Price & Zaller, 1993).

Nevertheless, evidence from Sweden and other comparative studies – which is turned to in the next section – suggest that the picture is somewhat more complex and that the span of inequality in political knowledge is very much dependent on the institutional features and the context in which the citizen operates. Applying a comparative perspective, recent scholars increasingly reject the tradition of treating knowledge inequalities as social constants unaffected by the national context (Fraile, 2013, p. 120). Rather, they argue that knowledge gaps are not merely a function of individual characteristics but are also influenced by institutions such as the electoral system and socio-economic policies. Before turning to an empirical investigation of the current Scandinavian and other OECD countries’ knowledge levels, I outline the arguments of scholars that point more generally to the institutional determinants of political knowledge – a field of research that originated in a study of Swedish voters.

### 5.2 From ‘The Political System Matters’ to the Importance of Equality

In reply to the findings of the American public opinion researchers, Westholm and Niemi (1984) and Granberg and Holmberg (1988) explored the notion of a supposedly ignorant citizenry by comparing the American case to Sweden. In contrast to the United States, the gap between elites and the Swedish mass public was much less apparent. The average constraint in attitudes among the least educated people in Sweden was about at the same level as the highest educated in the United States, and Swedes in general conveyed relatively higher levels of knowledge and stable opinions, regardless of their educational level (ibid., pp. 69–70). Granberg and Holmberg indicated that ‘the political system matters’ and that the multi-party, proportional system of political representation was the reason for the narrower knowledge gap in Sweden.

This first attempt to explain differences in knowledge gaps across several countries was not developed further until the last few years. Pointing to contextual features, the recent literature finds that institutions in a broad sense can be favourable for citizens’ ability, motivation and opportunity to become and stay informed about political matters. In addition to media policies and the information environment, two broad dimensions are conceived to influence political knowledge at the contextual level:

2 See e.g. Iyengar et al. (2010) and Aalberg and Curran (2012).
political institutional factors and policy factors related to the distribution of socio-economic resources.

With regard to political institutions, the literature puts forward two main explanations: the electoral system and the party system. Gordon and Segura (1997) focus on the decision to acquire political information as a cost-benefit calculation for citizens. As politics are remote from everyday life and paying attention to politics is a time-consuming affair, the costs of collecting information for voters outweigh the benefits. However, certain institutional contexts can decrease the costs by increasing the amount of political information available, thereby providing incentives for citizens to collect and think about political issues. One important driver is a multiparty system and the party competition logic that arises from such systems. Parties in a multiparty system differentiate themselves as much as possible from the parties around them in an effort to mobilize their base of support. This involves an increase in the access to and quality of information available to the public, decreasing the cost of collecting information. Polarization of the party system therefore seems to have positive effects on the voters’ knowledge levels and ideological comprehension (Vegetti, Fazekas, & Meder, 2016).

Furthermore, the electoral system can decrease the information costs for citizens. If the votes and outcomes (in terms of seats) are not congruent, the usefulness of even accurate information is limited. Therefore, whether a nation practices first-past-the-post or the proportional translation of votes to seats could have consequences for an individual’s political knowledge about political parties’ ideological positions. In a first-past-the-post system, citizens retain uncertainty about the policy implications of any set of outcomes, whereas in countries with proportional representation (PR) voters are likely to know the party’s real position and the policy implications. In the PR-environment information would be available, accurate and predictive of policy outcomes – and therefore worth collecting for the citizens (ibid., p. 140).

Other scholars highlight socio-economic egalitarianism as crucial for the distribution of knowledge within a society (Milner, 2002; Grönlund & Milner, 2006; Fraile, 2013; Iversen & Soskice, 2015). In this literature, at least three institutions or policies are seen as crucial for an equal distribution of political knowledge. First, Milner (2002) draws a divide between countries with low and high ‘civic literacy’. According to this view, high-civic literacy societies effectively manage to engage citizens in politics, reduce information costs and motivate citizens to collect information partly due to their focus on public education. Educational policies in such societies make sure that all citizens have the cognitive tools at hand to grasp a minimum of

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3 However, this effect declines as the number of political parties increases significantly. As the numbers of parties grow, the shades of distinction between them decrease, and the information demands on the voters go up (Gordon & Segura, 1996, p. 131).

