Partisan, not Ignorant - Citizens' Use of Arguments and Justifications in Direct Democracy

Céline Colombo

Thesis submitted for assessment with a view to
obtaining the degree of Doctor of Political and Social Sciences
of the European University Institute

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Department of Political and Social Sciences

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This thesis is a work of independent research. In accordance with §9.2 of the 'Academic rules and regulations for the doctoral and master's programmes' at the European University Institute (as amended by Academic Council decision N° 2 of 10 December 2014), the thesis contains my own account of my investigations. It has not previously been published in full. Earlier versions of some of the contents (chapter 4 is co-authored with Prof. Hanspeter Kriesi) are part of the work, and I contributed over 60%.

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Abstract

A competent citizenry is the key to the legitimacy of direct democratic decisions, but just how competent are citizens in direct democracy? Understanding how citizens reason and how they make their decisions is ever more important as the use of direct democratic instruments is growing throughout the world. I propose a concept of citizen competence based on reason-giving. A competent citizen is one who bases his or her decisions on substantive, policy-related arguments, and who considers a diversity of arguments before taking a decision.

In this thesis I use a multi-method approach, combining three different datasets to analyze citizen competence in direct democracy: cross-sectional post-ballot surveys from 34 popular votes in Switzerland; a panel dataset covering two referendum campaigns in Switzerland; and a lab experiment conducted in Scotland during the Scottish independence referendum in 2014.

I found, that citizens have a surprisingly accurate knowledge of the policy-related arguments of the debate. Furthermore, arguments are significantly associated with vote intention, even when controlling for party preference. This first results highlight the importance of meaningful arguments in political opinion formation. However, a second finding of my project is that citizens tend to process arguments in a biased way, preferring arguments compatible with their prior beliefs and partisan attachments, and disregarding or devaluing incompatible information. Yet this tendency for directional, motivated reasoning can be discouraged by holding individuals accountable for their views, that is, by making them justify their position to others.

The conclusions I draw for the legitimacy of direct democratic decisions are mixed. While citizens are not as uninformed and minimalist as they are often depicted in public opinion research, they are still partisan and find it difficult to process information impartially. Therefore, in order to enhance the legitimacy of direct democratic procedure, providing citizens with diverse and balanced information is necessary, but not sufficient. They need to encounter an environment where they are motivated to be accurate, for example, by being expected to justify themselves to others in cross-cutting discussions.

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Chapter 1

Introduction

In this chapter, I will first explain my personal motivation for this project before giving a brief summary of my general research interests and the principal contributions made by this research. A more detailed description of the research puzzle and the main argument follow in Chapter 3. I will also give a brief introduction to the different types and instruments of direct democracy and their use in Switzerland and elsewhere in order to familiarize the reader with the political context in which the empirical studies have been set. Finally, I will outline the structure of the thesis.

1.1 Research motivation

On 29 November 2009 Swiss voters went to the polls and accepted a constitutional ban on the construction of mosque minarets in their country. This vote originated in a popular federal initiative launched mainly by politicians from the radical right Swiss People's Party (SVP) and the Federal Democratic Union (EDU). At the time, Switzerland only had four minarets. The latest polls, conducted in early November 2009, had predicted that the initiative would fail with a minority of 37 per cent votes in favour. In fact, it was accepted with a clear majority of 57 per cent. This large deviation from the predictions led to much public criticism of the director of the main Swiss polling institute, who felt compelled to justify himself in the Swiss media.

Not only was the minaret ban unexpected, it was also highly problematic from a legal point of view. Before the vote, the Swiss government and the parliament had rejected the proposal and recommended a 'No' vote, mainly because the initiative would threaten the religious peace in the country and because it contradicted both the federal constitution and international law. More specifically, a ban on minarets clashed with the principles of religious freedom, and the equality before the law and the prohibition of discrimination, which are anchored in the Swiss federal constitution and in the European Human Rights Convention (Article 9) of which Switzerland is a

signatory state. In fact, the human rights organization Amnesty International declared the ban on minarets as “discriminating, disproportional, and unnecessary”.[1]

While this heated debate was taking place I was in my last year at the University of Zurich studying social psychology and political science. Together with many friends and colleagues, I was disturbed by the result, but also puzzled: Why would people accept such an obviously useless and offensive, islamophobic, proposal? Banning minarets, given that there were so few of them, would in no way hinder Muslims practicing their religion. But it would certainly stir up resentment, distrust, and suspicion in the Islamic community. In fact, the initiating committee described the referendum as a statement against the ‘Islam’s political claim to power’. Was I surrounded by racists? On the other hand, when talking to, or reading about, those who were sympathetic to the ban, I often heard the slightly absurd argument that they were worried about the noise made by the muezzin call for prayers from the minarets. Its supporters were, it seems not only racists, but also ignorant? As I was interested in human behaviour, and also in political structures and developments, I started to think harder about how people make their decisions in direct democracy. Whenever I asked people what they thought had happened, and how people had made up their minds, talk ended up focusing on how people should ideally take such decisions. Thus, I discovered that the empirical question ‘What happens’ was closely linked to some sort of normative question on ‘What *should* have happened’.

Clearly, I was not the only person concerned about the minaret decision, and the minaret decision was not the only controversial decision taken in recent years in Swiss direct democracy. Figure 1.1 shows two billboard advertisements commissioned by the SVP to promote their initiatives, which have stirred up much controversy because of their aggressive and offensive style. Since 2000, three initiatives have been accepted which demand harsher punishment for sexual offenders. All of them were launched by civil society organizations and all raised doubts about the feasibility of their legal implementation and/or their compatibility with human rights and international law. In 2004 an initiative for the lifelong detention for ‘untreatable’ sexual and violent offenders was accepted, which restricted the right for judicial review to cases where ‘new scientific insight’ was likely to lead to effective treatment. In 2008, Swiss voters accepted an initiative which

[1] See https://www.amnesty.ch/de/laender/europa-zentralasien/schweiz/dok/2009/nein-zur-minarettinitiative/stellungnahme-minarett-initiative/.

exempted pornographic crimes against children from the statute of limitations. The initiative was launched by a committee set up by the mother of a victim. Finally, in 2014, another initiative passed, prohibiting criminals convicted of sexual offenses against children from working with children for the rest of their lives ('the paedophiles' initiative').

Figure 1.1. Controversial billboards promoting radical right-wing SVP initiatives
Note: poster for ban on minarets (left); poster for expulsion of 'criminal foreigners' (right).

In immigration policy, in 2010 Swiss voters accepted another initiative launched by the radical right-wing SVP, which demanded the 'expulsion' (i.e. the loss of residence permit) of 'foreigners' (i.e. non-Swiss citizens living in Switzerland) who were convicted of certain crimes, including social benefit fraud. The proposed constitutional amendment was criticized for violating the constitutional principle of proportionality, and the European Human Rights Convention (in particular, the right to the protection of family life). More recently, in February 2014, the electorate accepted an initiative, again launched by SVP members, entitled 'Mass Immigration Initiative', which called for the introduction of immigration quotas. This would clearly contradict the clause on the free movement of people, one of the most important clauses in the bilateral treaties between

Switzerland and the European Union. To date, it is unclear whether and how these initiatives will be implemented.

At the level of politics, talk about possible reforms of direct democratic instruments – in particular reforms of the citizens' initiative – have intensified. Yet, to date, none of the reform proposals presented have been taken up. Avoiding clashes between popular decisions and international law such as human rights law is difficult in the Swiss system, first because there is no constitutional jurisdiction, and, second because citizens' initiatives amend parts of the constitution directly, i.e. even if constitutional jurisdiction were applicable, citizens' initiatives in their current form would not be affected by it. Furthermore, before being put to the ballot, popular initiatives can only be rejected by Parliament in very few cases (if they do not respect the unity of the subject, or if they violate fundamental principles of international law or *ius cogens*). In 2013, the Swiss Federal Council (the Swiss government) suggested two reform proposals for consultation by Parliament. The first was a legal pre-examination of citizens' initiatives with regard to their compatibility with international law. The examination would be conducted by the Federal Office for Justice and the Directorate of International Law. The second proposal was to extend the causes for invalidity of citizens' initiatives in order to include the fundamental principles and rights of the Swiss constitution. Both proposals were rejected in the consultation phase (see Milic et al. 2014). In sum, reforming Swiss direct democracy appears to be difficult, not least because every change of popular rights requires the approval of the people themselves.

In the public sphere, all these controversial popular decisions triggered intense debate on the (in)competence of Swiss voters, and reactions like the following have become common in the public debate on direct democracy:

> Es ist in einer von schäumenden Emotionen geprägten Stimmung nicht gelungen, in einer argumentativen Auseinandersetzung aufzuzeigen, dass der indirekte Gegenvorschlag des Parlaments besser und schneller gegen Abzockerei wirken würde. Wer mit rationalen Argumenten gegen Emotionen antritt, hat es naturgemäss ungleich schwerer.[2]

[2] "In an atmosphere packed with strong feelings, the attempt to show, in an argumentative discourse, that the indirect counterproposal of the Parliament would have worked better and more rapidly against excessive managerial salaries

The scholarly community in Switzerland also took up the issue of citizen competence. Early studies, based on survey data, had found disappointingly low levels of voter competence. Gruner and Hertig (1983) classified only one sixth of the electorate as ‘competent’. Later studies, which used different operationalizations of competence came to more positive conclusions (Bütschi 1993; Milic 2009; Trechsel 2006). In 2005, Hanspeter Kriesi (2005), a pioneer in the analysis of Swiss voter behaviour (Milic, Rousselot and Vatter 2014), published a comprehensive study on citizens' direct democratic decision-making which set the basis for much further research. By analyzing all direct democratic votes in Switzerland 1981 and 1999, he found, first, that the elite, i.e. party coalitions and their mobilisation efforts during the campaign, is decisive in shaping citizens' vote intentions. Second, he found that arguments are crucial in the process of opinion formation. In total, as much as 40 per cent of variance in citizens vote intentions was explained by their position on specific policy arguments. I found this remarkable and started to become more interested in the role of arguments in political opinion formation.

In 2012, Hanspeter Kriesi edited a book entitled *Political Communication in Direct Democratic Campaigns* (Kriesi 2012) which focused on the behaviour of elite actors and media effects. Furthermore, Regula Hänggli also focused on elite actors' behaviour in her thesis on the process of framing in direct democratic campaigning (Hänggli 2011; Hänggli, Bernhard & Kriesi 2012; Hänggli & Kriesi 2010); and Laurent Bernhard analyzed parties' campaigning strategies (Bernhard 2012; Kriesi, Bernhard & Hänggli 2009). In contrast, focusing more on citizens' behaviour, Milic analyzed the use of arguments (2009), and correct voting (2012) in Swiss direct democracy. By comparing two initiatives with similar proposals, which were put forward by the political left in one case,[3] and by the right-wing SVP in the other,[4] he found that voters' support of arguments was biased by party preference. In other words, voters are more ready to accept arguments put forward

failed. It is difficult to compete against emotions with rational arguments” (Martin Landolt, president of the Conservative Democratic Party (BDP) speaking about the ‘Initiative against excessive managerial salaries’ in an interview with the *Neue Zürcher Zeitung,* 4 March 2013).

[3] Initiative for the transfer of national bank profits to the pension fund.

[4] Initiative for the transfer of surplus gold reserves to the pension fund.

by their preferred party (Milic 2009). In another paper, on correct voting, Milic (2012) investigates under what conditions Swiss citizens make consistent decisions, that is, decisions which reflect their argument-based opinions. He finds that individual levels of political knowledge, but also the use of heuristics, affect correct voting.

Nai (Lanz and Nai 2015; 2010; 2015) worked mainly on the cognitive processes underlying referendum voting, and on correct voting in direct democracy. Lanz and Nai (2015) took up Milic's conceptualization of correct voting, but added explanatory variables on the context-level. They found that individual knowledge levels only partly determine correct voting, while intense, but low complexity, campaigns, offer the best preconditions for correct voting. Finally, media scientists Christian Schemer and Jörg Matthes carried out research on the effect of emotions versus cognition in direct democratic decision-making (Kühne & Schemer 2015; Kühne et al. 2011; Matthes, Rios Morrison & Schemer 2010; Schemer, Wirth & Matthes 2010). In broad terms they found that emotions and cognition affect vote decisions directly, but they also found evidence of emotions affecting cognition, and thus exerting an indirect effect on voting decisions.

Another strand of research in Swiss political science combines normative democratic theory with empirical research in analyzing direct democracy from the perspective of deliberative democracy theory. André Bächtiger, Marco Steenbergen and colleagues (2011) conducted deliberative field experiments during Swiss referendum campaigns. They were mainly interested in the effects of citizen deliberation on their opinions and vote decisions: would deliberation lead to more common-good oriented attitudes and prevent people from supporting populist arguments? The research is ongoing, but the initial results suggest positive effects of deliberation on the moderation of anti-immigrant attitudes. In an online-experiment on the expulsion initiative, participants were more favorable of the governments' moderate counterproposal after deliberating. Yet the results also suggest that opinion change does not occur during the face-to-face discussion, but in the preceding information-phase, where participants were asked to read informative material on the topic. Thus there is some evidence for the process of 'deliberation within', or change of mind through exposure to, and consideration of, other arguments.

As with these scholars, I too am interested in finding a way to assess the quality of opinion formation and decision-making in direct democracy. What is a competent citizen in direct democracy? How can we conceptualize and measure competence? Are citizens uninformed or do

they know the arguments relating to policy debates? Do citizens actually reason and weigh up arguments or do they resort to low-effort cognitive strategies? Is their reasoning driven by accuracy or motivated by prior beliefs and/or party attachments? How can biased thinking be reduced and replaced by considered opinions?

Hobolt (2006) suggests that to assess the question of legitimacy of direct democratic decisions we must ask three questions: How do voters reach their decisions? What are the strategies of the elites? And, what are the policy outcomes? In another attempt to categorize research on direct democracy, Milic et al. (2014) distinguishes between two branches of research:[5] Systemic and behavioural. Systemic research analyzes the effects of direct democracy on the political system, process and actors, while behavioural research focuses on the behaviour of individual citizens. Thus behavioural research is mostly interested in the factors explaining individual participation and vote decisions (see Figure 1.2).

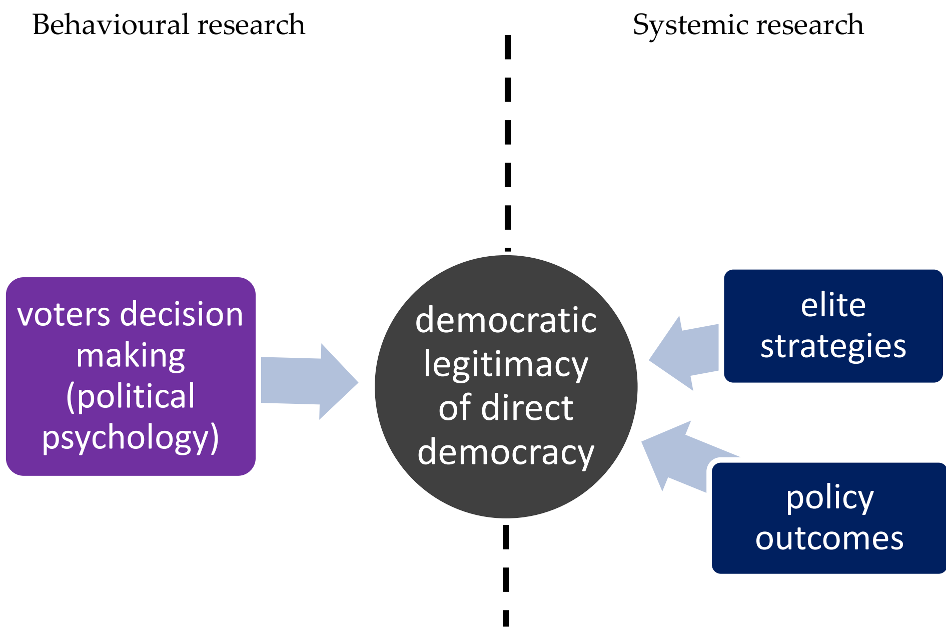

Figure 1.2. Organization of research on direct democracy
Note: Adapted from Hobolt (2006) and Milic et al. (2014)

[5] Note that the same distinction can be made for research on electoral systems.

This research project contributes to behavioral research and to the question of how voters reach decisions. Thus I have taken a political psychology perspective. In other words, I focus on the micro-level of how voters assess and use arguments and which cognitive and motivational processes underlie this process. Political psychology is basically a question of applying what is known from human psychology to political processes.

In assessing the quality of a democratic decision, we need a normative standard. Here, deliberation theory provides a range of possible criteria for quality, the most important being the ability to justify one's decision based on substantive policy arguments. Recent work has started to link deliberation theory to direct democracy (see Mendelsohn & Parkin 2001). Another strand of research links deliberation theory to findings from social and cognitive psychology on opinion formation processes (see e.g. Mendelberg 2002). Therefore, I decided to integrate aspects of these three strands of theory and research: direct democracy, deliberative democracy, and the psychology of opinion formation. Arguments and justifications are crucial in deliberation theory. Ideally, political opinions and decisions should be based on rational discourse and the exchange of arguments. Psychologists, however, have always been sceptical about our capacity for limitless rational information processing and have devoted much research to the biases and distortions of rational cognition (see Chapter 2 for more information on the three research fields).

My thesis contributes to the literature in several ways. First, with a side-glance at deliberation theory, I emphasize the importance of arguments for citizen competence and formulate a concept of 'considered opinion'. Furthermore, I propose a novel measurement of citizen competence based on an empirical analysis of justifications. Contrary to a minimalist view of public opinion, I find that citizens know the arguments of the policy debate, and are able to justify their vote decisions with meaningful arguments. Second, I introduce the concept of motivated reasoning or biased processing of arguments from political psychology and test the cognitive processing of arguments in-depth. Here too I find that arguments are a crucial element in opinion formation, voters do not follow their preferred party's recommendations blindly, in contradiction to the theory of low-information-rationality. However, voters do tend to process arguments in a biased way, preferring information which is consistent with pre-existing opinions and party-preferences, and devaluing or

disregarding incompatible information. Third, I test possible 'debiasing strategies', which are meant to reduce partisan bias in information processing. I find that accountability, or the expectation to justify one's political position to others, leads to more balanced and considered opinions. Finally, concerning methodology, I have combined different methodological approaches, such as cross-sectional post-ballot surveys, open-ended survey answers, panel survey data, and experimental data in order to assess the question of citizen competence.

1.2 Direct democracy in Switzerland and beyond

Direct democracy aims at translating the people's will into political decisions as directly as possible. It can be defined as "the direct participation of the active citizenry in deciding substantive political issues […]" (Marxer and Pállinger 2007, 14). In contrast to the other principal model of democracy, liberal or representative democracy, citizens do not transfer their decisional mandate to elected representatives, but instead they make their own decisions on policy questions at the ballot box. While in political theory, models of representative and direct democracy are often depicted as contrasting, in reality, 'pure' direct democracies do not exist. Modern democracies are constituted as representative political systems, in which more or less elements of direct democracy are embedded (Milic, Rousselot & Vatter 2014). Direct democratic instruments thus have merely a complementary status in political systems.

Elements of direct decision-making were introduced for different tactical and political reasons and expected to bring various advantages over purely representative systems (Qvortrup 2014). First, direct democracy is often equaled to pure or unmediated popular sovereignty (Barber 1984; Budge 1996). It is supposed to represent the people's sovereign will more accurately than representative instruments. Direct democratic options in a political system should in theory increase the elected representatives' responsiveness and move policies closer to the median voter's preferences (Hug & Tsebelis 2002; Matsusaka 2004). Thus, direct democratic instruments have a role similar to that of political parties: as devices to channel the people's political views (Qvortrup 2014; Serdült 2014). Indeed, as Qvortrup writes, direct democracy mechanisms tend to be introduced in countries with less 'frozen' or stable party systems.