4 In line with Pierson (2006) I treat public policies as institutions.
political issues. Through extensive public primary and secondary education as well as free and universal higher educational training, access to knowledge for all citizens is ensured. In a similar study, Iversen and Soskice (2015) assess the relationship between information levels and mass polarization in 20 Western democracies. They find that countries cluster into two types: one group of countries with low mass polarization, high economic inequality and low information levels (the United States being the prime example) and another group with high ideological polarization, low inequality and high information levels (i.e. Scandinavia). They ascribe a part of this finding to education: more equal education opportunities reduce income inequality and also affect the dispersion of political information by making the cost of acquiring more information smaller. Moreover, Iversen and Soskice assign the clustering of countries to a second institutional feature: the strength of unions. Strong unions produce wage compression, especially when wage bargaining is centralized, which decreases inequality. Moreover, many unions have political ties to the left and seek to mobilize and inform their members about politics, thereby cultivating political discussion both inside and outside the workplace. According to the authors, then, public education and strong unions not only enhance economic inequality; they are also strong predictors of information distribution within a citizenry (Iversen & Soskice, 2015, p. 1807).

Finally, socio-economic, redistributive policies present in ‘high civic’ countries serve to reduce knowledge gaps drastically. Milner (2002) points to the fact that societies characterized by high levels of civic literacy are those with a firm set of social policies aimed at the redistribution of economic and cultural resources. Fraile (2013) argues that the greater the effort of political actors to redistribute economic and cultural resources, the higher the number of opportunities for citizens to acquire information as citizens. When the government makes all citizens contribute to the general welfare through the tax scheme and offers universal services and social protection, the daily lives of the average citizens are intertwined with the workings and consequences of politics. In such an institutional environment, citizens are generally expected to be more motivated to stay informed about societal and political issues (Grönlund & Milner, 2006, pp. 396–399).

5.3 The Scandinavian Case Compared

Low levels of economic inequality thus seem to breed low levels of political knowledge inequality, and Fraile concludes that ‘egalitarian societies produce better-informed citizens’ (Fraile, 2013, p. 133). The rest of this chapter explores these theoretical expectations by studying 20 democracies with a special emphasis on Scandinavian countries. There are several reasons to suspect that knowledge inequality is less pronounced here. First, low inequality is commonly viewed as a key ingredient of the Nordic welfare model (see e.g. Kautto et al., 1999). The ideal of equality, borne by
strong social democratic parties, has played a central role over the last century and has characterized the development of the Nordic welfare state. As social democratic welfare regimes and coordinated market economies, Denmark, Norway and Sweden are well known for comparatively low income inequality, compressed wage structures and low poverty rates (OECD, 2015). Second, as ‘consensus democracies’ with proportional electoral systems, the Scandinavian countries are moderately polarized and fragmented political systems with broad representation of many parties in parliament (Lijphart, 2012). Finally, Denmark, Sweden and Norway are often coined ‘knowledge democracies’, with a strong emphasis on knowledge in the general governance of the state (Christensen, Gornitzka, & Holst, 2017). Comparatively speaking, the Scandinavian countries spend a high share of annual GDP on public education, and they fund their public broadcasters extensively (see e.g. Engelstad, Rogstad, & Larsen, 2017). Scandinavia’s ‘knowledge regimes’, social democratic welfare services and party systems thus provide good reasons to expect that the knowledge gaps are relatively smaller here than elsewhere.

In the next sections, I explore this assumption by first presenting descriptive figures and tables contrasting the knowledge gaps in the Scandinavian countries with those in the United States and comparable OECD democracies. Then, the following questions are explored in a multilevel analysis: Are knowledge gaps generally smaller in countries with proportional, multiparty systems? And do low inequality and redistributive policies affect knowledge inequalities?

5.3.1 Data and Operationalization

The data applied in the coming analysis is the Comparative Study of Electoral Systems (CSES). The CSES data provides two possible measures of political knowledge. First, the data includes a battery of “trivia”-like political knowledge questions. Respondents are asked to name a specific minister; what the unemployment level is; and other questions about current political affairs. This measure has, however, been met with criticism from several fronts. General knowledge questions do not tap into the use of heuristics and underestimate the true knowledge level of the voter (Popkin, 1994; Lupia & McCubbin, 1998). Others make the point that the questions are not randomly selected from the universe of political facts and that many topics relevant for an otherwise informed voter are left out (Lupia, 2016, p. 221). Another important objection is the lack of standardization of the questions across countries. Elff (2009, pp. 18–19) concludes with serious doubts about the equivalence of the knowledge questions

5 For a thorough discussion of this chapter’s methodological choices and data, see Hesstvedt (2016, pp. 19–40). Accessible from http://urn.nb.no/URN:NBN:no-54529
employed in election studies such as that of the CSES and advises researchers not to use the measure at all.