Second, citizen-initiated mechanisms of direct democracy (in contrast to top-down instruments) constitute a check on elected representatives, which can be used to prevent their misuse of power. Altman (2010, 2) describes them as "intermittent safety valves against perverse or unresponsive behavior of representative institutions and politicians." For Hug and Tsebelis' (2002) these mechanisms introduce voters as an additional veto player[6] in the political system. Furthermore, citizen-initiated mechanisms of direct democracy can be a vehicle for political outsiders or minority civil society groups, such as social movements, to put their concerns on the political agenda. Finally, in modern democracies, direct citizen participation constitutes a way to 'bring citizens back in', and is a possible remedy for widespread political alienation and disinterest (Zittel & Fuchs 2007). As formulated by Bernhard (2012, 199), "giving people more voice is widely considered a promising remedy against the current crisis of democracy".

Yet direct democracy has always been criticized as well. On the one hand, critics fear that the use of direct democracy could undermine the representative system and lead to a repressive, majoritarian mass democracy, overriding plurality and minority-rights (Qvortrup 2014; Tierney 2012). After the defeat of the European Constitution in popular votes in France and the Netherlands, the former president of the European Commission, José Manuel Barroso, criticized referendums because they "undermine the Europe we are trying to build by simplifying important and complex subjects" (Barroso quoted in Hobolt 2009, 23).On the other hand, direct democracy is suspected to lend itself to elite-manipulation and to be (mis-)used by the elite as a control-instrument – mainly in the form of popular plebiscites launched to consolidate the power of the government (Altman 2010; Tierney 2012). In this way, direct democratic instruments can be used by elite actors to by-pass state institutions and procedures in order to achieve their aims or to "disengage from the responsibility of tough politics" (Altman 2010, 10).

Finally, probably the most frequent and pervasive criticism of direct democracy is the lack of competence and ability of regular citizens to decide important policy issues, and the poor decision-making standards in direct democracy (Kriesi 2005; Tierney 2012). As I will explain in in Chapter 2, this criticism has two sides. First, citizens are assumed to be largely disinterested in, and uninformed about politics and therefore their opinions are assumed to be incoherent and unstable

[6] "Veto players are actors whose agreement is necessary for a change in 5.3." (Hug and Tsebelis 2002, 466).

(Converse 1964). Second, the institutional logic of direct democracy is criticized for not providing any incentives for deliberation and exchange of arguments. Instead, popular votes are regarded as snapshot aggregations of popular preferences which do not live up to normative standards of deliberative decision-making (Chambers 2001). In my dissertation I focus on this latter criticisms and try to assess citizen competence and people's use of substantive arguments.

In sum, direct democracy has its supporters and its critics. Despite these controversies, many political scientists take the stance that representative and direct mechanisms of decision-making do not basically differ from each other in their functioning after all (Budge 1996; Kriesi 2005).

1.2.1 Types of direct democratic instruments

Direct democracy comprises many different forms and facets and is certainly not a homogenous concept. Various attempts to classify it have been made in political science (see e.g. Hug & Tsebelis 2002; Milic, Rousselot & Vatter 2014; Vatter 2009). Most importantly, many authors distinguish between referendums, where citizens vote on a measure adopted by parliament, and initiatives, which allow citizens to propose a policy change themselves. Adding more differentiated categories, Altman (2010) provides a clear and useful classification which is based on three main criteria: the *initiator* of a measure, either the constitution, the political elite (top-down), or the citizens (bottom-up); the *purpose* of the measure can either be to maintain the status quo (optional referendum) or to alter the *status quo* (initiative); finally, ballot measures can have a *binding* or a *non-binding* (consultative) character. In addition to these basic criteria, direct democratic measures are characterized by some important procedural differences, in particular the number of signatures required to launch a measure as a proportion of the electorate, the time limit within which this signatures have to be collected, possible participation quorums and approval quorums, and, finally, possible qualifiers which exclude certain issues to consider. In what follows I will describe the direct democratic instruments available in Switzerland and Scotland respectively, the two cases I consider in my dissertation. Note that throughout the thesis I will use the terms 'referendum', 'popular vote' and 'direct democratic vote' interchangeably, and I will specify the exact institutional form of the vote only where this is strictly necessary.

1.2.2 Direct democratic instruments at the national level in Switzerland

Direct democracy, is one of the most distinctive features of the Swiss political system. Worldwide, Switzerland still accounts for around 50 per cent of all referendum votes (Serdült 2014), and has been classified as the world champion of direct democracy (e.g. Setälä & Schiller 2009). Direct democracy has a long tradition in Switzerland. The first national measures were introduced with the foundation of the Swiss federation in 1848, while at the cantonal and municipal level, direct democracy existed before that. In brief, the direct democratic tradition can be traced back to two main sources: a tradition of communal self-government which evolved during the late medieval age in Switzerland (as in Germany and Italy) and liberal-representative, egalitarian, and democratic ideas stemming from the French revolution, on the other.

Switzerland's political system offers a wide range of opportunities for direct citizen participation in the creation, change and abolition of binding legal norms (Serdült 2014). Between 1984 and 2014, Swiss voters have been called to the ballots on average nine times a year to decide on national policy proposals.[7] This number increases considerably if we add votes at the cantonal or municipal level. In my dissertation I focus on national-level votes and therefore I will limit the descriptions to national-level instruments. Kriesi and Trechsel (2008), and Milic et al. (2014), provide comprehensive overviews of direct democratic institutions at the different levels of the Swiss system. I will limit myself to the most frequently used ones in order to familiarize readers with the kind of procedures analyzed in the empirical chapters (see Table 1.1 for an overview of the main instruments used). I should point out that in the Swiss case, all direct democratic decisions are binding, as consultative referenda do not exist at the national level.

Votes can be initiated by the constitution – every constitutional amendment is subject to a mandatory referendum – or by citizens. Citizen-initiated mechanisms can be subdivided into popular initiatives, where citizens propose a constitutional amendment, and optional referendums, where citizens (or cantons) demand the abolition of a proposed federal law.

[7] Source: Altman 2011 and Centre for Research on Direct Democracy (c2d) (http://www.c2d.ch/index.php).

Table 1.1: Main instruments of direct democracy on the national level in Switzerland

Instrument	*Year*	*Initiator*	*Purpose*	*Approval quorum*
Mandatory constitutional referendum	1848	Constitution	any constitutional amendment	double majority of votes and cantons
Optional (facultative) legislative referendum	1874	50,000 citizens or 8 cantons	all federal laws	simple majority of votes
Popular initiative for a total revision of the constitution	1848	100,000 citizens	total revision of constitution	simple majority of votes
Popular initiative for a partial revision of the constitution	1891	100,000 citizens	constitutional amendment (formulated in general or specific terms)	double majority of votes and cantons
Counterproposal to a popular initiative for a partial revision of the constitution	1891	Federal Parliament	constitutional amendment (formulated in general or specific terms)	
Popular general initiative	2003–2009	100,000 citizens	constitution or law	simple majority; Parliament decides on implementation

Note: Adapted from Kriesi and Trechsel 2008. Year is the year of introduction into the Swiss constitution. Other instruments not mentioned here due to their minor relevance are: the mandatory treaty referendum for accession to supranational organizations and organizations of collective security; the facultative treaty referendum which applies to a part of international treaties; the resolutive referendum for retroactive suspension of urgent federal laws. The popular general initiative which was introduced to allow the people to initiate general suggestions for the attention of Parliament, including legislative bills, was abolished after six years for lack of use.

The Swiss system does not directly provide for elite-initiated top-down referendums[8]. However, the Federal Parliament may formulate a counterproposal in response to a popular initiative. In this case the voters must choose between the adoption of either one of the two proposals or maintaining the *status quo*. As Trechsel and Kriesi (2008) point out, optional referendums and popular initiatives, even though both initiated by citizens, operate using a different logic. While the popular initiative is located at the start of the legislative process, and proposes a change in the status quo, optional referendums are located at the end of the legislative process, and aim at maintaining the status quo. Thus while both instruments offer an opportunity to check and correct the actions of the political elite, the referendum constitutes a 'brake' and an impediment to change, while the initiative potentially constitutes a force of change. Because voters tend to avoid risk and prefer to maintain the status quo (see e.g. Kriesi 2005), initiatives are much less likely to pass at the ballot box than in referendums. Of all initiatives voted on between 1848 and 2013, only 10.1 per cent where accepted, while the figure is 55.8 per cent for optional referendums and 74.4 per cent for mandatory referendums (Milic et al. 2014). In addition to their direct effects, direct democratic instruments are assumed to exert considerable indirect effects on the working of the political system (Matsusaka 2004; Neidhardt 1994; Papadopoulos 2001; Trechsel and Sciarini 1998). In the Swiss case this is in particular a tendency to find compromises during the legislative consultation procedure so as to avoid potential popular votes, and thus a drive towards a more consensual and 'negotiatory' political system.

With regard to signature requirements, a popular initiative requires 100,000 signatures collected within eighteen months from the publication of the initiative. An optional referendum requires 50,000 signatures collected within 100 days from the official publication of the directive. These signature requirements were last adjusted in 1977, after the introduction of female suffrage. More recently, the signature requirements have been debated, as the proportion of the electorate necessary to launch an initiative has declined from about 6 per cent in the early twentieth century to 1.9 per cent in 2013 (Serdült 2014). This means that over time it has become much easier to launch an initiative and thus, the use of initiatives has increased considerably, in particular over the last forty years, as the next section will show. Some say, this leads to an overwhelming number of popular votes and indeed, the proposal to increase signature requirements has appeared more frequently in recent years (Rühli & Adler 2015; Sager & Vatter 2013).

[8] An exception is the optional referendum, which can be initiated by eight cantons.

Switzerland has no participation quorums, and in fact average turnout in direct democratic votes is extraordinarily low. After the Second World War, average turnout in direct democratic votes dropped from 60 per cent to 45 per cent of the population (Serdült 2014). However, Swiss citizens have voted selectively, and cumulative turnout rates are much higher. For example, Dermont (2014) found, looking at the canton St. Gallen, that 81 per cent of citizens had participated at least once between 2010 and 2013 (see also Serdült 2014; Milic et al. 2014). Furthermore, some votes generate high turnout rates, such as for example the referendum on the accession to the European Economic Area in 1992 (78.8 per cent turnout), or more recently the vote on the introduction of immigration quota (50.3 per cent). Although there is no participation quorum, some votes require a so-called 'double majority' of cantons and voters to pass. In other words, at least 50 per cent of the Swiss electorate has to accept the proposal, but at the same time also at least half the cantons. This is the case for mandatory referendums and popular initiatives, but not for optional referendums. According to Kriesi and Trechsel (2008, 52), "The requirement of a double majority is a direct consequence of the country's federal structure and was initially designed as a safeguard against the 'tyranny of the majority' by the most populated cantons". In recent years, this requirement has led to tension, because the demographic asymmetries between cantons have grown and the ever smaller proportion of the population living in small, rural, cantons possesses a growing veto power over the rest of the country (see also Sager and Vatter 2013, for an overview of the debate on the double majority).

To conclude, while Swiss direct democracy has been surrounded by various controversies, and proposals for reform have been put forward in recent years, the Swiss are deeply attached to direct democracy. As the most recent Eurobarometer data from 2013 show,[9] almost 92 per cent of respondents report to being proud or very proud of the way democracy works in their country. What is more, studies show that, compared to other countries, in Switzerland satisfaction with democracy is higher – a result which can be attributed in large part to the opportunities for direct democratic participation (Milic et al. 2014). This positive attitude is also reflected in an increased use of direct democratic instruments over the last forty years, as the next section will show. But first I will give a brief summary of the role of direct democracy in Scotland.

[9] See http://fors-nesstar.unil.ch/webview/index.jsp.

1.2.3 Direct democracy in Scotland

In comparison to Switzerland, direct democracy has an entirely different status in the United Kingdom. The UK political system does not foresee any citizen-initiated mechanisms of direct democracy at the national level, nor for mandatory referenda.[10] Nevertheless, the government can call a referendum (so-called plebiscites or top-down referendums).[11] In the last forty years, there have been eleven referendums in the UK, mostly on issues of devolution. Referendum outcomes are not legally binding however, that is, Parliament has the final say. In practice Parliament generally follows the people's will.

In Scotland, the first devolution referendum took place in 1979. The proposal to create a Scottish assembly, even though accepted by a majority of voters, fell short of the 40 per cent participation quorum required to enact devolution. Only in the second attempt, in 1997, did Scotland accept the introduction of a Scottish Parliament which would have fiscal powers. Most recently, in 2014, a first referendum on Scottish independence was held.[12] The Scottish Independence Referendum Bill, which set out the arrangements for this referendum, followed an agreement between the Scottish government under its Prime Minister, Alex Salmond of the Scottish National Party, and the British government under conservative Prime Minister David Cameron. To pass, the independence proposal only required a simple majority. On 18 September 2014, Scottish voters rejected the proposal for 'Scotland to be[come] an independent country', as formulated in the referendum question, by a narrow margin of 55.3 per cent, at an exceptionally high turnout rate of 84.6 per cent. In Chapter 5 I present an experimental study conducted during the 2014 independence referendum campaign.

1.2.4 Increasing use of direct democracy

Studying direct democracy is particularly relevant because the use of direct democratic instruments has been growing considerably over the last half century. Tierney (2012, 285) writes: "The use of referendums around the world has proliferated remarkably in the past thirty years", at the national

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[10] At the local level, however, citizen-initiated consultative referendums do exist.

[11] See http://www.parliament.uk/education/about-your-parliament/general-elections/referendums/

[12] See http://www.parliament.uk/get-involved/elections/referendums-held-in-the-uk/.

and at the local level. In his comprehensive analysis of worldwide referendums, Altman (2011, 65) finds that referendums "are used twice as frequently today compared with fifty years ago and almost four times more than at the turn of the twentieth century". Figure 1.3 confirms this trend, even though it is not clear yet whether it will persist during the current decade. By now Switzerland, even though it still holds about half of all worldwide referendum votes, has for the first time "given up the lead to Latin America and Europe" (Serdült 2014, 66). This is mainly because of the so-called third wave of democratization, which led to the writing of new constitutions, many of which provide for direct democratic mechanisms, in particular in the former Soviet bloc (see also Marxer & Pallinger 2007). What is more, European integration, enlargement, and constitution building have triggered a large number of referendums in the member states of the European Union over the last half century – and continue to do so. Some recent examples are: the Croatian referendum on EU membership held in 2012; a 2012 Irish referendum on the European Fiscal Compact; the Greek referendum on acceptance of the political terms for a EU bailout, a plebiscite which was called in July 2015 by leftist Prime Minister Alexis Tsipras; and, last but not least, the Scottish independence referendum 2014.

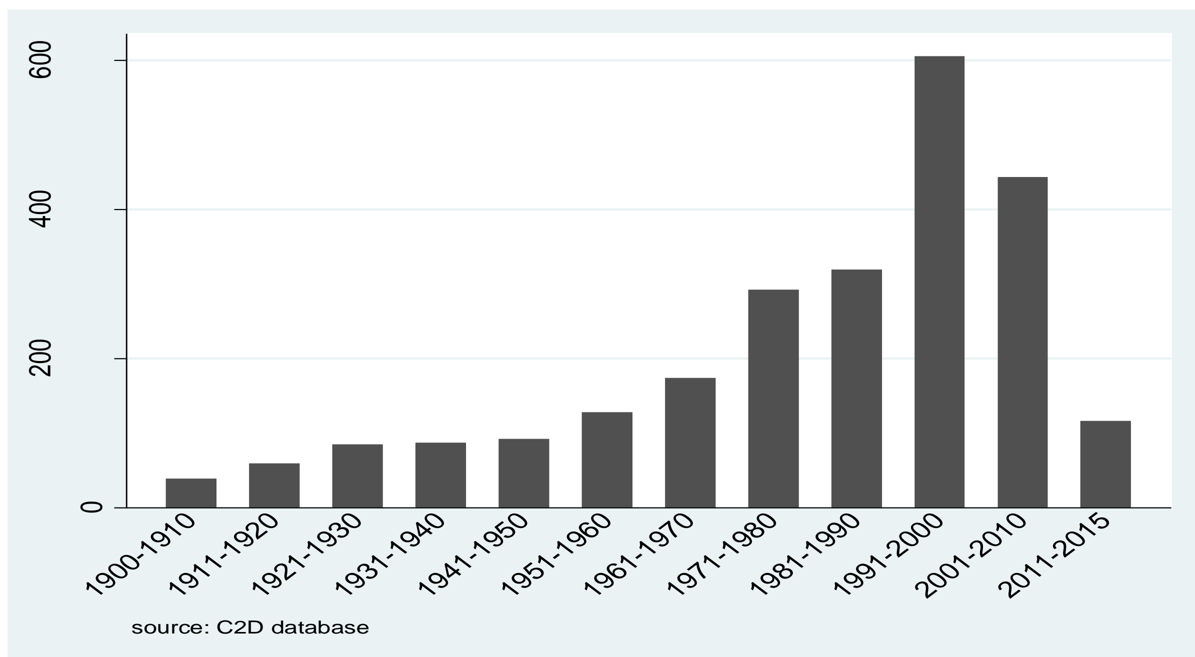

Figure 1.3. Increasing use of referendums worldwide, by decade, 1900–2015
Note: based on data from the Swiss Centre for Research on Direct Democracy (C2D)

Not only have more and more states adopted constitutional provisions allowing for direct democratic voting, but in the two countries with the most lively tradition of direct democracy, Switzerland and the United States, these mechanisms have been increasingly used (see Matsusaka 2004 for the US and Milic et al. 2014 for Switzerland). As Figure 1.4 shows, in Switzerland, the trends for referenda and initiatives proceeded differently in recent years. While the number of popular initiatives has been increasing steadily since the 1970s, the referendum trend reached its peak in the 1990s and has rather decreased since then. A report by the liberal think-tank Avenir Suisse (Rühli & Adler 2015) finds that not only the use, but also the acceptance rate of referendum has markedly increased in the last twenty-five years. This acceptance trend seems a little less dramatic if we look at data from the Swiss Centre for Research on Direct Democracy (C2D) presented in Figure 1.4. We see however, that since 1990 the acceptance rate has constantly been at over 25 per cent.

Attempts to explain this worldwide increase in the use of direct democracy include foremost references to 'dealignment' from the traditional party structures, and the formation of over-institutionalized party systems or so-called catch-all parties, which no longer represent people's preferences accurately (Altman 2011; Qvortrup 2014). Qvortrup (2014, 12) writes that:

> in the period from 1920 to 1970, when the Western European party system was 'frozen' along the lines of the main social, economic and religious cleavages – as famously suggested by Rokkan and Lipset (1967) – there were very few referendums. This was possibly because the political parties were able – and willing – to respond to views articulated by the interest groups they represented.

By contrast, when processes of 'dealignment', or the break-up of traditional, class-based, party-ties started, the use of direct democracy increased.

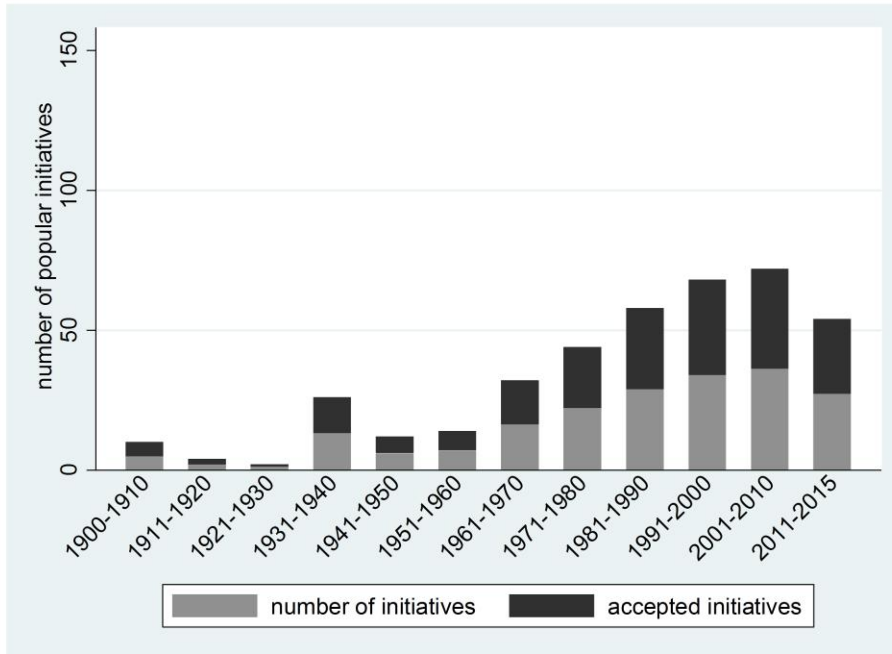

Figure 1.4a. Popular initiatives in Switzerland, 1900–2015

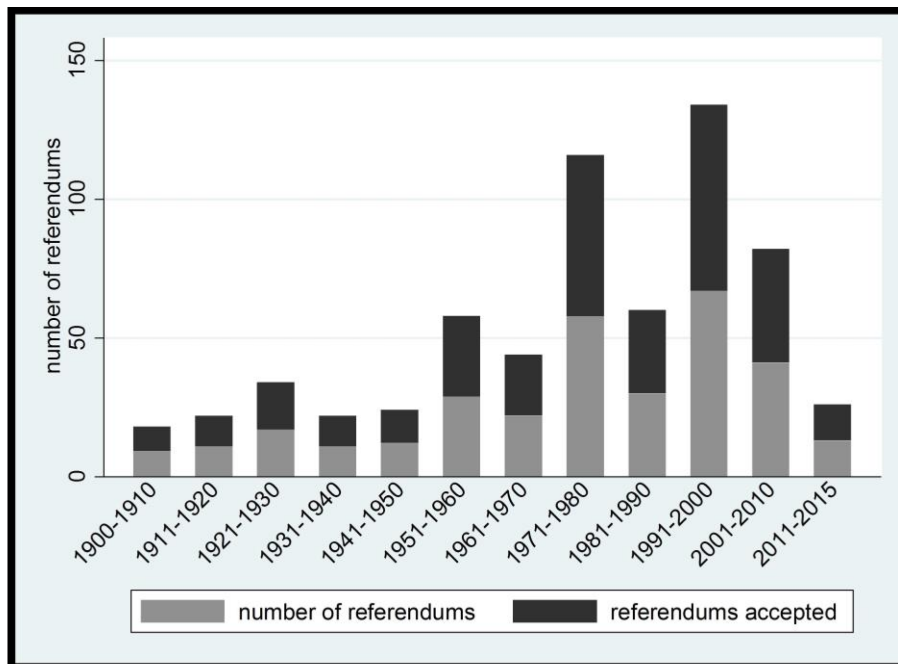

Figure 1.4b. Referendums (optional/mandatory) in Switzerland, 1900–2015

Note: Bars represent total number of votes held; black area represents the number of measures accepted. In both cases acceptance means the adoption of a new (constitutional or legislative measure).

To sum up, as Qvortrup (2014, 249) states, it is a "safe prediction that the number of referendums around the world will continue to grow". In the European context, the most controversial upcoming referenda of the next years will probably be the British 'in-out' referendum on EU-membership, announced by Prime Minister Cameron scheduled for 2017, and a possible independence referendum in the Spanish province of Catalonia, which has been strongly contested by the Spanish government. Looking at these recent developments highlights why it is essential to learn more about processes of direct democratic decision-making, not only from a Swiss perspective, but also beyond.

1.3 Thesis outline

This research is organized in four parts. Chapter 2 offers a review of the theoretical background and previous research and presents the puzzle I am interested in as well as the main argument. The key questions in this chapter are: What is participatory and deliberative democracy and how compatible are they? What are the concerns about direct democracy coming from political psychology and public opinion research on the one hand, and from deliberative democracy on the other hand? How do these three perspectives, participatory democracy, deliberative democracy, and political psychology, go together and what can they learn from each other? And finally, how can we define a competent citizen in direct democracy, what are possible normative requirements and standards? I conclude that analyzing citizens' reasoning, their use of arguments, and information processing mechanisms is crucial from a normative perspective.

Chapter 3 presents the first empirical study, an analysis of the level of justification of Swiss voters over thirty-four national-level direct democratic votes between 2008 and 2012. I offer a possible operationalization and measurement of citizen competence – the 'level of justification' – based on a quantitative content analysis of open-ended survey responses. In addition, I analyze the factors which are associated with voters' justification level, on the individual and on the context-level. For this purpose, I use a multilevel regression analysis. First I find that most voters have knowledge of policy arguments. Second, the context is just as important as individual resources in determining voters' competence. Finally, with regard to individual resources, motivation correlates more strongly with competence than with ability.

The use of arguments alone however, as analyzed in Chapter 3, is no guarantee for a considered opinion, or an unbiased reasoning process. Therefore, in Chapter 4, I present a further empirical study, co-authored with Hanspeter Kriesi, and which examines the motivational aspects of political reasoning. More specifically, we asked two questions: Do policy arguments or partisan cues affect individual voters' decisions in direct democracy? And, how do partisan cues affect the processing of policy arguments? Based on panel data from two national-level referendum campaigns in Switzerland, we find, first, that both, party cues and policy arguments have an independent effect on vote intentions. But in a second step, we find that party cues strongly affect the processing of policy arguments during the referendum campaign – a process termed *partisan biased processing* of arguments. This study "adds to an ongoing debate about how partisan endorsements work in terms of providing a cue to reduce cognitive effort as opposed to coloring how information is interpreted and consciously evaluated" (Bolsen, Druckman and Cook 2014, 236). In contrast to earlier, experimental, studies on partisan biased information processing, this study is conducted with observational panel data and set in the real-world context of a Swiss referendum vote.

A third empirical study, presented in Chapter 5, goes one step further and adds one more element to the previous chapters. First, in addition to analyzing motivated reasoning effects and biases in political thinking, I test 'de-biasing techniques', that is, the question how biases in thinking can be reduced. Thereby I take up the initial question of what is a competent citizen or a considered opinion, and elaborate it. Second, by conducting a laboratory opinion experiment, I add an additional methodological approach to my project. Third, the experiment is set in the context of the Scottish independence referendum. With this, I extend the narrow focus of the Swiss system and add another direct-democracy context to the research. I find that individuals who expect to discuss their political position with others, and who are therefore motivated to be accurate, write more cognitively complex justifications than individuals who do not expect to be involved in discussion.

I conclude by summarizing the main findings of my research and placing them in perspective with the current debates in political psychology. I end by pointing out the limitations of my research, or what I would have done differently had there been the opportunity to start again, and I suggest possible further avenues for the study of citizen competence in direct democracy.

The major part of my research project is based on data dealing with Swiss direct democracy. Therefore, it is important to ask whether, and how, my findings migrate to other contexts of direct democracy. First, as other scholars have noted, Switzerland can be considered as a 'laboratory for

direct democracy' (Kriesi 2005), offering a wealth of opportunities for research and excellent data. I think it is reasonable to make use of these resources and exploit them as much as possible in order to gain general insights on direct democratic decision-making. Second, I analyze basic processes of human reasoning. These processes may vary to a certain extent depending on the context, but in essence they are assumed to be the same in different countries, particularly in modern democracies. For example, the fact that people are willing and able to learn policy-specific information when they have the opportunity to participate in decision-making, or the fact that arguments are selected and interpreted differently depending on one's partisan preference are assumed to be universal processes. Nevertheless, in order to enhance the external validity of these findings, more studies from different direct democratic contexts are necessary. In this regard I see my doctoral dissertation as a starting point for further research, presenting novel studies on the political psychology of direct democratic decision-making, which would offer opportunities for replication in the context of the increasing use of direct democracy in many parts of the world.

Chapter 2

Deliberation, direct democracy and citizen competence – towards a concept of considered opinion, a review of theory[13]

Models of democracy can be divided into two broad types (Kriesi 2005; Mendelsohn & Parkin 2001): representative or liberal models where citizens exercise their sovereign rights through regularly repeated elections of political representatives and participatory models of democracy, where citizens are supposed to take part directly in political decision-making. Scholars of participatory democracy theory see direct participation of citizens in political decision-making as a necessary means to compensate for the deficits of representative democracy. In particular, direct participation is supposed to counter the increasing alienation and detachment of citizens from the political system in representative democracies (Altman 2010; Setälä & Schiller 2009). This alienation is expressed for example in declining electoral participation and organizational (party) membership, or waning trust in political institutions (Dalton 2000; Smith 2009; Zittel & Fuchs 2007). Direct democratic participation instead increases the perceived levels of political efficacy, satisfaction with the democratic system, and electoral turnout levels (Smith & Tolbert 2004; Smith & Tolbert 2010; Tolbert, Bowen & Donovan 2009). Therefore, direct democracy may constitute a political mobilization device which helps foster citizens' political interest and participation levels.

The background of this thesis however, is not the contrast between liberal and participatory democracy, but rather the criticisms directed at *direct democratic models* from *public opinion scholarship* on the one hand, and from *deliberative democrats* on the other. Even though this is not always clearly spelt out in the literature, participatory democracy theory comprises a range of different sub-models (Held 2006; Zittel 2007). These sub-models not only differ in the kinds of

[13] This paper is currently under review with *Acta Politica*

instruments and institutional reforms used – such as deliberative polls and town-hall meetings versus referendums and popular initiatives – but also in their theoretical implications. Even though both, theorists of participatory and theorists of deliberative democracy strongly emphasize the participation of citizens in political decision-making, they start from slightly different premises and set different normative requirements.

In this chapter, I will give a brief account of the general idea of participatory democracy, before spelling out the differences and theoretical tensions between the direct and the deliberative model more clearly. In section 2.2 I connect these theoretical ideas of participation with empirical evidence on how citizens actually form their opinions, discussing research in public opinion and political psychology. This discussion between different literature raises the question of how to best conceptualize and measure citizen competence in direct democracy, the central question of my thesis. My proposition, as described in the final part of this chapter, is to assess competence by analysing the complexity and diversity of citizens' arguments and justifications as a measure of *considered opinions*.

2.1 Participatory democracy theory

Participatory democracy theory originates from a critique of liberal or 'realistic' democratic models and was brought up mainly by the new left in the late 1960s and early 1970s (Held 2006; Kriesi 2005). According to Held (2006, 214), participatory democracy theory is an attempt to solve the "highly complex relationships among individual liberty, distributional matters (questions of social justice) and democratic processes". Participatory democrats such as Pateman (1970, 1985) or McPherson (1977) maintain that the liberal idea of 'free and equal' individuals cannot be realized only by the formal right to elect representatives, but rather, participation opportunities have to be extended to all areas of people's lives. In representative elections, existing social inequalities (e.g. in gender, ethnicity or class) are often reproduced. This reproduction of inequalities can be counteracted only through a comprehensive and active participation of citizens in decision-making. Furthermore, participatory democrats question the assumptions of a 'realistic' democratic theory (in particular Schumpeter 1943; see also Pateman 2012). Realistic theories assume that due to a widespread lack of interest in, and knowledge of, politics on the part of citizens, their role should

be restricted to choosing the people who decide. This conclusion is criticized as a naturalistic fallacy, inferring the normatively required from the empirically observed.

This critique of realistic, liberal models of democracy gives rise to the claim for participation in decision-making 'in all spheres of life' (Pateman 1970, 105) which entails two different principal aims or expected benefits, one instrumental and one emancipatory. On the one hand, participation is aimed at increasing responsiveness and protecting individual rights more accurately than representative institutions, and, on the other hand, it is supposed to foster 'liberty and individual development' (McPherson 1977, 211), by increasing not only citizens' political competence and knowledge, but also their sense of political efficiency, and thus their trust in government. From this point of view, citizens' political disinterest is the result of a lack of participation opportunities and cannot be used as a justification for denying them these opportunities, or in Barber's (1984, xxiv) words: "Autonomy is not the condition of democracy, democracy is the condition of autonomy. Without participating in the common life that defines them and in the decision-making that shapes their social habitat, women and men cannot become individuals", whereby he defines "strong democracy" as "a form of government in which all of the people govern themselves in at least some public matters at least some of the time". There is thus not only an *instrumental* or *protective* aspect to the claim for 'strong democracy' (which is to guarantee a more accurate representation of the people's will and better responsiveness of the political elites); there is also a *developmental and emancipatory* aspect, which was even more strongly emphasized by participatory democrats of the new left, because it focused on the empowerment of politically disadvantaged minorities through participatory means.

The idea of an emancipatory effect of participation is based on the work of early political philosophers, such as Alexis de Tocqueville (Mansbridge 1999), Jean-Jacques Rousseau, and John Stuart Mill (Pateman 1970). According to Pateman, the basic hypotheses of the function of participation in a democracy can be found in *Rousseau's* (e.g. 1766) political thinking, where *education* (in the broadest sense) is the central function of political participation. In addition to the educative function, deciding on their own laws, according to Rousseau, is the only way to ensure the freedom of individuals. From this follows a legitimation function of participation – participatory decisions are more readily accepted by the public because they are decisions taken by free individuals. Finally, participation also fulfils an integrative function, fostering community feelings and a sense of belonging, in Rousseau's theory. In much the same way, *John Stuart Mill*

(1910, 195), the other prominent influence on participatory thinkers, ascribes self-government "a great influence acting on human mind" and the promotion of "the general mental advancement of the community, including under that phrase advancement in intellect, in virtue, and in practical activity and efficiency" (see Pateman 1970). According to Mill, the individual starts taking public interest into account (in contrast to his narrow self-interest) as soon as he is forced to participate in collective decisions. In short, these theorists establish the idea that political institutions and arrangements affect citizens' minds, have psychological effects and in thus also affect their political behaviour.

Held (2006) however, argues that participatory democrats fail to answer the question of how their model can be realized in detail. In response to this, different possible interpretations were developed. Theorists agree on the point that participatory instruments can never fully *substitute*, but always only *complement*, institutions of representative democracy (see e.g. Budge 1996; Pateman 1970). They do not aim at total self-government, but at participatory, bottom-up organization of different spheres of society, starting from the workplace, up to the level of national politics.

2.1.1 Direct democracy

Direct democracy through referendums or popular initiatives, where citizens have a say on policy issues, is one possible version of participatory democracy (Budge 1996; Saward 1998). This connection has however not been clearly recognized by most theorists of participatory democracy (Schiller 2007), with Barber (1984) being an exception. Direct legislation through the ballot box is an example of an institution designed to increase citizens' participation (Smith 2009). It can help to reinforce the link between public opinion and political decision-making and eventually help to 'bring citizens back in' (Zittel and Fuchs 2007). Regarding the developmental aspect, empirical studies of direct democracy have shown that political participation fosters political learning and helps to form a more engaged, trusting, and competent citizenship (Benz & Stutzer 2004; Bernauer & Vatter 2012; Bowler & Donovan 2002; Smith & Tolbert 2004).

With respect to the protective or responsiveness aspect, Matsusaka (2004, 2005b) finds a positive effect of direct democracy, in that it pushes policy closer to the position of the median

voter and helps prevent elected representatives from deviating from their electorate's preferences (see also Butler and Ranney 1994). Thereby, not only the initiatives on the ballot affect policy-making, but also the 'referendum-threat' posed by the availability of direct democratic instruments can lead policy-makers to find solutions which enjoy broader support. This indirect effect of direct democracy has been well-documented in Switzerland (Neidhart 1970; Papadopoulos 2001; Trechsel & Sciarini 1998). Other studies (e.g. Smith 1998) doubt that popular ballot decisions are any less affected by vested interests than representatives' decisions (see Kriesi 2005 for an overview).

However, in the view of deliberative democrats, the theory of direct democracy is much stronger in emphasizing the *legitimacy* and *political equality* aspects of ballot decisions, where "all citizens have equal effective inputs into collective decision-making" (Saward 1998, 43), than in explaining its *educative* effects. Or in Smith's terms, direct democracy obviously increases the democratic goods of *inclusiveness* and *popular control*, but its effects on *considered judgment* are much less clear. How exactly are citizens supposed to become educated, knowledgeable, trusting, and common-good oriented simply by occasionally casting anonymous ballot votes? This is not spelt out by scholars of direct democracy. Even though some scholars stress the educative effects of direct voting, they treat citizens' preferences as exogenous to the process of voting, or at least they do not address the mechanisms of citizens' opinion formation – in contrast to theorists of deliberative democracy, in contrast to theorists of deliberative democracy.

2.1.2 Deliberative democracy

Deliberative democracy is currently the most debated democratic model among political theorists (Pateman 2012). It can be regarded as another version or sub-model of participatory democracy. By now, not only theorists, but also empirical political scientists have become interested in deliberation, and have started to put the theoretical hypotheses to the test (see e.g. Fishkin & Luskin 2005; Neblo et al. 2010; Steiner et al. 2004). Due to this trend, deliberation has become a widely – some would say inflationary – used term (Chambers 2003). As all participatory democrats, theorists of deliberative democracy also put a strong emphasis on citizens' equal participation in democratic processes. However, they place emphasis more on the very nature of opinion formation (Held 2006). Generally, deliberation can be described as "debate and discussion aimed at producing

reasonable, well-informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims made by fellow participants" (Chambers 2003, 309). Deliberation is supposed to be inclusive, truthful, respectful, and to end in consensual[14] decisions for the common good. Self-interest and power, as well as other forms of decision-making, such as bargaining or majority votes, have usually been excluded from the classical definition of deliberation (Mansbridge et al. 2010; Thompson 2008).

In such a discussion, *actors are rational when they are able to justify and explain their actions* (Habermas 1991). The notion that reasons and justifications for political decisions must be explained to those affected by it is at the core of the concept (Eriksen 2007). According to Habermas' discourse ethics, practical reason is the capability to justify one's moral and practical imperatives. Deliberation theorists in political science and theory have taken up this claim and most of them agree that 'mutual justification' or the ability to explain one's opinion with reference to certain reasons can be regarded as "the primary conceptual criterion for legitimacy, and the most important distinguishing characteristic of deliberation" (Thompson 2008, 504). For Cohen (1989, 2007) reference to the reasons of one's own opinion is one of the criteria for judging the quality of deliberation. Thus, in deliberative discussions, be it in formal arenas such as the Parliament or in informal 'everyday talk' among citizens (Mansbridge 1999) only the force of the better argument should count when taking a decision (Chambers 2003; Habermas 1991; Thompson 2008).

Reasons need not only be derived from rational thought though. Different theorists – critics of the traditional notion of rational deliberation - hold the view that reference to emotions, humor, or anecdotal evidence can be as valuable as rational conclusions in order to justify an opinion (Mansbridge 1999; Mansbridge et al. 2010). This criticism is reflected in the distinction between two types of deliberation drawn by Bächtiger et al. (2010). Whereas the strictly habermasian concept of type I deliberation is focused exclusively on truthful communicative discourse aimed at consensus through rational arguments, advocates of type II deliberation (Dryzek & Niemeyer 2006) put a stronger emphasis on the outcome of deliberation and include all forms of communication (e.g. rhetoric, emotional discourse, story-telling, humour etc.). These authors thus argue that

[14] The term 'consensual decisions' can have different meanings. The strict, habermasian idea of reaching a unanimous decision through exchange and recognition of rational arguments has been contested. According to Rawls (1993), disagreements can persist even if actors reason as rationally as possible. There is an ongoing debate on this issue within deliberation theory (see, for example, Eriksen 2007; Dryzek and Niemeyer 2006).

passion (emotions) and self-interest, as two of the main drivers of human behaviour, should not be excluded a priori from political debate and decision-making, but rather integrated into the framework of deliberation theory. This idea is more consistent with the findings coming from public opinion research and political psychology, which will be discussed below.

In terms of institutional mechanisms, deliberative democrats mainly propose installing a range of '*mini publics'*. These are randomly selected groups of citizens who deliberate on public issues within a guided framework. Deliberative polls (Fishkin & Luskin 2005) are one prominent version of such mini-publics; citizens' assemblies or deliberation days are other options (Gastil & Richards 2013; Goodin 2008; Goodin & Dryzek 2006; Smith 2009). More recently, technological developments in information and communication media have opened up new opportunities to install deliberative institutions on a larger scale (Smith 2009; Zittel & Fuchs 2007). In all these different mini-publics, participants are provided with information material on the issue, and the deliberation is guided by moderators or 'facilitators'. Eventually, deliberative mini-publics are designed to simulate "what people would think under good conditions" (Fishkin 2009, 6).