Second, CSES includes data about voter and expert-placement of political parties on the left-right scale. In the following analysis, I make use of these variables to construct a measure of a specific form of political knowledge, namely *ideological understanding* (also referred to as ideological comprehension or party system expertise). This construct captures citizens’ ability to recognize the positions taken by parties on a political left-right scale, and is a common way of operationalizing political knowledge in comparative studies (see e.g. Gordon and Segura, 1997; Fortunato, Stevenson & Vonnahme, 2016; Vegetti, Fazekas and Meder, 2016). Knowing where parties stand with respect to each other implies that the citizen is able to predict who is likely to do what when elected (Vegetti, Fazekas, & Meder, 2016, p. 4). It is also uncontested that the left-right scale structures Western European party competition and political behaviour (Inglehart & Klingemann, 1987; Blais, 2006; Golder, 2010) in the same way as the liberal-conservative continuum structures American politics (Conover & Feldman, 1981; Fiorina, 2008).

I measure ideological comprehension by comparing the voters’ perceptions of left-right positions to the parties’ *objective* positions. In the CSES data, respondents and national election researchers were asked to place the largest parties on a ten-point left-right scale. The dependent variable is therefore constructed by calculating the absolute distance between respondents’ and experts’ judgments of parties’ ideological positions, quantifying to what degree a respondent has ‘misjudged’ a party’s left-right position. In the following analyses, a value of zero means low ideological comprehension and a score of ten means perfect ideological comprehension.

The 20 countries included in the analysis are all established democracies and a part of the so-called OECD group. The data applied in the multilevel analysis of these

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6 There are several other ways to construct this measure. While I make use of the *absolute* distance between expert and respondent judgements, Vegetti et al. (2016) present a distance measure between experts’ and respondents’ orderings of parties, while Gordon and Segura (1997) suggest that the respondent sample mean can serve as parties’ objective position. In Hesstvedt (2016) the latter measure is applied as a robustness test, finding insignificant differences between the expert-based measure and the sample mean-based operationalization.

7 Two dependent variables make up the basis for the following analysis: one that calculates the differences between expert and respondent placement of five parties and a second that applies two parties. The analysis yields similar results for these variables. In the results shown in this chapter, the two-party variable is applied.

8 The countries are Australia, Austria, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, The Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom and the United States. See Appendix A.1 for countries’ years and N.
countries comprise a pooled dataset consisting of CSES rounds two, three and four.\(^9\) The advantage of multilevel analysis is that it takes into consideration that macro variables may influence individual behaviour (Jones, 2008, p. 1). Multilevel-analysis controls for voters being nested in identifiable contexts (countries) and that they collect information within these macro-political environments (Anderson & Singer, 2008, p. 566). These environments can come in the form of formal institutional rules or in the form of differential economic, social and political conditions that shape people’s interpretations and actions. As I apply several rounds of the CSES data, the analysis consists of three levels: individuals (level 1), which are nested in country years or elections (level 2), which belongs to countries (level 3).

To measure the level of economic inequality, the Gini coefficient is applied. A Gini index of zero represents perfect equality, while an index of one implies perfect inequality. The income distribution can be calculated on the basis of the population’s net income – that is, post taxes and transfers or by the gross income (i.e. before taxes). I apply the post-taxes distribution as it expresses the disposable income and also to a certain extent whether the government has engaged in redistribution through means of taxation.\(^10\) To operationalize multiparty systems the analysis includes a measure of the effective number of parties (ENP) proposed by Laakso and Taagepera (1979), the standard numerical measure for the comparative analysis of party systems (Caulier & Dumont, 2003, p. 2). Moreover, a set of socio-demographic control variables are included: education, gender, age, income and party identification.

### 5.3.2 Political Knowledge Gaps: A First Glance

In the figures below, Scandinavian citizens’ knowledge levels are compared to citizens in the United States as well as to voters in the remaining 16 OECD countries. Note that the variable is coded so that a high score (10) means that the respondents display high levels of ideological comprehension and no deviations from the expert placement. A score of, for example, 8 indicates that the respondent misjudged a party by two scale-units.

Figure 5.1 is a first, simple illustration of the knowledge gaps in the three country groups. It shows the mean ideological comprehension (indicated by the circles) and the standard deviation (the black lines). The figure reveals a narrower knowledge gap in Scandinavia – illustrated by Denmark, Norway and Sweden’s lower standard deviation (1,96) compared to the OECD group (2,36) and the United States (3,16).

\(^9\) CSES round one is not used due to poor standardization of the variables related to the dependent variable. In particular, inconsistencies in the coding of missing and ‘don’t know’ answers make it difficult to compare left-right placement in round one to rounds two to four.

\(^10\) See http://data.worldbank.org/indicator/SI.POV.GINI
However, as several countries are lumped together in the OECD-groups, the figure does not show that some countries have higher absolute political knowledge means than Scandinavia. Canada, Switzerland and France (see Appendix A.2.) all have higher means of political knowledge than Norway and Sweden (but not Denmark).

**Figure 5.1.** Means and standard deviations. Ideological comprehension in 16 OECD-countries, Scandinavia and the United States

Figures 5.2, 5.3 and 5.4 compare knowledge levels across groups. In Figure 5.2, the bars visualize average ideological comprehension among men and women, while the black line marks the standard deviation. Men and women are more similar in Scandinavia: the mean knowledge difference between genders is 0.3 in Scandinavia, compared to 0.5 scale units in OECD countries and 1.0 scale unit in the United States. Illustrating similar patterns, figures 5.3 and 5.4 show that citizens with little education and low income lag behind highly educated and well-earning citizens to a much smaller extent in Scandinavia than in the United States. While the difference in political knowledge between voters with no or only primary education and those with higher education is 1.2 scale units in these countries, the number is 2.1 in the United States. Moreover, the low-income group in Scandinavia (i.e. respondents belonging to the lowest income quintile) displays relatively higher levels of knowledge than their counterparts in both the OECD countries and the United States.
Figures 5.2–4. Mean political knowledge by gender, education and income. Standard deviations indicated by black line.
5.3.3 Multilevel Analysis

To explore whether knowledge gaps vary across countries due to inequality and political systems, results from the multilevel analysis are presented in Table 5.1. Models 1 to 3 show the effects of the party system, income inequality and individual background characteristics. The fourth and fifth models analyse whether education is more important for knowledge levels in the United States than in Scandinavia, by introducing cross-level interaction effects. Finally, Models 6 to 8 explore the impact of institutions in general. Here, cross-level interaction effects between income-inequality and education, gender and income are introduced to determine whether the knowledge gaps are smaller in egalitarian countries than in unequal countries.

Model 1 shows, as expected by Granberg and Holmberg, that ‘the political system matters’. There is a significant positive relationship between the number of parties in the party system and ideological comprehension when controlling for ‘extreme’ polarization measured as a squared effective number of parties. The effect of a multiparty system disappears, however, when the Gini coefficient is introduced in Model 2. The absence of the effect when controlling for inequality could indicate that political institutions and redistributive policies are simply two sides of the same coin: countries with a multiparty system also tend to redistribute more, and there is an indirect effect of the party system through socio-economic policies (see e.g. Iversen & Soskice, 2006). The effect of the Gini coefficient remains strong and significant when introducing individual level variables in Model 3. The predicted effect of -7.61 means that when going from the country with the lowest level of inequality, Denmark, to the country with the highest level of inequality, the United States, the predicted level of ideological comprehension increases by 1.24 scale-units.

Overall, models 2 and 3 reveal that education has the strongest effect on ideological comprehension: the average difference in knowledge levels between individuals with no education and a citizen with a university degree is one scale unit, controlled for the other variables in the model. All else being equal, women display 0.25 scale-units of lower levels of ideological understanding, and individuals with a high income have better ideological understanding than those with low income.

However, the differences between groups are reduced when taking the institutional context into account. Models 4 and 5 investigate whether the knowledge gap is smaller between educational groups in Scandinavia and the United States by introducing a cross-level interaction between education and a dummy for Scandinavia and the US, respectively. The differences between the two effects illustrate the expected tendencies: In Scandinavia, the effect of higher education is 0.05, while the same effect is 0.58 in the United States. This means that while highly educated American citizens exhibit considerably higher political knowledge than the uneducated, there is merely a weak such tendency in Scandinavia. However, the direct effects of the country dummies reveal that the effect of being a Scandinavian citizen does not significantly increase the probability of having a high score on ideological comprehension, while being an
Table 5.1. Multilevel regression analysis.