Although most deliberation theorists agree that deliberative processes require a discourse between at least two individuals (be it citizens, politicians, social movement activists etc.), the idea of 'self-deliberation' has been described as well (Delli Carpini, Cook, and Jacobs 2004, 318f.). According to Goodin's (2000, 81) concept of 'deliberation within', deliberation consists of "the weighing of reasons for and against a course of action" and "can and ultimately must take place within the head of each individual". Lindeman (2002, 199) defines deliberation as "a cognitive process in which individuals form, alter or reinforce their opinions as they weigh evidence and arguments from various points of view". Gunderson (1995, 199) instead sees democratic deliberation occurring "any time a citizen either actively justifies her views (even to herself) or defends them against a challenge (even from herself). An experiment with mini-publics has shown that 'deliberation within' in a pre-discussion, information phase contributes more to opinion shifts than the actual deliberation or discussion (e.g. Goodin 2008). Findings like this suggest that, on the micro-level, *changes in opinion take place through thinking and weighing different pieces of information received in a deliberative setting*, rather than through discursive interaction with others. Despite these findings the notion of 'deliberation within' is contested, and most current deliberative theorists would not include 'self-deliberation' in a definition of deliberation.

As with all participatory democracy models, deliberative theorists also stress the developmental effect of deliberation. They are convinced that deliberation exercises a '*transformative power'* on the individual. Deliberative discourse, they argue, "induces individuals to think through their interests and reflect upon their preferences, becoming amenable to changing the latter in light of persuasion from other participants" (Dryzek & Braithwaite 2000, 214f). In addition to emancipating the discussants the *epistemic value* of a political opinion is also expected to be fostered through deliberation in the sense that weighing up reasons and arguments leads to 'better' or more 'correct' answers for collective problems (Bächtiger forthcoming, 7; Mansbridge et al. 2010). A whole strand of empirical studies has recently started to test these transformative effects, and has repeatedly claimed that the psychological mechanisms underlying deliberative processes of opinion formation should be analyzed more closely (see e.g. Bächtiger & Wyss 2013; Cohen 2007; Mutz 2006; Neblo 2007).

After this overview we can see how deliberative theory attempts to explain in more detail how the 'educative effects' of participation emerge, a point that is missing with direct democratic theory. Next, I will spell out more clearly the supposed incompatibilities between direct and deliberative democratic procedures.

2.1.3 On the antagonism between direct and deliberative democracy

We have seen that institutions of direct democracy are designed to enhance inclusiveness and equality of participation, to increase the possibility of popular control of political decisions, in sum: to increase *the level of citizens' political participation.*[15] An educative effect was implicitly supposed, but never concretely spelled out. Institutional mechanisms proposed by deliberative democrats in contrast, emphasize much more the considerateness of political opinion formation and decision-making, and thus the *quality of political participation*. Thus it is fair to say that deliberative democracy "emerged as a corrective to (…) aggregative forms of democracy", such as popular referendums (Bohman 1998; Smith 2009).

[15] Whether the goal of inclusiveness and equality are reached through direct democratic procedures is seriously questioned by many scholars, be it from a formal perspective (constitution of the demos/who is a citizen?), as also regarding actual participation, which is strongly correlated to socio-demographic factors such as education. This is not discussed further in this context.

On the other side, deliberative democracy has been criticized for being exclusive, elitist, and utopian. Fishkin (2010, 68) speaks of a ‘trilemma’ between the realization of “political equality, participation and deliberation”. The higher the demands which come with participation – for example reason-giving, deliberative discussion, consensus-finding – the more difficult participating becomes, and thus the fewer people will be able and/or willing to participate. In consequence, deliberation might reduce inclusiveness of participation. Not only is taking part in deliberation a difficult task for many, Mutz (2006) has also found that people tend to avoid cross-cutting political discussions out of conflict-aversion. Instead they tend to discuss politics with like-minded others, contributing to opinion fractionalization and polarization (see also Sunstein 2009). Thus, an ideal deliberation situation seems extremely difficult to create in the real world.

Other critics of deliberative democracy rightly point out that deliberative theory is of little help if it focuses on opinion formation and fails to provide a feasible rule for taking political decisions in the end (Smith 2009). While deliberative theorists disapprove of majority voting as a decision mechanism, they do not agree on one realistic alternative either – given that requiring consensus is in most cases too demanding. Even more worrying for critics of deliberative democracy is the fact that rejecting ‘aggregative’ decision modes such as voting, severely hurts the principle of political equality. Or as Saward (2001, 367) puts it: “No system resting its justification upon the principle of political equality could rightly countenance the denial of the right to vote”.

In fact deliberative theorists strongly criticize the tendency to focus on aggregation of preferences as the basic mechanism of legitimation. Some of them have gone so far as to deny the compatibility of voting, i.e. aggregation of preferences, and deliberation, which ideally works through arguing on a common-good oriented basis. Elster (1998) distinguishes three modes of collective decision-making. These are the communicative forms of *arguing, voting* and *bargaining*. These modes correspond to different operations of preference formation and to different underlying motives. While with arguing and deliberation, preferences are formed through transformation and motivated by reason, with voting, preferences are formed through aggregation and this process can be motivated by reason, interest or passion.

The reason why aggregation and deliberation cannot go together lies in the majoritarian decision modus as well as in the irreversible character of voting decisions, which can (or according to some deliberation theorists always do) trigger different motives than pure reason (Chambers 2001). According to Chambers (2001, 243), direct legislation invests “much in numbers rather than

arguments”. Or, as Eriksen (2007, 1) puts it, majority rule is “insensitive to reasons. A majority decision represents arithmetic artefacts and not a common will”. Such an arithmetic decision, based on aggregation of pre-established preferences, under conditions of secret and private voting induces the strategic motive to win/not to lose. Not to end on the losing side or to gather just the number of votes necessary to win become the strongest incentives and not the epistemic quality or truthfulness of the discussion. This leads to more passionate, emotion-led voting, in contrast to argument-based voting.

In sum, not (mainly) citizens’ lack of political knowledge is the problem of direct democracy according to deliberative theorists, but the fact that direct democratic campaigns create incentives which tend to undermine mutual respect, toleration, and consideration of the others’ viewpoints (Smith 2009; Chambers 2001). While Chambers suggests to involve citizens in the legislative process without letting them vote as a solution, most deliberative theorists “concede the need for formal voting in the last instance” (Saward 2001, 367).

At this point I argue that the fact that in ballot decisions, citizens’ motivations and opinion formation processes are not visible or explicitly formed by institutional mechanisms, does not necessarily mean that there is not a process of reasoning, deliberation, and argumentation going on in the public. Frey (1994, 339) describes a “pre-referendum stage”, where referenda “stimulate discussion among citizens, and between politicians and voters”, and compares it to an ideal deliberative situation. He acknowledges that “unlike the rather academic and institutionally unbound notion of the ideal discourse, the pre-referendum discussion is practically relevant, focused, and limited in time”. More generally, Hirschman (1989) describes holding meaningful opinions, which are based on reasons and justifications, as a defining element of our well-being and personal identity.

There is also empirical evidence from direct democracy. In his comprehensive study of citizens’ decision-making in Swiss direct democracy, Kriesi (2005) comes to the conclusion that citizens’ votes are determined mainly by arguments. In a more recent experimental study set in the context of Californian direct democracy, Boudreau and MacKenzie (2014) find that policy arguments affect citizens’ opinions to a larger extent than party cues. In Schiller’s (2007, 60) words: “There are good empirical reasons to assume that, as an institution, direct democracy will induce some additional motivation and opportunities – by comparison with representative systems – to engage in reflecting preferences and interests, seek out information, and participate in political

communication on policy issues" whereby "many citizens enter into a process of opinion formation and communication, with the additional incentive that there may be an opportunity to vote at the end of the process". In sum, popular votes have the potential to create a deliberative space.

Therefore, as Saward (2001) has argued, the ideals of deliberative and direct democracy can be mutually supportive. The truth about how citizens make their decisions at the ballot box – as well as the normative requirements of how they ought to make them – might lie somewhere in between ideal habermasian rational discourse and mere defence of pre-existing preference through voting. I think this is an *empirical question* which remains to be analyzed. Given the strong emphasis deliberative theorists put on the requirement of reasoning and justification, it is surprising that they have widely lacked to investigate what concrete arguments and reasons citizens' use in their everyday political decision-making (e.g. Jackman & Sniderman 2006; Polletta & Lee 2006) and which psychological mechanism underlie processes of deliberation and opinion formation. This may be due to the theorists' initial lack of connection to empirical research (Thompson 2008).

In the search for a more realistic and applicable vision of deliberative (and participatory) democracy, research on individual-level opinion formation, mainly from social and political psychology, can make a valuable contribution. The research on how citizens' preferences are formed and by what mechanisms they are influenced, built and changed, has longtime been neglected by both deliberative and participatory theorists. I argue that the debate over an antagonism between voting and deliberation has in part to do with this neglect. Participatory democracy, as well as deliberation theory have not properly taken into account the psychological mechanisms underlying the formation and change of citizens' opinions and the connections between interests, opinions and decision-behavior. In what follows I will review possible mechanisms and biases potentially influencing individual political opinion formation.

2.2 Public opinion research: political knowledge and citizen competence

In political psychology and public opinion research, citizen competence – or political sophistication – has generally been defined as high factual political knowledge (Delli Carpini & Keeter 1996; Lavine, Johnston & Steenbergen 2012; Mutz 2007; Page & Shapiro 1993). Luskin (2002, 281) puts it like this: "By and large, the people who have lots of information are also those whose information is better organized and more largely correct, making information, knowledge and sophistication highly collinear". However, the evidence on the average citizen's knowledge level found over the last half-century was deeply disappointing. Since Converse (1964) published his pessimistic account of U.S. citizens holding incoherent and unstable political attitudes – 'non-attitudes' in his terminology – and lacking very basic knowledge on political matters, the picture of disinterested and unaware citizens has become common knowledge in political psychology (Achen & Bartels 2006; Bartels 2007; Delli Carpini & Keeter 1996; Zaller 1992). 'Minimalism', or the picture that "the public's knowledge of politics was paper thin, its views on public issues arranged higgledy-piggledy, its understanding of political abstractions like liberalism or conservatism as a rule superficial or nil" (Sniderman et al. 1993, 3), has become the dominant paradigm in public opinion research.

In his influential work, Converse (1964) comes to the conclusion that most people have little understanding of ideological politics and no coherent or consistent belief system. According to Zaller (1992), who built on Converse's ideas, an individual is situated in an information environment, where the flow of information is controlled by the elites. Furthermore, Zaller assumes low levels of political awareness in general and ambivalence in citizens' political considerations – two assumptions derived from Converse's findings. In such an environment, political opinions are formed in three steps: 1) reception of information, 2) acceptance or rejection (as well as storage in memory), and 3) sampling from memory. This process is influenced by an individual's personal inclinations (values, political awareness) on the one hand and by the elite discourse (i.e. experts, media, politicians) on the other. As a third moderator, the salience or availability of the information at the moment when answering a question is crucial (what is 'at the top of the head').

Both, Zallers' as well as Converse's views on citizens' sophistication are rather pessimistic with respect to the deliberative quality of citizens' opinion formation. Other scholars, such as Bartels

(Achen & Bartels 2006; Bartels 2000, 2005, 2007), join in this lament. Bartels is even more pessimistic and assumes that citizens often ‘rationalize’, that is they try to find reasons in hindsight for their pre-established political attitudes. It is important to note here that there are also more optimistic and positive accounts of citizens’ sophistication (Gerber & Green 1999; Green, Palmquist & Schickler 2004), but they constitute a clear minority among political psychologists.

Apparently there is a contrast between citizens’ low information levels and their ability to take meaningful political decisions. On the one hand, this contrast rests on the ‘paradox of voting’ described by Downs (1957) and on the other hand on the assumptions of limited cognitive capacity or ‘bounded rationality’ as Simon (1957) called it. Two solutions have been proposed to solve this dilemma of low political sophistication levels: *aggregation of opinions* and the use of *cognitive shortcuts*. One idea is that very low levels of individual knowledge tend to balance out at the aggregate level of public opinion and therefore reasonable decisions can be made by citizen publics even if very few individuals are well-informed (Feldman 2003; Stimson 2004).

Another strand of research, under the heading of ‘low information rationality’ has found much evidence for the widespread use of cognitive shortcuts in political decision-making (Lau & Redlawsk 2001; Lupia 1994; Lupia, McCubbins & Popkin 2000; Sniderman, Brody & Tetlock 1993). These scholars assume that citizens with little knowledge can reach decisions comparable to those of highly knowledgeable citizens by relying on simple heuristic cues, such as recommendations of experts, or the position of parties or interest associations close to them. Therefore, not every single person needs to know the details of a political issue, often it suffices to know the position of certain stakeholders such as parties, interest groups or experts, and to follow them to get to the right decision. However, all these scholars either assume that citizens are rational processors of information, or they argue that in the ideal case, citizens’ should be fully informed and even-handed in their political considerations (Kuklinski 2002; Mutz 2007).

These disappointing empirical finding on citizens’ cognitive effort and political knowledge can be better understood once we consider psychological mechanisms and biases in opinion formation. Accounting for these findings – and against the background of classical rational choice theories of decision-making coming from the field of economics – social and political psychologists have developed a ‘behavioral decision theory’ (Lau 2003). In this approach, humans are viewed as limited information processors, prone to biases in thinking. In social psychology, the distinction *between cold and hot cognition* has been introduced to distinguish between *cognitive* biases which

have to do with the way our brain works and *motivational* biases, which are connected to our emotions. Both types of mechanisms can be considered as shortcomings of rational inference as it is required by traditional deliberative democrats (Abelson et al. 1968; Nisbett & Ross 1980).

2.2.1 Cold cognition – heuristics and biases

The idea of cognitive biases rests on Simon's (1957) theory of bounded rationality, which states that humans' cognitive capacities are too limited to rationally weigh all relevant information to come to an optimal decision in every case. Lau (2003) distinguishes between different types of limits. There are limits in information processing that begin with the physical limits of our sense organs, which are unable to absorb all the informational stimuli surrounding us. Therefore, attention plays a crucial role in guiding decision-making. Another constraint arises from the limits of retrieval of information from long-term memory, which is often far from perfect. In order to cope with these limitations, humans have developed a set of strategies to handle information overload. Examples of such strategies are: the use of schemas and categories; breaking down decisions into easily understandable components; editing decisions, i.e. focusing on single aspects of a decision and ignoring others in order to simplify it; and – maybe the best-studied strategy in the context of political decisions – the use of *heuristics* (see also Kahneman 2011 for an overview).

The term heuristic refers to a cognitive shortcut or rule of thumb in thinking. Kahneman and Tversky (1984) were the first authors to explicitly describe different heuristics used for judgments under uncertainty. Some of the best known heuristics described by Tversky and Kahnemann (1974) are:

- representativeness heuristic – an object or event A is perceived as belonging to a class B with a higher probability when A is more representative of B, i.e. resembles B more. This includes the neglect of the base rate, the insensitivity to the sample size, the misconception of chance (as in the gamblers' fallacy), and the lack of understanding regression to the mean.
- Availability heuristic – the frequency of a class or the probability of an event is judged by the ease with which it can be brought into mind. This can happen because some things are more salient or more imaginable than others and therefore better retrievable in memory.

- Anchoring heuristic – when making estimations, a starting point (or 'anchor') is chosen and adjusted to yield the final answer. Different anchors yield different estimations which are biased towards the initial values. These initial values need not be related with the estimation target.
- Framing heuristic - "seemingly inconsequential differences in the formulation of choice problems cause significant shifts in preferences" (Kahneman & Tversky 1984, 457). This can concern the framing of prospects (e.g. the chances of winning in a lottery) but also of outcomes (i.e. gains and losses).

Within research on persuasion, so-called *dual process models* have taken up the idea of heuristics and integrated it into a broader framework of opinion formation (Chaiken 1980; Chaiken & Ledgerwood 2012; Kahneman 2011; Petty & Cacioppo 1986; Petty & Wegener 1999). These models propose two distinct, but not mutually exclusive, modes of how information is processed by individuals to create an attitude. The *central or systematic* mode (system 2 in Kahnemann's terms) requires a high degree of cognitive effort since an individual tries to carefully collect and scrutinize all available information. Voters who are able and motivated for example, may read as many newspaper articles as possible on the issue, search for information on the internet, watch the news and ask friends about their opinions before deciding on a policy. The *peripheral or heuristic* mode (Kahnemann's system 1) is much less demanding since individuals are assumed to focus exclusively on salient and comprehensible cues or heuristics. Thus, when judging a proposed new policy, a voter may simply ask themselves, who proposes the policy and which party it belongs to and then accept the policy when it is a party he supports or reject it when it is from an opposed party.

Which mode of information processing is chosen by individuals to build their attitude depends on their motivation (e.g. political interest, personal relevance of the topic) as well as their ability (cognitive but also situational). The models act on the assumption of a general motivation of people to hold correct and *accurate* attitudes but at the same time it assumes an *efficiency* motivation, i.e. the motivation to reach a sufficient certainty of opinion with the least possible effort (Petty & Wegener 1999). It is important to point out that those two ways of information processing are not assumed to be mutually exclusive but rather to build a continuum and to interact with each other. However, attitudes gained through systematic processing are usually regarded as more persistent over time, more resistant to attack and more predictable of behaviour. Empirical evidence for these

hypotheses comes mainly from experimental studies (see e.g. Chaiken & Ledgerwood 2012, for a review).

More recently, the concept of heuristic versus systematic information processing has found its way into research about political judgments (Gaines et al. 2007; Kriesi 2005; Redlawsk & Lau 2005). Especially the idea that citizens can use heuristics effectively for political decisions and the question if heuristics can be an adequate substitute to the systematic processing of arguments have triggered an intensive debate under the heading of 'low information rationality' (see Lupia 1994; Lupia, McCubbins & Popkin 2000). On the one hand, heuristic shortcuts are praised for overcoming citizens' information shortfalls due to their lack of interest and helping them to nevertheless reach informed decisions, comparable to the decisions of well-informed voters. On the other hand, relying on informational cues opens up the prospects of elite manipulation and may make voters deviate from their own preferences in their decisions. Heuristic decision modes do not live up to the normative ideals of a well-considered opinion, based on deliberative reasoning and justification.

2.2.2 A motivational theory of political reasoning

Different from cognitive biases and heuristics which arise from the way our brain works, another class of biases in thinking is caused by *emotions* which trigger certain *motivations*. Recent developments in the field of political psychology have cast some doubts as to whether high political knowledge is an adequate measure of citizens' competence. Particularly the concept of *motivated reasoning* has received much attention (Kunda 1990; Lau & Redlawsk 2006; Lodge & Taber 2013; Redlawsk & Lau 2005; Taber & Lodge 2006). Motivated reasoning describes a process whereby all reasoning is not necessarily led by a goal to be accurate but rather by personal motivations to *protect existing beliefs*. This means that citizens select and process information in a biased way, preferring information that is consistent with their existing knowledge and at the same time disregarding and/or devaluating incompatible information. In their seminal experiment, Lodge and Taber (2006) found subjects spending more time and effort scrutinizing attitudinally incongruent than congruent arguments, whereas, when free to choose what information to expose themselves to, seeking out confirmatory evidence. Another study found Republican and Democrat voters, while holding accurate estimates of the number of casualties in the 2003 Iraq war, interpreted the

facts differently, Republicans constantly evaluating the casualty rate as 'low' or 'very low' in contrast to Democrats (Gaines et al. 2007). The assumption that we generally strive to protect our beliefs is based on the insights of cognitive dissonance theory (Abelson et al. 1968; Aronson 1969; Festinger 1957), one of the best-founded theories of social psychology by now. According to cognitive dissonance theory, holding conflicting cognitions at the same time creates an unpleasant feeling of dissonance, which triggers mechanisms to reduce this unpleasant dissonance. One way to reduce cognitive dissonance is to adjust novel considerations to existing knowledge, either by selective exposure to compatible information or by biased processing of incompatible information.