| Model | Level-2 variables | Level-1 variables | Interaction effects |
|-------|-------------------|-------------------|---------------------|
|       | Multiparty system | Gender (woman)     | Scandinavia*education |
| Model 1 | 0.124* | -0.252** | 0.048* |
|       | (0.060) | (0.010) | (0.007) |
| Model 2 | -0.008 | -0.251** | 0.048* |
|       | (0.062) | (0.010) | (0.007) |
| Model 3 | -0.017 | -0.252** | -0.252** |
|       | (0.054) | (0.010) | (0.007) |
| Model 4 | -0.014 | -0.251** | -0.251** |
|       | (0.055) | (0.010) | (0.007) |
| Model 5 | -0.022 | -0.252** | -0.252** |
|       | (0.052) | (0.010) | (0.007) |
| Model 6 | -0.015 | -0.252** | -0.252** |
|       | (0.055) | (0.010) | (0.007) |
| Model 7 | -0.016 | -0.252** | -0.252** |
|       | (0.054) | (0.010) | (0.007) |
| Model 8 | -0.017 | -0.252** | -0.252** |
|       | (0.054) | (0.010) | (0.007) |
|       | Multi. system squared | Age | |
| Model 1 | -0.084* | 0.010** | 0.048* |
|       | (0.043) | (0.002) | (0.007) |
| Model 2 | -0.038 | 0.010** | 0.048* |
|       | (0.043) | (0.002) | (0.007) |
| Model 3 | -0.038 | 0.009** | -0.000** |
|       | (0.043) | (0.002) | (0.002) |
| Model 4 | -0.038 | 0.010** | -0.000** |
|       | (0.043) | (0.002) | (0.002) |
| Model 5 | -0.038 | 0.010** | -0.000** |
|       | (0.043) | (0.002) | (0.002) |
| Model 6 | -0.038 | 0.010** | -0.000** |
|       | (0.043) | (0.002) | (0.002) |
| Model 7 | -0.038 | 0.010** | -0.000** |
|       | (0.043) | (0.002) | (0.002) |
| Model 8 | -0.038 | 0.010** | -0.000** |
|       | (0.043) | (0.002) | (0.002) |
|       | Inequality (gini) | Age squared | |
| Model 1 | -7.613** | -0.000** | 0.048* |
|       | (2.033) | (0.000) | (0.007) |
| Model 2 | -7.032** | -0.000** | 0.048* |
|       | (1.800) | (0.000) | (0.007) |
| Model 3 | -6.694** | -0.000** | -0.000** |
|       | (2.186) | (0.000) | (0.000) |
| Model 4 | -6.055** | -0.000** | -0.000** |
|       | (1.799) | (0.000) | (0.000) |
| Model 5 | -7.108** | -0.000** | -0.000** |
|       | (1.816) | (0.000) | (0.000) |
| Model 6 | -10.85** | -0.000** | -0.000** |
|       | (1.841) | (0.000) | (0.000) |
| Model 7 | -6.510** | -0.000** | -0.000** |
|       | (1.803) | (0.000) | (0.000) |
| Model 8 | 0.059 | 0.000* | 0.048* |
|       | (0.184) | (0.000) | (0.007) |
|       | Scandinavia dummy | Education | |
| Model 1 | | 0.285** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 2 | | 0.292** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 3 | | 0.260** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 4 | | 0.289** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 5 | | 0.280** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 6 | | 0.285** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 7 | | 0.297** | 0.048* |
|       | | (0.007) | (0.007) |
| Model 8 | | 0.292** | 0.048* |
|       | | (0.007) | (0.007) |
|       | USA dummy | Income | |
| Model 1 | | 0.099** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 2 | | 0.098** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 3 | | 0.097** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 4 | | 0.098** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 5 | | 0.107** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 6 | | 0.099** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 7 | | 0.065** | 0.048* |
|       | | (0.004) | (0.004) |
| Model 8 | | 0.066** | 0.048* |
|       | | (0.004) | (0.004) |
|       | Party identification | Income | |
| Model 1 | | 0.066** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 2 | | 0.065** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 3 | | 0.064** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 4 | | 0.065** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 5 | | 0.063** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 6 | | 0.066** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 7 | | 0.066** | 0.048* |
|       | | (0.010) | (0.010) |
| Model 8 | | 0.066** | 0.048* |
|       | | (0.010) | (0.010) |
### The Scandinavian Case Compared

|                | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 | Model 8 |
|----------------|---------|---------|---------|---------|---------|---------|---------|---------|
| USA*education  | 8.134** | 8.059** | 7.801** | 7.795** | 7.827** | 7.806** | 7.778** | 7.804** |
|                | (0.100) | (0.081) | (0.053) | (0.059) | (0.053) | (0.054) | (0.054) | (0.053) |
| Gini*education | 1.413** |         |         |         |         |         |         | -1.095** |
|                | (0.173) |         |         |         |         |         |         | (0.286) |
| Gini*Income    | 1.275** |         |         |         |         |         |         |         |
|                | (0.108) |         |         |         |         |         |         |         |
| Gini*gender    | -1.095**|         |         |         |         |         |         |         |
|                | (0.286) |         |         |         |         |         |         |         |
| Constant       | 8.059** | 8.087** | 8.087** | 8.087** | 8.087** | 8.087** | 8.087** | 8.087** |
|                | (0.081) | (0.053) | (0.053) | (0.053) | (0.053) | (0.053) | (0.053) | (0.053) |
|                |         |         |         |         |         |         |         |         |
| Estimates of variance |        |         |         |         |         |         |         |         |
| Country (level 3) | 0.070** | 0.013*  | 0.007   | 0.008   | 0.009   | 0.009*  | 0.009   | 0.007   |
|                | (0.050) | (0.025) | (0.025) | (0.025) | (0.022) | (0.025) | (0.025) | (0.025) |
| Country year (level 2) | 0.108** | 0.115** | 0.109** | 0.107** | 0.095** | 0.107** | 0.107** | 0.110** |
|                | (0.032) | (0.031) | (0.031) | (0.031) | (0.027) | (0.031) | (0.032) | (0.031) |
| Residual (level 1) | 1.802** | 1.802** | 1.527** | 1.527** | 1.519** | 1.525** | 1.524** | 1.527** |
|                | (0.009) | (0.009) | (0.009) | (0.009) | (0.009) | (0.009) | (0.009) | (0.009) |
| N level 1      | 75788   | 75788   | 61972   | 61972   | 61972   | 61972   | 61972   | 61972   |
| level 2        | 73      | 73      | 73      | 73      | 73      | 73      | 73      | 73      |
| level 3        | 20      | 20      | 20      | 20      | 20      | 20      | 20      | 20      |
| Log lik.       | -129974.465 | -129969.063 | -101164.438 | -101161.151 | -100999.963 | -101131.023 | -101094.588 | -101157.095 |

*p < 0.05, **p < 0.01, ***p < 0.001. Standard errors in parentheses. Dummy-coded variables (1): Gender (woman) and party identification (do identify with a party). Education: four groups, centred. Income: five groups (quintiles). Effective number of parties, Gini, HDI, age and age squared are centred and continuous. OLS regression, ML estimation. Missing excluded from the analysis.
American significantly affects the chances of being less knowledgeable. This means that while the educational knowledge gap is lower here than in the United States, the Scandinavians do not have a higher knowledge level than the other citizens in the sample.

If we turn to the effect of institutions on knowledge gaps between groups, we find further support for the claim that context matters. Models 6-8 explores whether the level of inequality in a country affects the differences in knowledge levels between educational groups, high and low-income groups, and men and women. The interaction effects between the Gini coefficient and citizens’ education, gender and income are all significant. What does this mean? To illustrate the effect, figure 5.5 plots the marginal effect of education on the y-axis and the country’s Gini index on the x-axis. The dotted lines display the confidence interval, and the full line shows the estimated interaction effect between education and the Gini index on ideological comprehension.

![Figure 5.5. Interaction effect between inequality and education. Marginal effects.](image)

The steepness of the line illustrates that the education effects are conditioned by the socio-economic context. The marginal effect of education increases in strength as we move along the horizontal axis, from low-inequality countries to high-
inequality countries. In the most unequal countries the marginal effect of education on ideological comprehension is considerably higher than in the countries with the lowest inequality. Hence, the knowledge gap between well-educated and uneducated groups in a high-inequality country is 1,20, whereas the same difference in a socio-economically equal country is 0,54. This means that education is twice as important for understanding ideology in unequal countries.

Model 7 and 8 also suggests a gap between income groups and gender in high-inequality countries. The effect is illustrated in the marginal effect plots of gender (in the square to the left) and income (to the right) in the figures below.

Figure 5.6. Interaction effect between gender and inequality and income and inequality. Marginal effects.

Figure 5.6 confirms the expectations presented earlier. It illustrates that the negative effect of gender increases with rising inequality levels. Women in countries with a low degree of inequality tend to be more ideologically knowledgeable than women in more socio-economically unequal countries, when controlled for other variables.\footnote{The marginal effect of gender in a low-inequality country is -0,18, and in a high-inequality country it is -0,34.}
The figure to the right shows that the marginal effect of income increases as the inequality level increases. For countries with the lowest levels of inequality, income has no significant effect on ideological comprehension, while in the more unequal countries the effect is 0.21.