Thus, in this perspective, emotions and feelings underlie and guide our political thinking to a greater extent than expected. The importance of emotions in political opinion formation has become the focus of attention of much recent research in political psychology. The traditional dualism between emotion and cognition is increasingly questioned and the insight that emotions are an essential component of most of our reasoning has gained ground (Lodge & Taber 2013; Marcus 2003; Marcus, Neuman & MacKuen 2000; Mutz 2007). The most influential theory here is Marcus''s *Affective Intelligence Theory* (2000) which posits that automatic unconscious affective reactions of either enthusiasm or anxiety upon exposure to political topic guide all subsequent thinking on the topic. This idea of the primacy of emotions is based on the '*hot-cognition hypothesis'* (Abelson 1963; Fazio 1986), claiming that all socio-political concepts are effect-laden, and that therefore reasoning and judgment on political matters will be influenced by effects. Lodge and Taber (2013), pioneers of motivated reasoning theory, present a large array of evidence in the form of implicit association tests and psychological lab experiments for their claim that our political thinking is led by subconscious emotional reactions to political stimuli which are biased in the way that they help maintaining our existing knowledge structures and beliefs. They go so far as to claim that most of the reasons individuals give for their political opinions and decisions are nothing but *post hoc* rationalizations of emotion-driven processes. In fact, they state that "uncontrolled affective reaction […] systematically guides the encoding, search, retrieval, interpretation, and evaluation of information" and that they do so "in defense of prior attitudes" (207), motivated reasoning is therefore taking place "at every stage of the evaluative process" (227).

As an effect of this *belief perseverance bias* (Ross, Lepper & Hubbard 1975), a *polarization of opinions* is often observed when citizens' are confronted with policy judgments in the form of approval or rejection, as it is the case in popular votes, because they process the information they

encounter during the campaign in a biased way, led by the motivation to protect their prior beliefs. This phenomenon of opinion polarization has been tested in experimental settings (Lord, Lepper & Preston 1984; Lord, Ross & Lepper 1979; Miller et al. 1993) and in observational studies (e.g. Zaller 1992), and recently also in neuropsychological studies (e.g. Westen et al. 2006). What is more, different studies have found, that the citizens with the highest knowledge levels – the democratic model pupils – are the ones with the strongest bias (Lau and Redlawsk 2001; Shermer 2002; Zaller 1992). Similarly, a series of experiments on the effects of framing have come to the conclusion that in many cases, when competing frames are available, subjects only consider those which are compatible with their prior knowledge and thus opinions tend to polarize (Chong & Druckman 2007; Druckman & Slothuus 2012; Sniderman & Theriault 2004).

According to this noveler strand of research thus, the problem with citizens' political decisions lies not primarily in their bounded cognitive capacity or their lack of knowledge, but rather the motivations and emotions that distort their judgments. What is more, these mechanisms mostly operate on an unconscious level. Transferred to the context of political opinion formation, this means that all the beliefs and emotions, likes and dislikes, we have towards an object pre-shape the way in which we perceive new information about this object. Confronted with information about a new generation of safe nuclear plants, an environmental activist will react differently than a liberal market economist. If I am a pensioner and wish pensions to be increased but at the same time I wish my children to get their fair pensions as well, I might simply build a firm belief that enough resources are available and that the politicians who tell us otherwise are lying out of certain obscure interests of them – in this way I can keep my different cognitions without any feeling of dissonance.

If we think back to the deliberativists' criticism of referendum votes, claiming that binary, majoritarian and irreversible choices incentivize strategic and self-interested voting, and dis-incentivize deliberative arguing and reasoning, we could say that on the other hand, belief protection and motivated reasoning can distort deliberation. Even in a deliberative group setting motivated reasoning might be at work. And this is something, deliberative theorists have not considered sufficiently. If we assume that there are strong emotional motivations involved in our reasoning, the 'force of the *compatible* argument' (compatible with pre-existing opinions and beliefs) may be stronger than 'the force of the *better* argument'.

To sum up, I suggest that both kinds of biases in reasoning, the cognitive and the motivational, the cold and the hot ones, should be considered when we ask how citizens' participation in political decisions really happens.

2.3 The task structure: considering the context of the vote

When studying political opinion formation as political scientists, besides individuals' internal psychological attributes, it is important to consider external factors such as the information environment citizens are exposed to (Jerit, Barabas & Bolsen 2006; Kuklinski et al. 2001). This comprises the framing of the arguments in the public debate (Druckman 2001), as well as the institutional setting (Sniderman & Levendusky 2007), but also the political elite: i.e. the parties' supply or the task structure (Kriesi 2005; Sniderman & Theriault 2004). According to Kriesi (2005), the party coalitions as well as the mobilization strategies of the elite (i.e. the intensity and direction of the campaign) significantly affect the vote decision. Furthermore, the institutional logic of the vote, i.e. that there is always a binary yes-or-no choice and that all elite actors have to position themselves along this dividing line, pre-shapes the vote and makes it easier for the citizens to come to a decision.

Institutional guidance can be regarded as a counter-agent to an irrational public (Taber 2003). "The key intuition is this. In politics, citizens do not get their choice of choices. They must select from an organized menu of choices" (Sniderman & Levendusky 2007: 438). Accordingly, Zaller's (1992) seminal work on public opinion acts on the assumption that citizens are free to form their opinion only within the constraints of the elite discourse. However, few studies take the context, and in particular the institutional circumstances, into account, when looking at citizens' political decisions. This may partly explain the pessimistic standpoint some scholars take on citizen competence in liberal democracies. In direct democracy this means that the way the options are presented matters to voters. It makes a difference whether voters have to accept or reject a proposition (as is the case in Swiss votes), or whether they have to choose the ones to accept among several proposals on the same issue (often the case in California). Furthermore, whether they decide on a citizen initiative which aims at introducing a new law, or on a referendum which aims at abolishing an existing (abrogative referendum as it exists e.g. in Italy) or a planned law (legislative referendum in Switzerland) matters. While initiatives try to change the status quo, optional

referendums try to maintain the *status quo* (*ante*). According to Kübler et al. (2012), who studied the different forms of ballot votes in Switzerland, both information and participation levels are lower with mandatory referenda and counterproposals than with either optional referenda or initiatives. These examples illustrate that the institutional setting can affect voters' opinion formation crucially, and they should therefore not be neglected in studies of opinion formation.

Furthermore, the characteristics of the issue at stake may affect opinion formation. In particular, Carmines and Stimson (1980) distinguish between *easy* and *hard* issues. Easy issues are symbolic, have been on the agenda for a long time, and concern political ends rather than means. Hard issues, by contrast, are technical, concern political means, and are often new on the political agenda. In direct democratic voting, first, the *policy domain* is relevant. Yet previous findings on issue types in direct democracy are mixed: Whereas Kübler et al. (2012) find higher information levels for votes concerning the relationship between Switzerland and the European Union than for other issues, Kriesi (2005) did not find any influence of the policy domain on knowledge levels and information processing of citizens.

Moreover, independently of the policy domain, the *complexity of the issue* varies. More complex issues should restrict the average citizens' chances to inform themselves thoroughly and thus lead to lower levels of justification. The '*vote package'* also partly determines complexity of an issue. In Switzerland, there are up to four voting dates each year and in most cases voters are asked to decide upon more than one issue on the same day. Thus, the number of votes on the same day, as well as the complexity and the salience of the other issues may influence citizens' justification levels (see e.g. Bowler, Donovan & Happ 1992; Kübler et al. 2012; Lau, Andersen & Redlawsk 2008). However, Kriesi's (2005) study of Swiss direct democratic votes did not find such an effect on knowledge levels.

This restriction, due to the complexity of the issue, might be overcome by an *intense campaign* which provides the citizens with all the necessary cues and arguments they need (Kriesi 2005; Lau and Heldman 2009). In general, a *salient topic,* which is widely discussed and which most people perceive as important, might help to overcome the barrier of complexity. When a salient topic is at stake, citizens have an incentive to expend more effort in informing themselves. In their multilevel analysis, Lau and Heldman (2009) find a significant influence of these contextual factors on correct voting, although the individual characteristics remain the strongest determinants. Finally, the elite constellation – in particular the extent of elite polarization – is assumed to affect opinion formation.

In one possible scenario, a highly polarized elite might lead to less deliberative thinking, less careful consideration of arguments and stronger reliance on simple heuristic. However, in a contrary scenario, a polarized elite might increase the amount of information available and thus induce citizens to examine more carefully different arguments and perspectives.

To sum up, contextual factors such as the institutional setting, the characteristics of the issue, and the positioning of the elite shape voters' opinion formation and decision-making in direct democratic setting to a great extent. Therefore, they should be considered when studying opinion formation, and consequently I try to integrate the context as well as possible in the empirical part of my dissertation.

2.4 Bringing the perspectives together: justifications as the connecting link

As the discussion above has shown, direct democratic voting instruments do often not meet normative standards of democracy. There are two main problems with citizens' political competence. First, as has been shown in public opinion research, citizens are often disinterested in, and unknowledgeable of, politics. Their attitudes are malleable, incoherent, and unstable, they regularly resort to heuristic strategies and are therefore prone to manipulation by political elites. Thus placing important policy decisions in citizens' hands seems risky and irresponsible. So here the problem is that voters might not know the arguments of the debate in the first place. Second, direct democratic procedures do not provide enough incentive, nor institutional mechanisms, to ensure a deliberative debate between voters. Thus what is missing, according to deliberative theorists, is mainly the exchange of arguments and different viewpoints, and an opinion formation process which is based on consideration of arguments and information from different sides. Participation through the ballot box alone cannot ensure argument-based reasoning and does therefore frequently not lead to considered opinions and enlightened understanding. So the second problem is, that voters often do not listen to the other side.

On the other side it has also become quite clear that the ideal deliberative situation, as envisaged by theorists, is very difficult – if not impossible – to reach outside of intentionally designed mini-publics, that is in a wider citizen public. Furthermore, also citizens who are fully informed about politics and regularly participate in deliberative debate might be misguided by processes of belief

confirmation and motivated reasoning. The questions which arise here are then: What is a competent citizen in direct democracy? How can we conceptualize and how can we measure citizen competence in direct democracy? I think these are empirical questions which need to be approached by analyzing data from real direct democratic decisions, but at the same time keeping the theoretical reservations and premises in mind. In my thesis I have decided to investigate these questions by focusing on citizens' knowledge and use of arguments and justifications in ballot decisions.

Thereby I think that all three fields, theories of participatory and deliberative democracy as well as research on public opinion and mechanisms of individual cognition offer relevant perspectives on the role of citizens in democratic decisions. Even though these perspectives have often been depicted as incompatible or even contradictory, I suggest that a realistic model of political participation should take all the three perspectives into account. Such a realistic model of citizens lies somewhere in between mere aggregation of exogenous preferences and preference formation through rational discourse.

The solutions which have been proposed by public opinion scholars to solve the problem of citizens' lack of interest and knowledge – opinion aggregation, or the use of cognitive heuristics – are not satisfying. On the one hand, they are questionable from a normative stance as remedies for the quality of democratic decisions. On the other hand, they also have to been investigated more thoroughly empirically – under what circumstances does cue following and motivated reasoning happen and when do people resort to arguments and debate?

When we ask for the normative requirements citizens should live up to when they participate in political decision-making, we should demand at least some sort of 'considered opinion', including reasoning and consideration of substantive arguments (e.g. Fishkin 2010; Gerber et al. 2013; Neblo 2007). Dryzek and Niemeyer (2006, 643) have proposed the concept of a 'normative meta-consensus', which "implies reciprocal understanding and recognition of the legitimacy of the values held by other participants in the political interaction" as a political ideal which reconciles pluralism and consensus and can be reached through deliberation. If this normative standard is accepted, according to them, "this means that citizens must provide reasons in terms that those with whom they disagree can accept […]. In constructing justifications for their positions […] individuals would […] construct a normative meta-consensus". For the purpose of this thesis, and in agreement with deliberative theorists, a considered opinion will therefore be defined by two criteria: first, it should be *well justified by substantive reasons*; and second, it should *take into*

account the arguments of different sides (see also Bächtiger & Wyss forthcoming; Fishkin 2009, 2010; Neblo 2007).

While I agree with the requirement for considering different arguments and justifying ones' decision, as established by deliberative theorists, I think that the kind of formal discussion based on purely rational arguments, as traditionally envisioned, is too far removed from political reality. Instead of giving up the idea of individual reasoning altogether – as in low information rationality theory – or imagining decisions taking place in an ideal information environment – as deliberative democrats do – we ought to look for indicators of deliberative thinking in the real world of political decision-making. Political decisions may be influenced by emotions, aimed at sustaining cognitive consistency with prior beliefs and restrained by bounded rationality – before we draw normative conclusions we have to analyze these mechanisms empirically.

How can we assess the quality of citizens' political decisions then? I propose analyzing citizens' justifications for their political decisions as one possible indicator of the democratic quality of these decisions. From the perspective of deliberative theory this is certainly a very minimal indicator as it does not directly assess the deliberation procedure that is going on before a political decision. Nevertheless, I think that an analysis of citizens' justifications which takes into account the different psychological mechanisms and biases has many advantages. The actual process of citizen deliberation is very difficult, if not impossible, to measure on a large scale in a real-world environment of a political decision. Analyzing justifications instead allows to assess the 'deliberative potential' present in the electorate – as one quantifiable indicator of the democratic decision quality.

Not only the sophistication and complexity of argumentation can be assessed, but also the psychological mechanisms underlying information processing as well as the contextual conditions affecting these processes. And direct democratic votes, where citizens are allowed to decide over substantive policy matters are an ideal setting to measure justifications.

One possible objection to this approach is that analyzing justifications is meaningless because justifications can result from *post hoc* rationalization and do not necessarily reveal the 'true motives' behind citizens' decisions (Achen & Bartels 2006; Lodge & Taber 2013). This is indeed problematic, as here, our need for cognitive consistency may well clash with the deliberative requirement of considered reasoning, that is, people will always come up with some kind of

justification in order to maintain their cognitive consistency, even when their decisions is led by very different motives or simply intuitions.

I would reply in four ways. First, it is questionable whether there is such a thing as a 'true motive', because the motivations for our behavior are very often hidden to our conscious thinking and therefore any method to assess them is necessarily indirect. Second, due to the very small probability that their single vote makes the difference to policy outcome, I assume that in many cases (if not most cases), citizens' political attitudes and decisions follow rather value-expressive motives rather than strategic self-interested motives. Third, it is not the goal of this project to *explain the motives* underlying vote decisions or policy opinions, but rather to *a) describe citizens' justification, linking them to existing theory, b) assess to what extent these justifications come close to a normative requirement of 'considered opinion'*, and c) *to explain the variance in quality and patterns of citizens' justifications with reference to context-level and individual-level factors*. Finally, arguments are a prerequisite for deliberative debate. Only citizens who know the corresponding policy arguments and are able to justify their positions are able to engage in deliberation in the first place. In consequence, analyzing justifications is a way to assess the deliberative potential of an electorate.

Chapter 3

Justifications and citizen competence in direct democracy – a multilevel analysis[16]

Abstract

While the popularity and implementation of direct democratic instruments is growing throughout the democratic world, the criticism that ordinary voters lack the necessary competence to make policy decisions persists. This paper presents a novel and original measure of voters' level of justification as a possible, policy-specific, conceptualization of citizen competence in direct democracy. Using a unique dataset based on thirty-four ballot decisions in Switzerland, the study explores the levels and correlates of citizen competence by means of a multilevel analysis. The main findings are: first, that most voters have some knowledge of policy arguments; second, the political context *and* individual resources are important in determining voters' competence; and finally, with regard to individual resources, motivation is strongly associated with justification levels, while the effect of ability is smaller than expected.

3.1 Introduction

Despite the growing popularity of direct democratic instruments, the criticism that ordinary voters lack the necessary expertise and competence to make policy decisions persists. Critics can by now rely on a large body of research documenting low levels of political knowledge and sophistication of the citizen public (Delli Carpini & Keeter 1996). This 'minimalist' view of ballot voters has been questioned from different perspectives, however, and the debate over citizen competence in direct democracy is far from settled.

[16] This manuscript is forthcoming in *British Journal of Political Science*.

Several open questions remain: How best to conceptualize and measure citizens' direct democratic competence? And which factors are associated with citizen competence? Answering these questions becomes ever more important as direct democracy is on the rise throughout the democratic world (Matsusaka 2005a). This study contributes to this debate in two ways. First, I suggest a conceptualization and measurement of citizen competence in direct democracy, which is based on policy-related justifications. More specifically, a justification, in this study, is an answer given *ex post* by voters when asked for the reasons for their vote-decision. In this definition justification is not directly equivalent to 'reasoning' or 'competence'. However, by measuring voters' *level of justification*, I hope to come closer to a concept of 'considered opinion' and to grasp the deliberative potential of direct democratic electorates. Second, I present a multilevel analysis of the correlates of voters' justification levels, based on data from thirty-four ballot decisions in Switzerland, using a unique and original dataset which contains voters' justifications for their ballot decisions. I find, first, that most voters are acquainted with policy-related arguments – a finding which casts some doubt on minimalist assumptions. Second, I find that individual resources, together with the political context, are important factors in determining voter competence. With regard to individual resources, I find the effect of education to be substantively small when controlling for political interest.

The paper is structured as follows: I start by discussing theoretical considerations and presenting my hypotheses. Next, I describe the conceptualization and measurement of the level of justification. Then I present the data and the empirical research design, together with the results of the multilevel analyses. Finally, I discuss the results, conclusions and limitations of the study.

3.2 Theoretical considerations and hypotheses

3.2.1 Justifications and citizen competence

Direct democratic instruments, such as referendums and popular initiatives, where citizens decide on policy through the ballot box, are increasingly popular throughout the democratic world (Altman 2010; Qvortrup 2014; Schiller 2011). Not only in the United States and Switzerland, where the use of such initiatives has accelerated continuously over the last thirty years, but also in other parts of the world, where initiatives and referenda gained currency as political decision-making devices.

The referendum on Scottish independence in 2014, the Irish referendum on gay marriage in 2015, and the current discussion on a British referendum on European Union membership are recent examples. Correspondingly, empirical research on various aspects of direct democracy is becoming more important in order to understand its functioning.

Yet, direct democracy has always been criticized. Probably the most primary criticism is that voters are not competent to take policy decisions. In Magleby's words (1984, 198, quoted in Matsusaka 2005b):

> The majority of ballot measures are decided by voters who cannot comprehend the printed description, who have only heard about the measure from a single source, and who are ignorant about the measure except at the highly emotional level of television advertising […]. The absence of straightforward, understandable, rational argumentation in initiative campaigns, combined with what has been discovered about voting decisions making in these situations, raises serious questions about the integrity of the direct legislation process.

Indeed empirical studies on voters' knowledge throughout the last century, mainly based on U.S. data, have repeatedly shown exceedingly low levels of political knowledge (Converse 1964; Delli Carpini and Keeter 1996; Neijens & de Vreese 2009; Zaller 1992). Consequently, 'minimalism' (Sniderman, Brody & Tetlock 1993), that is, for a long time the image of a politically uninformed citizenry was the predominant account of public opinion – *a worrying perspective with regard to direct democratic decision-making!* However, there are at least three objections to the minimalist criticism of citizen participation.

First, 'low information rationality' (Lupia, McCubbins & Popkin 2000) allows citizens to make reasonable political decisions in an efficient way by using information shortcuts, such as following the positions of parties and other elite actors. This research introduces a more optimistic perspective, concluding that voters efficiently use the incomplete information at hand to reach informed decisions.

Second, there is increasing evidence of the positive effect of citizens' direct participation on various measures of political sophistication and civic engagement, such as voting (Donovan, Tolbert & Smith 2009; Smith & Tolbert 2004), internal and external efficacy (Bauer & Fatke 2014; Bowler and Donovan 1998), as well as political knowledge and interest (Benz & Stutzer 2004; Mendelsohn & Cutler

2000; Smith & Tolbert 2004) These studies reverse the logic of the minimalist critics and put forward the hypothesis that citizens become more politically competent once they are given the opportunity to participate in political decisions.