5.4 Knowledge Gaps and Inequality: Exploring the Relevance of Scandinavian Institutions and Policies

The major finding in this chapter is that citizens living in countries with a high degree of socio-economic equality are also relatively more equally informed. Equality reduces the effects of the well-established and well-documented predictors of political knowledge. Regardless of income, education and gender, citizens in more socio-economically equal countries are more motivated and able to pay attention and invest their time in understanding what politics and ideology are all about. In contrast, individual resources are apparently more important in unequal countries, such as in the United States, to be able to grasp party ideology. With regard to Scandinavia, citizens of these countries do not necessarily know more about politics than citizens in comparable democracies in Europe. Rather, they exhibit more equally knowledgeable citizens. In short, then, socio-economic equality matters for political knowledge. The question that remains is why there is a relationship between these two resources: why do equal countries, such as those in Scandinavia, also tend to have a more equally informed public?

A first explanation could be that the general level of inequality more or less directly affects the distribution of political knowledge. Studies that lean on relative resource theory (Goodin & Dryzek, 1980; see e.g. Solt, 2008), for example, claim that if income and wealth are more concentrated, power will also be more concentrated, and the less affluent will find that the issues debated are not those that interest them. Economic inequality thus causes a feeling of ‘outsiderness’ among the poorer segments of the population, which leads them to political apathy. As power and wealth are skewed, there is no real possibility for being represented and heard, and poorer citizens give up discussing political matters and lose interest in politics. In such a situation, there would be few incentives to collect information and stay informed hence resulting in a skewed distribution of political knowledge at the aggregate level. A second, and related, explanation would be that the presence of both economic and knowledge equality is the outcome of specific institutions, policies and political choices. Such a perspective would mean that governments promoting redistribution tend to reallocate both material resources and political awareness. What are these specific policies and institutions? To understand why knowledge inequality is lower between genders, income groups and educational groups in egalitarian countries, one could point to the institutional or policy-related features of the Scandinavian countries that arguably can serve to reduce both income and knowledge gaps.
First, educational policies are a likely contributor. In Scandinavia, access to higher education and a publicly funded school system has been a core element of the Nordic welfare state model (Christensen, Gornitzka, & Holst, 2017, p. 244). Students benefit from generous public support for primary and secondary education as a large share of GDP per capita is spent on such measures. Furthermore, citizens have the possibility to pursue higher and high-quality tertiary studies by attending public universities or state university colleges due to extensive state funding. In contrast, countries such as the United States are characterized by moderate levels of public spending on primary, secondary and tertiary education, and private actors are much more prevalent in the education sector (Iversen & Stephens, 2008, p. 631). This can have consequences for egalitarianism both in terms of income and knowledge: The private funding of schools decreases children’s probability of social mobility, and children in countries where the state invests in education have better future prospects (Roemer & Ünveren, 2017). Indeed, the widening of higher education in the Scandinavian countries over the last 20 years has increased greater participation among students from families with low levels of education (Christensen, Gornitzka, & Holst, 2017, p. 243). Public education can therefore be a crucial indicator of the extent to which those at the lower end of the socio-economic spectrum have access to a key resource in acquiring political information.

Second, since the Second World War, Scandinavian countries (Norway and Sweden in particular) are characterized by extensive social policy directed to all sections of the population. With a centralized bargaining system, the wage structure in Scandinavia is also relatively compressed. The result is that the gap between low-income and high-income groups is comparatively small (OECD, 2011, p. 22). Due to generous welfare services and social security nets as well as a relatively high minimum wage, citizens in the lower income quintiles in egalitarian countries might therefore, quite simply, have fewer economic worries than similar groups in countries such as the United States. As a result, people at the lower end of the income spectrum could have more time and resources to spare with regard to engaging in political and societal issues (Inglehart, 1971, 1997).

Third, the narrower gender knowledge gaps might be ascribed to active gender policies. The Nordic countries are today considered the most gender equal countries in the world, both with regard to their women-friendly welfare policies and women’s participation and integration in politics and the public sphere. One of the main areas of welfare state innovation in Scandinavian countries are policies enabling women to enter the labour force, not only through providing day care but also through transfers such as paid parental leave (Iversen & Stephens, 2008). Individual and universal entitlements have included women and men in the welfare state on a more equal basis than has been the case in many other societies. This has resulted in the idea of the ‘women friendly’ state and a kind of partnership or alliance between women and the welfare state (Hernes, 1987). Today, a high level of women’s labour force participation, educational attainment and participation in politics characterizes Scandinavia. In other words, gender policies have been important in empowering women and also promoting equality with regard to political knowledge.
5.5 Concluding Remarks: Citizenship in a Time of Rising Inequality

This chapter has argued for the relevance of an institutional perspective to understand the distributions of political knowledge within a society. In particular, the findings indicate that policies and institutions promoting redistribution and egalitarianism are important contributors to the distribution of citizens’ non-material resources. Today, however, it is well-documented that within-country income inequality has risen dramatically in most Western democracies over the past decades. This holds true even for Scandinavian countries. While Norway, Sweden and Denmark all have lower income inequality than most other countries in Europe, inequality is increasing here as well. Norway has seen rising inequality in the period 1975–2004 (Mastekaasa, 2011), and in Sweden and Denmark inequality grew more than elsewhere in the OECD area in the 2000s (OECD, 2011, p. 22).