Third, the measures that are commonly used to assess political sophistication are not necessarily the most appropriate ways to assess voter competence in direct democracy. Surveys usually ask respondents factual political knowledge questions on generic aspects of national politics, such as the names of certain office-holders (see Delli Carpini & Keeter 1996 for a standard definition of general political knowledge). It is debateable whether such questions constitute an appropriate measure of citizen competence (Graber 2001; Lavine, Johnston & Steenbergen 2012; Lupia 2006). Possible alternatives are to use issue-specific (Gilens 2001; Krosnick 1990; Price and Zaller 1993) or local level (Shaker 2012) knowledge questions in survey research. As Gilens (2001, 379) points out, "most of the political facts in typical information scales are unlikely to contribute directly to such judgments as vote choice or policy preferences". This finding is particularly relevant for direct democracy, where citizens' preferences are directly transformed into policy decisions.

In this paper I will therefore consider the capacity to justify political decisions with policy-related arguments as a possible conceptualization of citizen competence in direct democracy. This approach comes closer to a concept of *considered opinion* or *enlightened understanding* (Dahl 1989). Holding considered opinions in this sense means engaging in deliberative thinking on different aspects of a topic, considering dissenting arguments, and basing one's opinion on arguments and justifications (Bächtiger & Wyss 2013; Fishkin 2010; Gerber et al. 2014; Neblo, Siegel and Minozzi 2012).

Why are well-justified opinions a better indicator of citizen competence in direct democracy than general political knowledge? First of all, this measure captures more accurately what citizens know about the particular proposal. As has been noted, general and policy-specific knowledge are not necessarily correlated in all cases (Gilens 2001; Kuklinski et al. 1998). There may be voters with a high level of general political knowledge who simply failed to inform themselves properly on a specific proposal. As regards the democratic quality of the vote, this is much more problematic than having voters who can justify their position on the vote, but fail to name the members of the cabinet. As Gilens (2001, 380) puts it: "much of what separates actual political preferences from hypothetical 'enlightened preferences' is due to ignorance of specific policy-relevant facts, not a lack of general political knowledge or the cognitive skills or orientations that measures of general

political information reflect." Furthermore, he shows that policy-specific knowledge is more likely to affect citizens' preferences and to influence how they vote than general political knowledge.

Finally, the ability to justify political decisions is vital when legitimizing these decisions. This is particularly true from the perspective of deliberative models of democracy, which have traditionally placed a high value on justifications. Deliberative theorists have always criticized direct democratic procedures for lacking a need for justification and exchange of arguments (Chambers 2001). Thompson (2008, 504) defines 'mutual justification' or the ability to explain one's opinion with reference to certain motives, as "the primary conceptual criterion for legitimacy, and the most important distinguishing characteristic of deliberation". Yet, measuring individual voters' justification levels tells us little about the amount of actual deliberative political talk taking place among the public. Moreover, we should be aware of the possibility that reasons may be *post hoc* rationalizations of predetermined preferences, and not necessarily their causes (for a discussion see Lodge and Taber 2013). I argue, however, that measuring the capacity to give reasons captures at least the 'deliberative potential' of the electorate (Dryzek 2009; Pedrini 2014). Voters equipped with good arguments are potentially capable of "engag[ing] in high-quality deliberation with effect" (Milewicz and Goodin 2012, 4).

3.2.2 Individual resources and the decisional context

In examining the predictors of voters' justification levels, I start from the ability-motivation-opportunity framework. In their classic work on political knowledge, Delli Carpini and Keeter (1996) have pointed to three factors correlated to knowledge: *ability* (possession of appropriate cognitive skills), *motivation* (a desire to learn), and *opportunity* (availability of information and its presentation). While ability and motivation operate at the individual level, opportunity is determined by the context in which the decision takes place, i.e. the elite, the institutional setting and the information environment. A similar framework has since been applied in many studies (Althaus 2003; Barabas et al. 2014; Lau & Heldman 2009; Prior 2007), and has been shown to apply to the direct democratic setting (Freitag & Stadelmann-Steffen 2010; Kriesi 2002, 2005).

3.2.3 Individual level – ability and motivation

Characteristics of the individual have traditionally been treated as the best predictors of political knowledge. With regard to *ability*, education is the standard variable used to predict political knowledge. Delli Carpini and Keeter (1996) found education was the strongest single predictor of political knowledge as have many other studies (Bennett 1988; Elo & Rapeli 2010; Mondak 2000). I too expect that education will have a positive relationship with voters' justification level *(Hypothesis 1a)*. While higher education levels are expected to enhance citizens' capability to understand and process political information, political interest is assumed to support their *motivation* to do so. Thus, political interest is used as a proxy for motivation. The motivational aspect of political competence has long been overlooked. Recently, however, Lavine et al. (2012) convincingly showed that motivation is a key for considered political judgment. Thus, I expect political interest to have a positive relationship to voters' justification level *(Hypothesis 1b)*.

3.2.4 Context level – opportunity

Alongside the internal psychological attributes of voters, it is important to consider external factors structuring the decision task. Here I focus on *two context-level factors* which predict political sophistication. First, the information environment citizens are exposed to [political] matters (Jerit, Barabas & Bolsen 2006; Kuklinski et al. 2001). I expect more intensive referendum campaigns to be positively related with higher justification levels *(Hypothesis 2a)*. Second, the complexity of the issue is expected play a role (Steiner 2012). More complex issues may restrict the average citizen's possibility to inform herself thoroughly. Thus I expect a negative relationship between issue complexity and justification levels *(Hypothesis 2b)*.

Finally, there may be cross-level interactions between these variables. In particular, the disadvantages in individual resources may be compensated to some extent by intensive campaigns, which enable the least educated and least motivated to acquire arguments. Taking this into consideration, I expect a negative cross-level interaction between political interest and campaign intensity *(Hypothesis 3a)* and another negative cross-level interaction between campaign intensity and education *(Hypothesis 3b)*. That is, with more intensive campaigns, I expect the association between individual-level resources and justification levels to be weaker.

3.3 Research design, data and measurement

3.3.1 Data

This study is based on a combination of two datasets (see Kriesi 2005 for a similar procedure). At the individual level, I rely on a dataset collected from cross-sectional post-ballot surveys[17] conducted one week after federal-level popular votes in Switzerland using computer-assisted telephone interviews.[18] The surveys are based on representative samples of Swiss citizens drawn from stratified random sampling from the population of all Swiss citizens eligible to vote. The samples are representative of the Swiss citizen population in all relevant socio-demographic respects, except for the participation rate, which is higher than actual average turnout (61.6 vs. 44.4 per cent). In this study, however, I only analyze the data of respondents who participated in the vote. The reason is that these are the people who eventually decide policy proposals, and furthermore only these respondents are asked to justify their vote decision in the survey.

The dataset is unique and interesting, because it contains data on voters' justifications for all 34 federal-level votes which took place between 2008 and 2012, covering all relevant policy domains. Turnout in these votes varies between 35.9 in a referendum on unemployment insurance to almost 54% in a vote on the popular initiative to ban minaret construction (see table 3-O3 in the appendix). It also contains information on all individual-level variables used in the study. More specifically, it contains two types of data: respondent-related data, mainly on socio-demographic variables and general political predispositions; and proposal-related data, such as acceptance vs. rejection of the proposal, perceived difficulty of the decision and – most importantly – an open-ended question asking respondents to justify their vote decision. The question reads: "Which are your main reasons for accepting/rejecting proposition X?"[19]. The interviewer is instructed that this is the *most important question* in the survey and that the answer should be noted carefully. In addition, the interviewer is asked to try to *obtain at least 2 reasons* in any case. Therefore, after the first answer of the respondent, the interviewer asks the follow-up

[17] Vox data, see, for example, Sciarini, Nai and Tresch 2014.

[18] The surveys were conducted by the research institute GfS together with the universities of Zurich, Geneva and Bern.

[19] In the original languages the question reads: „Welches sind die Hauptgründe, dass sie die Vorlage X angenommen haben?" (GER); « Quelles sont les raisons principales pour lesquelles vous avez accepté la proposition X?» (FR); "Quali sono le ragioni principali per cui ha rifiutato il Controprogetto relativo all'Iniziativa Avanti?" (IT)

question: “And what else?”. Up to 6 different reasons are recorded. The unit of analysis thus constitutes a response given by a respondent on a specific proposal. The individual-level dataset contains 26,621 observations on 34 votes. The 34 votes were distributed over 12 federal voting dates between 1.06.2008 and 23.09.2012, and each survey corresponds to one voting date. The number of issues submitted to vote per date varies between one single issue and five[20] (mean 3.4). This means that each person gives responses for up to 5 votes. Finally, for the purpose of a multilevel-analysis, this individual-level dataset is combined with a second, context-level dataset, containing information on the form of the vote (referendum/initiative), and elite-related and campaign-related variables.

3.3.2 Measures

Dependent variable: level of justification (LOJ)

This study’s main outcome variable is a voters’ justification level with regard to a specific proposal. It is based on a quantitative content analysis of an open-ended survey question, which asks respondents for the two most important reasons of their vote decision. Only the respondents who participated in the vote are asked this question. It is phrased as follows: ‘What are your main reasons for accepting / rejecting the proposal XY?’.[21]

A respondent’s *level of justification (LOJ)* for a specific proposal consists of 3 components which build upon each other stepwise. The first component of the LOJ index is the *content of the answer*. I draw a threefold distinction between non-answers, heuristic cues and content-related arguments (see Milic 2009, for a similar distinction). A content-related answer contains an argument referring to the issue at stake, whereas a heuristic cue is defined as an answer not referring

[20] Speaking only about the national votes, in addition there might have been cantonal or municipal votes which are not considered in the present study.

[21] As the surveys only asked respondents to justify their own vote decision, and not to list or discuss the other side’s arguments, this measure was unable to capture entirely the degree to which dissenting arguments were considered. The construction of the index nevertheless tries to capture the cognitive complexity and integration of different arguments as far as possible (see Tetlock 1983 on integrative complexity of thinking). A perfect measure of considered opinion would also include the consideration of the other side. However, I argue that the dataset used for the present study is unique and original, so it can make a relevant contribution to the research on citizen competence.

to the content of the vote.[22] Therefore, non-answers are coded 0, cues and heuristics are coded 1, and arguments are coded 2. If a respondent gives more than one justification (as the interviewers recorded up to 6 answers) the one belonging to the highest category counts.

In a second step, the *elaboration rating* (0 or 1) is added. If a respondent mentions one or more content-related arguments, at least one of these must be well formulated in order to be rated 1; this is assigned when the answer contains at least one reason as to why X should be done or not. 0 is assigned when the speaker only says that X should or should not be done (simple claim), but no reason is given.[23] This elaboration rating is adopted from Steiner's Discourse Quality Index (Steiner et al. 2004), which also contains a component capturing the 'level of justification'

In a third step, I assign 1 to respondents mentioning more than one content-related argument and 0 to all other respondents. The two arguments have to be clearly distinct, mentioning the same argument twice, in other words, does not count, nor does mentioning an additional heuristic cue. This component tries to capture the *complexity of the justification*.

In total, a scale ranging from 0 (a non-answer) to 4 (at least two different arguments one of which is well formulated; see Table 3.1). I treat this scale as ordinal because, from a theoretical point of view – in particular taking the perspective of deliberative democracy – a policy-related argument is better than a heuristic cue, while providing no answer at all is the least desirable. Moreover, policy-related arguments which provide reasons are 'better' than simple claims (see Steiner 2004). Finally, having considered at least two distinct arguments is 'better' than a single argument (see Tetlock's account of integrative complexity of political thinking, 1983).

[22] Examples are: 'I followed my party's recommendation' or 'I followed my gut feeling'.

[23] Examples: *not elaborated answers (0): '*Protecting animals is important'; 'I think foreigners who commit crimes should be deported'. *Well elaborated answers (1): '*Animals are not objects, they should be treated like living creatures and have their own rights'; 'It is only fair when foreigners who have committed crimes are repatriated."

Table 3.1: Coding examples LOJ

Category	Example	Explanation
0	*No answer? I don't know*	
1	*I listened to my party*	Heuristic cue: non-content-related answer
2	*I think this is fair*	Non-elaborated, content-related argument
3	*It's good to do this. Immigration has to be restricted because otherwise our traditions get lost*	2 for content-related argument + 1 for high elaboration; (N.B. the general answer "It's good to do this" does not count here
4	*Our pensions have to be saved for later generations, that's why we have to reduce the conversion rate. That's just fair*	2 for content-related argument + 1 for high formulation of 1st answer + 1 for mentioning more than one argument

Coding reliability

Intercoder-agreement was established by randomly choosing 100 examples of open-ended answers from then different proposals. These 100 answers were separately coded by the author and by an independent second rater, trained in the coding procedure. I report Cohen's Kappa (k), which is the most widely used statistical measure of intercoder agreement. The agreement between coders reaches 83 per cent (k = .801), which is classified as almost perfect agreement.

Independent variables: individual level

Education. To measure education, following previous studies in the Swiss context (e.g. Kriesi 2005; Milic 2009), I use a dummy variable separating below-secondary level from secondary-level and higher educational attainment. The mean LOJ is very similar for respondents with secondary (m=2.06) and tertiary education (m=2.15), while it is substantially lower for respondents with

below-secondary education (1.74), this is why I decided to create the dummy in this way (see also table 3-A3 in the Appendix which shows the distribution of LOJ by educational categories)[24].

Political interest. This is measured by the standard question: “In general, how interested are you in politics”, with answers ranging from 0 (not at all interested) to 3 (very interested). Tables 3-A1 and 3-A2 in the Appendix provide summary statistics for the variables of interest.

Independent variables: context level – characteristics of the issue

Elite polarization. Before popular votes take place, the major parties publish their position on the proposal. From these positions the ‘ballot vote coalitions’ are inferred. The degree of polarization of a given ballot proposition is calculated as: 100 per cent - [50 - vote share in the last national election of the party coalition, which won the popular vote]. The assumption here is, that if the vote share of the ‘winning ballot coalition’ is around 50 per cent, the polarization of the elite is highest, while with very broad or very small winning coalitions polarization is lower. High values on this measure thus represent high elite polarization on an issue.

Campaign intensity. Before the popular vote this is measured by a systematic analysis of the advertisements in six Swiss newspapers during the four weeks running up to the vote (see Kriesi 2005; Barabas et al. 2014 for similar measures). The sample contained four quality papers, and nine tabloids, both, from the German-speaking and French-speaking part of the country. Since the distribution of this indicator is skewed at the upper end, I use the logarithm of the total number of advertisements for the analysis, which is more normally distributed.

Issue complexity. This indicator is based on responses to a question asking respondents how difficult it was for them to get an idea of what the outcome of the vote would mean for them personally. Answers ranged from not 0 (not at all difficult) to 3 (very difficult). Following previous studies using Swiss Vox data (Kriesi 2005; Nai 2013, 2015), I use the share of respondents who answered ‘difficult’ or ‘very difficult’ as an aggregate measure. The higher the share, the more complex the issue. Note that this question was asked also to non-participants, the aggregate

[24] I calculated a model introducing both, secondary education and tertiary education as separate dummy variables (see table 3-A6 in the appendix). The results are practically identical.

complexity-measure thus includes also non-voters' complexity-assessment. This helps to avoid endogeneity in the estimation of LOJ.

Furthermore, I include a set of standard *control variables* commonly used in studies on direct democracy (see e.g. Benz & Stutzer 2004). First, at the individual level, I include whether a respondent accepts a proposition or rejects it (and thus votes for the *status quo*). People who vote for the status quo might be less interested in politics and also less well informed about the policy-specific details. In addition, I include age, gender, language (German vs. non-German) as socio-demographic characteristics. Finally, I include a measure for media use (number of different media read during campaign), because this might be correlated with the main independent variables of interest as well as with the justification level. At the issue level, I control for the form of the vote (initiative, optional referendum, mandatory referendum), as well as for the policy domain because these issue-specific characteristics have shown to affect political knowledge levels, and at the same time they are correlated with context-level variables such as campaign intensity (campaigns are on average less intensive with mandatory referendums), elite polarization, and the complexity of the issues (technical or administrative topics are on average rated as more complex foreign or immigration policy issues for example).

3.4 Empirical results: multilevel analysis

Before I present the results of the multilevel analysis, let us take a look at the distribution of the levels of justification in the sample. Figure 3.1 gives the percentage of respondents for all categories of LOJ. There is a substantial proportion of respondents who cannot provide any answer (21.9 per cent), while 8.9 per cent cite justifications which do not relate to the content of the proposal. Nevertheless, this leaves us with 70 per cent of voters who can provide a content-related justification for their vote decision. Among the latter, 15.4 per cent gave a single and not-well formulated answer, while another 46.7 per cent provided more complex responses, either elaborating their claim with reasons or naming more than one argument. Finally, voters giving highly-elaborated responses which at the same time contained more than one argument account for only a minority of 7.1 per cent[25].

[25] Find more descriptive results of LOJ by moderating variables in the appendix.

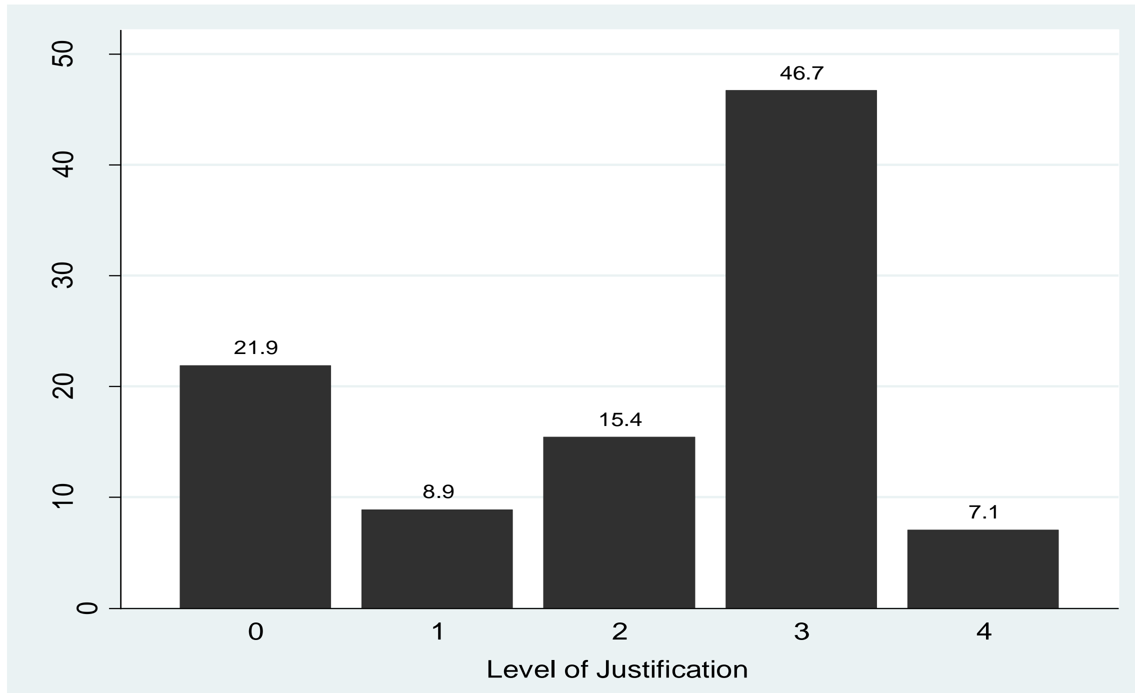

Figure 3.1. Distribution of LOJ over sample of respondents
Note: Higher numbers mean higher levels of justification.

3.4.1 Determinants of the level of justification

The unit of analysis is a person's level of justification (LOJ) for a specific proposal. While individuals differ in the quality of their justifications, it is important to note that different proposals may also be more or less difficult to justify. To the extent that different respondents justify their decision for a particular proposal in a similar way, there is clustering at the proposal level. In order to account for this complex data structure, two-level models are used. In these models, the level of justification y for a given person and a given proposition j is represented as a function of individual-level and proposal-level characteristics.

In addition to this complex data structure, I need to account for the ordinal nature of my dependent variable, which violates the assumptions underlying standard regression procedures. In order to satisfy the ordinal character of the dependent variable, I calculated a series of binary logistic regressions with random-intercept for all categories of LOJ, that is estimating the effects

of the covariates at the four thresholds of LOJ. For this purpose, I collapsed the sample into a binary variable at every cut-off point of the LOJ scale (Models 1-4 in Table 3.2). This analysis strategy exploits the ranking information of the dependent variable and, at the same time, it accounts for the clustering of the data at the proposition level. It allows me to introduce covariates on the individual as well as on the context level of the proposal. In addition, the models contain two cross-level interaction terms. The results can be interpreted as follows: at every threshold of LOJ, positive coefficients indicate that the probability of having a higher level of justification increases.[26]

Let us first look at the similarities between the four models. For the most part, the estimation results for the four threshold models show the expected statistically significant effects of the main explanatory variables at the individual and the context level. The only exceptions are education and campaign intensity, which affect different thresholds differently and will be discussed below. At the individual level, as stated in hypothesis 1b regarding the individual-level determinants of citizen competence, more politically interested voters provide better justifications.

At the context level, elite polarization has a negative, statistically significant effect on LOJ, meao that voters' arguments are less sophisticated in votes with a more polarized elite. Moreover, hypothesis 2b is also confirmed, and more complex issues are associated with lower LOJ.

The effects of education, campaign intensity, and complexity vary along the ordinal scale. The effect of education decreases for higher LOJ, as does the effect of complexity. Comparing the lowest (0/1) threshold with the highest (3/4) one, the coefficient of education decreases by half and loses statistical significance, only partly confirming hypothesis 1a. This means that education is relevant mainly in determining the step from not having a meaningful answer at all to having at least some answer to justify ones vote decision, but much less in determining differences between highly formulated and complex responses. Similarly, the coefficient of complexity, though still statistically significant, is less than half as large for the highest threshold as for the lowest one.

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[26] As a robustness check, I calculated a series of ordered logit models as well as an OLS model (see Appendix Table 3-A7). In these models, the Ordered logit estimates are based on the 'parallel regression assumption' that the effect of the covariates is the same on all four thresholds between the categories of the outcome variable, while OLS simply treats LOJ as a cardinal scale. None of the coefficients is significantly different in these models, which I interpret as evidence of the robustness of the findings.

While education and complexity are more strongly associated with the lower thresholds, the opposite is true for campaign intensity. The effect of campaign intensity almost doubles for the highest threshold (3/4) as compared to the three lower ones, controlling for all other variables. This partly confirms hypothesis 2a. Thus intense campaigns mainly make a difference for the highest levels of justification. The threshold between category 3 and 4 differentiates between those content-related answers which are well-elaborated *or* contain more than one argument and those answers which are well-elaborated *and* contain more than one argument. This suggests that media campaigns are important mainly to provide citizens with more than the basic information on a proposition. In sum, low levels of education, and complex initiatives seem to constitute a sort of 'entrance barrier' to justifying political decisions in a meaningful way. Media campaigns by contrast are most important when it comes to highly elaborated and complex justifications.

Finally, in order to check hypotheses 3a and 3b we need to look at the interaction effects. The hypotheses suggested that intensive media campaigns might substitute for the lack of either education or political interest at the individual level. Indeed, there is a significant negative interaction of campaign intensity and political interest at the lowest and the highest threshold, thus partly confirming hypothesis 3a. The interaction of education with campaign intensity is not statistically significant in contrast. This means that intensive campaigns reduce the effect of political interest on justification levels for the lowest and highest levels of justification.

Some of the control variables also give statistically significant associations with LOJ. Those who consult more media during the campaign have higher justification levels. Moreover, contra-voters, who reject proposed new legislation, are better at justifying their position than pro-voters, although the differences are relatively small. Language is the control variable with the strongest association with LOJ, with German-speakers providing significantly better justifications. This may be due to differences in the quality of media in different language regions (see Table 3.2).

Table 3.2: Binary logit regression results on LOJ tresholds

Level of Justification		Model 1: 0/1	Model 2: 1/2	Model 3: 2/3	Model 4 3/4
Fixed effects					
Individual	education	0.525	0.385	0.167	0.255
		(0.205)*	(0.163)*	(0.148)	(0.360)
	political interest	0.455	0.312	0.308	0.453
		(0.082)***	(0.059)***	(0.050)***	(0.110)***
	age	-0.004	-0.001	-0.002	-0.005
		(0.002)**	(0.001)	(0.001)*	(0.002)***
	male	0.120	0.051	-0.012	0.109
		(0.050)*	(0.036)	(0.029)	(0.050)*
	language (german)	0.466	0.281	0.192	0.397
		(0.050)***	(0.037)***	(0.031)***	(0.055)***
	pro / con	0.236	-0.129	-0.125	-0.183
		(0.055)***	(0.039)**	(0.032)***	(0.054)***
	media use	0.086	0.084	0.068	0.026
		(0.028)**	(0.021)***	(0.017)***	(0.030)
Context	campaign intensity	0.175	0.159	0.170	0.312
		(0.091)	(0.073)*	(0.081)*	(0.133)*
	elite polarization	-0.017	-0.018	-0.015	-0.017
		(0.006)**	(0.005)***	(0.007)*	(0.008)*
	mandatory referendum	0.571	0.144	0.040	0.072
		(0.253)*	(0.205)	(0.264)	(0.308)
	optional referendum[1]	0.614	0.411	0.231	0.196
		(0.214)**	(0.174)*	(0.224)	(0.259)
	institutional/fiscal	-0.252	-0.044	-0.100	-0.616
		(0.297)	(0.244)	(0.317)	(0.380)
	foreign/immigration	-0.262	-0.292	-0.146	0.191
		(0.190)	(0.155)	(0.200)	(0.229)
	ecology[2]	-0.533	-0.376	-0.492	-0.246
		(0.205)**	(0.169)*	(0.219)*	(0.258)
	complexity	-5.826	-5.498	-3.485	-2.639
		(1.025)***	(0.832)***	(1.072)**	(1.252)*
Interaction	interest*intensity	-0.053	-0.017	-0.023	-0.069
		(0.023)*	(0.017)	(0.014)	(0.029)*
	education*intensity	0.019	-0.005	0.002	-0.026
		(0.057)	(0.046)	(0.041)	(0.093)
	_cons	3.728	3.268	1.837	-1.832
		(0.719)***	(0.586)***	(0.735)*	(0.928)*
Random effects					
Context level variance		0.388	0.325	0.436	0.488
		(0.057)	(0.045)	(0.056)	(0.067)
N		22,597	22,597	22,597	22,597

Note: cells report logit coefficients and standard errors in parentheses; * $p<0.05$; ** $p<0.01$; *** $p<0.001$.

Binary logit models of the single thresholds of LOJ (calculated with xtlogit). For creating the dependent variables, the sample was collapsed the 4 different thresholds of LOJ. [1] Reference category for form of vote: popular initiatives; [2]Reference category for policy domain: social/cultural issues

As Stadelmann-Steffen and Vatter (2012) have noted, in the Swiss context the language indicator captures a variety of cultural, political, and societal-structural aspects, which are difficult to disentangle. When looking at the context level control variables, voters are more competent with optional referendums than with popular initiatives, and less competent with ecological issues than with social-cultural ones. Overall, the regression thus seems reliable, and the dependent variable obviously captures more than just random differences in citizens' justification levels.

Substantively, both individual level and context level variables have a significant impact. Taking the substantive effects, on average, the probability of higher levels of LOJ compared to any other level increases by 4.8 per cent for highly-educated respondents compared to those with below-secondary education.[27] This is a surprisingly small effect given that education has traditionally been taken as the primary determinant of political knowledge. In contrast, the total shift in the probability of giving a higher LOJ attributed to political interest is approximately 10.6 per cent, which is substantive. This means that a highly interested person is almost 11 per cent more likely to provide better justifications than a person uninterested in politics.

On the context level, average probability of a higher LOJ increases by 20.9 if we compare the least polarized with the most polarized issue, and by 14.8 per cent if we compare the least intensive and most intensive campaign. If we look at issue complexity, the probability of higher levels of LOJ increases by even 25 per cent from the most complex to the least complex issue.

3.4.2 Low-complexity vs. high-complexity issues

Issue complexity appears to be the strongest single determinant of LOJ. This makes it interesting to take a closer look at the relationship between issue complexity and justification levels. As regards types of topics, those 'closer' to people's everyday life are generally judged to be less complex (see appendix Table 3-O3).

vote on the constitutional act 'for quality and economic efficiency of health insurance policy'; a referendum on the renunciation of introducing a 'general popular initiative'; a vote on creating a

[27] The predicted probabilities reported here represent average marginal effects for all scores of LOJ based on an ordered logit model comprising all four LOJ categories (see Table 3-A7 in the Appendix, OLM full model) (see e.g. Benz and Stutzer 2004 for a similar procedure).

special public fund in support of air traffic; and an initiative to restrict private associations' rights of public appeal.

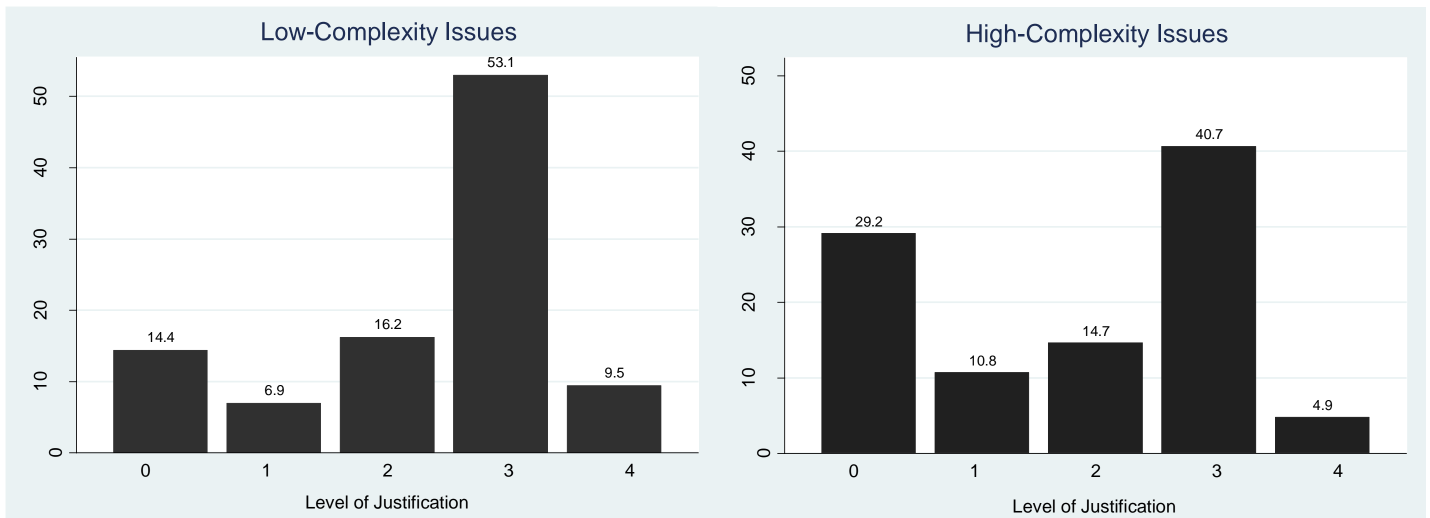

Figure 3.2 Distribution of LOJ shown separately for low-complexity issues (left-hand panel) and high-complexity issues (right-hand panel).
Note. The issues were split at the median of the complexity-distribution.

Figure 3.2 displays the distribution of LOJ separately for high-complexity versus low-complexity issues (separated by median-split). The most striking difference is found in the lowest category: the number of respondents not providing any justification almost doubles when it comes to complex issues as compared to easy issues. This confirms the result reported in the previous section of complexity as an 'entry barrier' to argumentation in direct democracy. Furthermore, with regard to the covariates, campaign intensity is more strongly associated with justification levels for low-complexity issues (see Tables 3-O4 and 3-O5 in the appendix for details). Thus with easy issues, people seem to better able to learn arguments through the campaign as with difficult issues. Elite polarization, by contrast, has a stronger negative effect for high-complexity issues. This is probably because, when an issue is complex, people tend rely more on their party's position, as postulated by low-information-rationality.

3.5 Discussion, conclusions and limitations

This paper started with the question “What is a competent citizen in direct democracy?” This was defined as a person holding well-justified opinions. The analysis of citizens’ levels of justification yielded three main results. First, almost 70 per cent of respondents justified their decision with reference to substantive, content-related arguments. Is this number high or low? Earlier studies of Swiss direct democracy reached similar conclusions, classifying about 70 per cent of the voters as medium or highly competent (Gruner & Hertig 1983; Kriesi 2005). Compared to studies on citizens’ knowledge from the U.S., the result seems rather optimistic. Converse (1964) classified about 85 per cent of his respondents (in the context of candidate elections) as holding no meaningful policy-related opinions, Delli Carpinin and Keeter (1996) found in a comprehensive study, reviewing over 2,000 political knowledge questions, that on average only four out of ten of the questions were answered correctly by over 50 per cent of those surveyed. More recently, Somin (2004), analyzing data from the 2000 U.S. National Election Study, classified a third of the voters as ‘know-nothings’, with little or no political knowledge.

This first result suggests that arguments play an important role in the vote choices of Swiss citizens in direct democratic decisions. Citizens, at least in the context studied here, seem not to be so minimalist after all. With this I echo Kriesi (2002; 2005), who found arguments to be the main determinants of direct democratic vote choices in Switzerland. This finding casts a positive light on the deliberative potential of the citizenry in Swiss direct democracy. Naturally, this study does not measure the deliberation going on between citizens, but at least it confirms that most citizens have arguments available to engage in such a deliberation.

As Hirschman (1989) and Frey (1994) have so aptly pointed out some years ago, holding opinions which are formed in an autonomous manner, based on arguments, is a public good and an important element of well-being – in particular in a direct democratic context. This is well in line with recent findings from U.S. direct democracy. An experimental study by Boudreau and McKenzie (2014) in the context of California direct democracy for example found that citizens shift their opinions away from their party’s positions ‘when policy information provides a compelling reason for doing so’.

A second main result concerns the individual-level effects of ability and motivation. For our policy-specific measure of citizen competence, education is less relevant than earlier studies had

suggested.[28] This finding fits well with Barabas et al.'s (2014) study, which analyzed the effect of education on different types of knowledge questions and found that education was mainly associated with general political knowledge, and much less with policy-specific information. In their comprehensive study on ambivalence and citizen competence, Lavine, Johnston and Steenbergen (2012) have shown more generally that: "Contrary to conventional wisdom, poor citizen performance is not inextricably linked to a lack of formal education or political knowledge. In fact, the results quite clearly indicate that cognitive capability is not the primary problem. Instead, what is at issue is motivation."

However, if we look more closely at the differential effects of education, we see that it seems to represent a sort of 'entry barrier' to the argumentative discourse in direct democracy. This suggests that low education may prevent people from acquiring arguments in the first place. And indeed it has always been a major concern of critics of deliberative democracy that some citizens lack the necessary resources to take part in the a deliberative discourse and are thus excluded from this form of democratic decision-making (e.g. Sanders 1997; Young 2000). This concern is accentuated if we add issue complexity to the picture. With complex issues, many people are unable to provide any arguments at all.[29]

Finally, the decision context – that is the opportunity factor – proves to be important. First, regarding issue complexity, meaningful deliberation is more probable to take place over easy issues which are close to people's everyday life. Second, a polarized issue, where the elite actors disagree and split into two coalitions of comparable size, appears to decrease the quality of public discussion and the ability of voters to justify their position as compared to an issue on which most parties agree. This confirms the finding from deliberation research within parliamentary debates that polarized elites hamper high-quality deliberation (Steiner 2012; Steiner et al. 2004). For the public's level of justification, a polarized elite also seems to be detrimental.

[28] This study only includes participants and does not cover non-voters. Whether abstention is associated with education is another question and one which is beyond the scope of this research.

[29] Note that there is no significant interaction effect between either motivation and education, or complexity and education (result not shown in model). Thus motivation cannot substitute the lack of education on the one hand, but complex issues do not enhance the negative effect of low educational level either on the other.

Furthermore, intense campaigns enhance justification levels as expected. Intense campaigns can even substitute to a certain extent for the lack of motivation as we learn from the negative interaction between the two factors. However, if we take a closer look at the threshold effects, we find that media coverage is not the engine that 'lifts' citizens into the debate. Instead, intensive campaigns are associated with changes in higher levels of justification. This means that one can learn more sophisticated arguments in the debate, but that intensive campaigns alone do not help citizens to enter the debate in the first place.

One limitation of the present data is that it cannot answer the question whether arguments really change minds or simply serve as *post hoc* rationalizations. Since Zajonc (1980) we know that "preferences need no inferences", or in other words, that individuals can hold preferences without prior cognition. From the perspective of motivated reasoning theory (Taber & Lodge 2006), one could argue that all arguments are nothing else than subsequent rationalizations of intuitively acquired opinions and do therefore not matter in decision-making. In fact, this line of reasoning has been advanced in several recent contributions in political psychology (Haidt 2012; Lodge & Taber 2013). However, first, this perspective is contested, and, second, certainly from the perspective of deliberative democracy, it is essential that citizens are able to justify their vote decisions in direct democracy. Only citizens who possess arguments can engage in a deliberative debate in the first place.

As to further limitations of the present study, first, the results are based on observational data and therefore causal claims are difficult to make. Nevertheless, observing associations between variables while controlling for relevant covariates allows us to gain valuable insights into the relationships between individual-characteristics and context-characteristics and citizen competence. In particular, because the analysis uses a unique and extensive dataset containing voters' justifications over representative samples of Swiss citizens for as many as thirty-four popular votes, covering all relevant policy domains.

Another concern is the generalizability of the results beyond the Swiss context. Following Kriesi (2005, 55), I argue that Switzerland should be considered as a 'laboratory of direct democracy'. Of course, the institutional and individual-level factors may change in other countries, but not necessarily the basic mechanisms of opinion formation and voting. In any case, the Swiss data provides a starting point for further comparative analysis. Finally, the research would have

benefitted from a better measure for issue complexity, particularly because this proved to be the strongest predictor of LOJ. However, due to a lack of alternative measures and following previous studies (e.g. Kriesi 2005), I decided to use it. The results on the strong effect of issue complexity, though intuitively plausible, should therefore be treated with some caution.

In sum, while citizens dispose of substantive arguments which allow them to hold considered opinions, the elite plays a key role in sending signals and informing the public in direct democratic votes. In direct democracy, citizens are only as competent or incompetent as their elite. If we worry about incompetent citizens taking policy decisions, we should worry just as much about the competence of the elite to lead the public discussion. In this respect, direct democracy does not differ as much from representative forms of democracy as is often assumed. The results also resonate with a recent U.S. field experiment (Esterling, Neblo and Lazer 2011), which shows that the motivation to deliberate combined with an opportunity to do so are crucial for citizens' willingness to become informed about politics.

This study makes several contributions. First, I propose a measure of citizen competence in direct democracy, based on citizens' ability to justify their decision with policy-related arguments. This measure gives a clearer and more valid picture of citizens' practical democratic competence than general factual measures of political knowledge. By analyzing citizens' justification levels in Swiss direct democracy, I find that voters are surprisingly able to provide policy-related arguments for their decisions. This should be of interest to scholars who want to empirically test the premises of deliberative and direct democracy theory. This study finds that a deliberative discourse can take place between citizens during direct democratic campaigns. To what extent citizens eventually compare their views and exchange arguments in a deliberative manner is a different question, which remains to be tested. Yet one essential prerequisite for such deliberation has shown to exist.

This emphasis on the importance of arguments tends to contradict one current strand of research in political psychology which depicts voters as unaware, led by unconscious, evolutionary inherited intuitions and manipulated by elite cues (see e.g. Haidt 2012; Lodge and Taber 2013). Lining up with some more optimistic findings on voter competence and argument processing (Bolsen, Druckman & Cook 2014; Boudreau & MacKenzie 2014; Druckman & Nelson 2003; Kriesi 2005), I conclude with the claim that the role of policy information and arguments in citizens' political opinion formation requires more attention in future research.