This not only raises economic and social concerns. As this chapter reveals, growing inequality also raises political-, democratic- and governance-related concerns. Political knowledge is not the only characteristic that is linked to inequality; several other studies point to the negative effects of inequality on different aspects of citizenship. Voting turnout, interest in politics and political discussion are affected by the level of inequality; citizens tend to distrust politicians and parliaments in unequal societies, and they are less satisfied with democracy (Solt, 2008; Schäfer, 2010; Andersen, 2012). Social trust, social tolerance, voluntary involvement in associations and social participation are also among the things that are significantly affected by the general level of socio-economic equality (Uslaner & Brown, 2005; Andersen & Fetner, 2008; Andersen & Milligan, 2011; Lancee & Can De Werfhorst, 2012).

In other words, there is no doubt that social inequality has widespread consequences for peoples’ ways of enacting their citizenship. In the long-run, it can also affect the functioning of democracy as a system of governance. This is not only of urgent policy relevance but should also be the object of more systematic analyses. Which specific institutions and policies affect the inequality levels in regard to income and other aspects of citizenship? Are these institutions resistant to change over time? In a time of rising inequality, it is crucial that we learn more about the consequences of this pattern.

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## Appendix

### Table A.1. Country and country years, N

| Country year     | N   | Country year     | N   | Country year     | N   |
|------------------|-----|------------------|-----|------------------|-----|
| Australia, 2004  | 1769| Germany, 2009    | 2095| New Zealand, 2011| 1374|
| Australia, 2007  | 1873| Germany, 2013    | 1889| Norway, 2001     | 2052|
| Australia, 2013  | 3953| Greece, 2009     | 1022| Norway, 2005     | 2012|
| Austria, 2008    | 1165| Greece, 2012     | 1029| Norway, 2009     | 1782|
| Austria, 2013    | 1000| Iceland, 2003    | 1446| Portugal, 2005   | 2801|
| Canada, 2004     | 1674| Iceland, 2007    | 1595| Portugal, 2009   | 1316|
| Canada, 2008     | 4495| Iceland, 2009    | 1385| Spain, 2004      | 1212|
| Denmark, 2001    | 2026| Iceland, 2013    | 1479| Spain, 2008      | 1204|
| Denmark, 2007    | 1442| Ireland, 2002    | 2367|                  |     |
| Finland, 2003    | 1196| Ireland, 2007    | 1435| Sweden, 2002     | 1060|
| Finland, 2007    | 1283| Ireland, 2011    | 1853| Sweden, 2006     | 1547|
| Finland, 2011    | 1298| Italy, 2006      | 1439| Switzerland, 2003| 1418|
| France, 2002     | 1000| Netherlands, 2002| 1574| Switzerland, 2007| 3164|
| France, 2012     | 2014| Netherlands, 2006| 2359| Switzerland, 2011| 4391|
| France 2007      | 2000| Netherlands, 2010| 2153| United Kingdom, 2005| 860|
| Germany, 2002    | 2000| New Zealand, 2002| 1741| United States, 2004| 1066|
| Germany, 2005    | 2018| New Zealand, 2008| 1149| United States, 2008| 2102|
|                  |     |                  |     | United States, 2012| 1929|
| **Total**        | 93731|                  |     |                  |     |
Table A.2. Ideological comprehension; country means

| Country    | Mean | N   |
|------------|------|-----|
| Denmark    | 8.36 | 3468|
| Canada     | 8.23 | 6169|
| Switzerland| 8.14 | 8973|
| France     | 8.10 | 5014|
| Germany    | 8.09 | 8002|
| Norway     | 8.04 | 5846|
| Spain      | 7.99 | 2416|
| Australia  | 7.99 | 7595|
| Sweden     | 7.93 | 2607|
| Finland    | 7.91 | 3777|
| Greece     | 7.89 | 2051|
| Netherlands| 7.87 | 6086|
| Iceland    | 7.84 | 5905|
| Portugal   | 7.59 | 4117|
| Austria    | 7.32 | 7595|
| Italy      | 6.59 | 1439|
| Ireland    | 6.51 | 5655|
| New Zealand| 6.45 | 4264|
| United States | 6.10 | 5097|
| UK         | 6.07 | 860 |
| Total      | 7.69 | 91506|