Chapter 4

Party, policy – or both? Partisan biased processing of policy arguments in direct democracy[30]

Abstract

How do party cues and policy information affect citizens' political opinions? This question is particularly relevant in direct democratic settings. Direct democratic campaigns are information-rich events which offer citizens the opportunity to have detailed information on a policy. At the same time parties try to influence citizens' decisional procedure by publishing their own positions on the issue. The current debate on whether 'party' or 'policy' has more impact on political opinions has not yet yielded conclusive results. We examine the effect of policy arguments and party cues on vote intention in two Swiss referendum votes using panel survey data. We find that both policy arguments and party cues have an independent effect on vote intention. However, in a second step, we find strong evidence of partisan biased processing of policy arguments, i.e. voters tend to align their arguments with their preferred party's position. Our conclusions as to the democratic quality of these vote decisions are therefore ambivalent.

4.1 Introduction

How do voters make up their minds in direct democracy? Do they blindly follow party cues, or do policy arguments matter in their opinion formation? This party-over-policy debate is ongoing in political psychology, with some early experiments finding that party cues trump policy arguments

[30] This paper was co-authored with Professor Hanspeter Kriesi and is currently under review with the *Journal of Parties, Elections, and Public Opinion*.

most of the time, and that individuals follow their party even if they are exposed to controversial policy information at the same time (e.g. Cohen 2003). Later research, by contrast, has rehabilitated the role of arguments to some extent, showing that individuals are well able to abstract from their preferred party's position when exposed to substantive policy information (e.g. Bullock 2011). The questions we address in this paper are therefore: *to what extent do citizens rely on policy information versus party cues in making their vote decisions*? *Do party cues substitute for policy-information or do they interact with policy-related arguments in their effect on vote intentions?* In direct democratic settings, these questions are particularly relevant, because the legitimacy of the decisions depends also on how people form their opinions. Furthermore, direct democracy offers an ideal setting for analyzing party versus policy effects.

We test the effect of policy arguments and party cues on vote intentions using original panel survey data covering two referendum campaigns in Switzerland. We find, first, that citizens' vote intentions are determined by both policy arguments and party cues. Yet in a second step we find that voters tend to align their position on policy arguments to their preferred party's position over the course of the campaign. This study makes a contribution to research in political psychology and public opinion in several ways. First, by using panel data, we systematically test heuristic effects of party preference versus partisan biased systematic processing in political campaigns. Second, in contrast to many previous laboratory experiments, we investigate these questions in the real-world context of direct democracy, where citizens are faced with policy decisions which affect their lives. Finally, we add results from the European context of Swiss direct democracy to a discussion which has been mainly based on data from the U.S. (Bullock 2011).

4.2 Theoretical considerations: Party over policy?

Direct democratic campaigns are information-rich events which give citizens an opportunity to learn detailed information about a policy. At the same time parties try to influence citizens' decisional procedure by publishing their own positions on the issue. In this context it is particularly interesting to know how party cues and policy information affect opinions and vote decisions for two reasons.

First, proponents suggest that direct democratic decisions reflect the will of the people more closely than decisions taken in representative systems (Bowler, Donovan & Tolbert 1998; Lupia & Matsusaka 2004). This assumption does not hold, however, if we find that citizens rely mainly on party cues when making up their minds. The second reason has to do with the debate about citizens' political ignorance. Critics' resistance against direct democratic procedures is essentially based on the argument that citizens are not sufficiently qualified to participate directly in political decisions because they lack the necessary political knowledge to do so (Budge 1996; Magleby 1984; Matsusaka 2004). Their point is that, as Sartori (1987, 120) suggested, direct democracy "would quickly and disastrously founder on the reefs of cognitive incompetence". Public opinion research over the years largely tended to confirm the lack of political knowledge of ordinary citizens (Converse 1964; Delli Carpini & Keeter 1996; Neijens & de Vreese 2009; Zaller 1992). The fundamental paradigm of public opinion research of the period – "*minimalism*" as it has been called – demonstrated that mass publics were distinguished by their minimal levels of political attention and competence (Sniderman, Brody, and Tetlock 1993, 219).

However, the fact that most citizens lack detailed information about politics is not sufficient to assume that they are unable to make reasonable political choices. Research under the heading of 'low information rationality' has shown that citizens who lack detailed policy information can use simple heuristic shortcuts, such as following the position of parties or interest groups, in order to come to similar conclusions as their well-informed fellow voters (Bowler & Donovan 1998; Kriesi 2005; Lupia and Matsusaka 2004; Arthur Lupia, Mathew McCubbins, and Samuel Popkin 2000; Sciarini and Tresch 2011). This idea of using heuristic cues as decision-shortcuts goes back to so called-dual process models of information processing in social psychology (e.g. Chaiken 1980; Petty & Cacioppo 1986) and to the work of Kahneman and Tversky (1974) on decisional heuristics.

One important reason why shortcuts are able to overcome informational shortfalls in political decision-making, is that "public choices have been organized by political institutions in ways that lend themselves to these cues" (Lupia, McCubbins & Popkin 2000, 68). Thus, direct democratic decisions are clearly structured into a binary choice, where each option is supported by a coalition of organizations in a more or less intense campaign that precedes the vote. The importance of judgmental heuristics to compensate for citizens' limited information about and attention to politics has been documented not only in the context of direct democratic campaigns (Lupia 1994; Lupia,

McCubbins & Popkin 2000), but in a wide range of politically relevant situations (Lau & Redlawsk 2001; Mondak 2000; Sniderman, Brody & Tetlock 1993).

Probably the most important heuristic cue is the partisan cue. Early on in political science research, the authors of *The American Voter* recognized "the role of enduring partisan commitments in shaping attitudes toward political objects" (Campbell et al. 1960, 135). While in the election context using party cues implies relying on the candidate's party affiliation (Lodge & Hamill 1986; Rahn 1993), in the direct democratic context it means relying on the endorsements provided by the party we feel closest to (Boudreau & MacKenzie 2014; Bowler & Donovan 1998; Kriesi 2005).

However, even if heuristic cues allow voters to overcome their minimalism to some extent, they do not provide a guarantee against unreasonable decision-making. First of all, as has been pointed out by some critical observers (Kuklinski et al. 2001), voters may well use cues, but they may be using them automatically and unknowingly, hardly worrying about their accuracy. A certain contextual knowledge is needed to use heuristics intelligently or in fact use them at all. Finally, what is probably the most worrying downside of the reliance on cues such as party endorsements, is that it allows the possibility for the elites to manipulate citizens' opinions. The concern is that "citizens conform too readily to the policy views of elites" (Bullock 2011, 496) and thereby ignore substantive information about policies. For the quality of democratic decisions it is therefore essential that citizens do not blindly follow elite cues but that they also consider policy information in making their decisions.

Enlightened opinions are meant to be based on substantive policy information. They should be the result of a more or less careful consideration of different arguments and viewpoints. From a deliberative point of view, voters ought to be able to justify their political decisions. The idea that simple signals such as party recommendations might substitute for the deliberative consideration of facts and arguments is therefore difficult to accept from a normative standpoint (Dahl 1989; Gerber et al. 2014; Hobolt 2007; Neblo 2007). For these reasons it is crucial to find out more about the way in which party cues and policy arguments affect political opinions.

So far, neither experimental, nor observational studies have come to consistent conclusions about the relative importance of party cues and policy information in voters' opinion formation. Early studies by Rahn (1993) and Cohen (2003) emphasize the overwhelming influence of party

cues. Cohen (2003) provides experimental subjects with counter-stereotypical party cues (he combines a leftist policy proposal with a Republican label and *vice versa*) and finds that, in most instances, people follow their party's cue, disregarding the policy information. More recent experiments conclude that policy information still has strong effects on opinion, even when citizens are exposed to party cues (Kriesi 2005, Bullock 2011, Boudreau and MacKenzie 2014). The latter argue that most of the time people do not have much information on, or interest in specific policies. But in situations where they are provided with detailed information and policy-related arguments, people do take them arguments seriously and use them to form an opinion.

Direct democratic votes represent a situation where citizens have incentives to be informed on policy (because they can decide) and where there is usually a more or less intensive campaign, which provides them with the necessary information. In the end, the question of how party cues and policy information affect citizens' political decision making is still unresolved. Therefore, the first question we try to answer in this paper is: *to what extent do citizens rely on policy information versus party cues in making their vote decisions*? *Following recent research results we expect that both, party cues and policy information, affect citizens' vote intention in direct democratic votes (hypothesis 1).*

4.2.1 Deep or shallow? Party cues as heuristics or triggers of biased systematic processing?

In recent years, research on party cue effects has developed further and the initial assumption that party cues simply substitute for detailed policy information has been questioned. Several recent contributions show that reliance on party cues does not necessarily reduce the amount of policy information voters elaborate, or the cognitive effort in processing it (Bullock 2011; Leeper & Slothuus 2014; Petersen et al. 2013). Instead, when party cues are provided together with policy information (as in the case of direct democratic campaigns), party cues affect the way in which this policy-information is processed. In other words, relying on party cues in this situation means that individuals process policy information in a partisan biased way (Bartels 2002; Gaines et al. 2007; Slothuus & de Vreese 2010).

This research is based on motivated reasoning theory (Kunda 1990; Lau & Redlawsk 2006; Taber & Lodge 2006). Motivated reasoning describes a process whereby (political) reasoning is

not necessarily guided by a goal to be accurate (an *accuracy goal*) – which would correspond to the normative ideal - but more often by *directional goals*, such as a personal motivation to protect existing beliefs or to follow a certain party line. A directional goal is given "when a person is motivated to arrive at a particular conclusion" (Kunda 1999, 236). This means that citizens select and process information in a biased way, preferring information that is compatible with their party position/preference and disregarding and/or devaluating incompatible information.

Motivated reasoning differs from simple cue-taking (e.g. following a party cue to make a political decision), which is used as a shortcut to avoid the effort of processing political information. In the case of motivated reasoning, individuals use arguments and information about the issue at stake, but do so to confirm a certain position. Such biased systematic processing is particularly likely under two conditions (Chaiken & Maheswaran 1994): when individuals have to deal with very important tasks, and when they face ambiguous information with regard to such tasks. Both conditions apply to direct democratic votes where citizens decide directly on often complex and controversial policy issues which affect their personal life and the national welfare.

The debate about the specific mechanisms through which party cues affect information processing is ongoing. Do voters blindly follow cues as shallow heuristics without much cognitive effort, or do party cues affect the way they process more detailed information? *Our second research question in this paper is therefore: Do party cues substitute for policy information or do they interact with policy-related arguments in their effect on vote intentions? Following motivated reasoning theory, we expect party cues to affect citizens' position on policy arguments, so that they align their arguments with their party preference (Hypothesis 2).*

The question is essential from a normative perspective because the two options entail very different consequences and remedies (Petersen et al. 2013; Leeper & Slothuus 2014). If party cues act as shallow heuristics and substitute a lack of policy information, then simply providing more detailed information should reduce partisan bias and lead to more considered opinions. If, by contrast, party cues activate a directional goal and lead to *biased systematic processing* (Cohen 2003) or *partisan motivated reasoning* (Taber & Lodge 2006), more information will not lead to more balanced opinions. On the contrary, it will be processed in a partisan biased way; *more* information will lead to *more* partisan positions (see Zaller 1992, Taber & Lodge 2006).

4.2.2 Individual and context-level moderators: political knowledge and issue complexity

Party cues and policy information influence opinion formation differently depending on various characteristics of the individual as well as the context of the decision task. On the context level, the characteristics of the issue at stake are crucial for voters' information processing. Classic dual-process models would predict more systematic information processing with simpler tasks and more heuristic use with more complex tasks. Accordingly, Arceneaux (2008) finds a stronger effect of policy information with a more salient (and thus more easily accessible) issue. Bullock (2011) also argues that many previous experiments have found strong party cue effects because they used low-salience issues about which subjects did not know much. He finds strong effects of policy information when he uses the salient example of a health care reform and provides detailed policy information. In sum, previous studies confirm that with simple, salient policy issues, were information is readily available, policy arguments play a stronger role.

In our study we capitalize on the comparison of two cases in order to test the effect of task complexity: a familiar, salient, and easily understandable asylum law revision and a technical, highly complex and unfamiliar corporate tax reform. *We expect policy arguments to be more strongly associated with vote intention in the easy, asylum law vote than in the more complex corporate tax reform (H1a).* This is because we assume that the arguments in the asylum law debate are more easily understandable for citizens, while in the technical tax reform discussion we expect citizens to rely more strongly on party cues. Therefore, reversely, *we expect party cues to have a stronger effect in the corporate tax vote than in the asylum law vote (H1b). What is more, we expect these differences to be more marked at the end of the campaign than at the beginning, since we expect people to learn about party cues and policy information during the campaign **(H1c).***

On the individual level, the most controversial debate surrounds the moderating effect of political knowledge. Interestingly, some studies have found motivated reasoning and belief protection to be just as strong (Bartels 2002; Cohen 2003; Taber, Cann & Kucsova 2009) or even stronger in highly politically knowledgeable individuals than in low knowledgeable (Meffert et al. 2006; Mutz 2006; Taber & Lodge 2006), while others found a reduction of bias among highly knowledgeable (Anduiza, Gallego & Muñoz 2013; Arceneaux 2008; Boudreau & MacKenzie

2014; Kam 2005). On the one hand, the more knowledgeable might be better able to understand and integrate policy information and update their opinions accordingly. On the other hand, if motivated reasoning holds, they might be more skilled in protecting their prior beliefs and to select and process novel information accordingly (see Zaller 1992).

Given these controversial results, we expect citizens with different political knowledge levels to use party cues and policy information differently. More specifically, *following motivated reasoning theory, we expect a stronger partisan bias in information processing for the highly knowledgeable (H2a).* In other words, we expect high knowledge voters to be better able to align their policy information with their party preference than low-knowledge voters.

4.3 Research design, data and measurement

4.3.1 Data

Our analysis is based on individual-level panel survey data collected for two national popular votes in Switzerland. The issues at stake were first, an asylum law reform, and second, a corporate tax reform. The surveys were designed by researchers at the University of Zurich[31] and conducted by a Swiss polling agency[32] using computer-aided telephone interviews. The population consisted of Swiss citizens from the age of eighteen (voting-age) who live either in the German-speaking or French-speaking part of Switzerland and speak one of the two languages sufficiently well.[33] The sample was drawn through a random-quota sampling strategy where the households were selected randomly, while the target person within a household was selected according to quota criteria. These criteria were gender, age, education and occupation. The sample is therefore representative of the Swiss population in these relevant variables.

The panels consisted of two waves. The first was conducted at the startof the three-month referendum campaigns, and the second immediately after the two votes respectively. Thus, we have before and after-campaign measures for both cases. We only include respondents who answered

[31] Hanspeter Kriesi, Laurent Bernhard, Regula Hänggli, Christian Schemer and Jörg Matthes

[32] GfK (http://www.gfk.com/ch/seiten/default.aspx)

[33] The Italian-speaking part was omitted from the analysis for reasons of cost.

both waves in the analysis, which means that the dataset is balanced. For our models, we are left with 1092 (asylum) and 1001 (corporate tax) respondents respectively. Every respondent constitutes an observation for each panel wave in which they participated, which means that every respondent provides two observations (for descriptive statistics of the variables used see Tables 4-A1 and 4-A2 in the Appendix).

4.3.2 The two cases

In order to test our hypotheses, we selected two popular votes that share some characteristics, but are clearly distinct with respect to their *complexity*. Both votes concern a referendum launched by the left against a legislative proposal adopted by the Swiss Federal Parliament. The first case is a referendum against a revision and toughening of the asylum law which took place in 2006. The new law was accepted by a two-thirds majority (67.8 per cent). The complexity of the asylum law referendum was quite low. First of all because voters were already familiar with the issue, since there had been no less than three other federal votes on asylum laws over the last ten years – in 1987, in 1999, and in 2002. In addition, over the same period of time, there had been eight votes dealing with immigration, all of them dealing with the restrictiveness of immigration policy. Moreover, the share of voters who experienced difficulties in making up their mind at the end of the campaign was average according to a representative national post-ballot survey. 38 per cent of voters experienced such difficulties in this particular case, compared to an overall average of 37 per cent (established on the basis of 226 federal votes since the 1980s). The asylum law reform also qualifies as an *easy issue* in Carmine and Stimson's (1980) terms, as it is a longstanding debate on a symbolic issue which concerns political ends.

The second referendum concerns a neo-liberal corporate-tax reform that was accepted by the smallest possible margin (50.5 per cent) in 2008. This reform was new on the political agenda, and it constituted a very technical, highly complex proposal with three components. Its core element consisted in a reduction of the tax on dividends for large shareholders – a measure designed to alleviate the double imposition of dividends, which Switzerland practiced at the time as one of the last member states of the OECD. With this it classifies as a *hard issue* in Carmines and Stimson's (1980) definition. The corporate tax was relatively unfamiliar, as is indicated by the fact that no less than 28.7 per cent of the voters indicated that they were still undecided at the start of the

campaign (which is twice the corresponding share for the asylum law). Moreover, it was much more difficult than the asylum law. As a matter of fact, this tax constitutes one of the most difficult objects that have ever been submitted to the Swiss voters. Almost two-thirds of the voters reported having had difficulties in taking a decision in this case in the corresponding national post-ballot survey.

4.3.3 Key concepts / operationalization

Vote intention

Our first outcome measure is the vote intention for both waves. For the first wave, in the asylum case, the specific questionnaire item reads as follows: 'If there were a ballot tomorrow, would you strongly be in favour, somewhat in favour, somewhat against or strongly against [the proposal, e.g. the toughening of the asylum law]?' In the second wave, after the vote, we repeated a similar question to the vote intention question, which is used here: 'Are you strongly in favour, somewhat in favour, somewhat against or strongly against [the proposal, e.g. the toughening of the asylum law]?' The variable is dichotomized by median-split, in order to distinguish between supporters and opponents of the proposal. We prefer the vote intention over the final choice in the second wave, because it allows us to include respondents who did not vote.[34]

Party orientation

Citizens' party preference constitutes our indicator for the effect of party cues. We define party preference in terms of the likes and dislikes of political parties prior to a campaign. The reason is that a stricter definition in terms of party identification or party choice at the last election leads to a large amount of non-response in Switzerland. While this constitutes a weaker measure of party affiliation than party identification, it also means that we will most likely obtain conservative estimates of party cue effects. Following previous studies (Slothuus and de Vreese 2010; Van der Eijk et al. 2006), we operationalize partisan preferences on the basis of a set of questions asking the respondents to indicate how likely it is that they will ever vote for each one of the four major Swiss parties – Social Democrats (SPS), Christian Democrats (CVP), Liberals (FDP or LPS) and

[34] The results are virtually identical when voting behaviour reported in the 2nd wave is the dependent variable.

the Swiss People's Party (SVP) –, and for the Green Party (GPS). These questions have been asked only once, at the beginning of the campaign, since we assume that voters do not change their partisan orientation during a short issue-specific campaign.

The responses range from 'will never vote for this party' (score 0) to 'will certainly vote for this party at some time in the future' (score 10). Based on this information, we define a respondent's partisan predisposition with respect to a given proposal as the difference between his or her greatest likelihood to vote for a party in the alliance supporting the proposal, and his or her greatest likelihood to vote for a party in the alliance opposing the proposal. Respondents with clear-cut partisan allegiances will get high (negative or positive) values on this indicator, while respondents with weak or ambivalent allegiances will get values close to zero. In order to make our two independent variables, party preference and policy arguments, more comparable, we standardize them with a mean of 0 and a standard deviation of 1. Only 3.4 per cent of the respondents in the sample do not have a value on this indicator of partisan predispositions.

Party cue knowledge

We can only assume that party preference affects vote intention with the use of a partisan heuristic if a voter actually knows their preferred party's position. Therefore we introduce an additional, dichotomous variable which scores 0 for respondents who do not know their preferred party's position on the proposal and 1 for those who do. Only the latter are able to use party cues.

Policy arguments

For each one of the two proposals, the interviews included a list of arguments[35] related to the ballot proposal in both waves. At the beginning and at the end of the campaign respondents were asked how much they agreed with these arguments: "We would now like to ask you about your personal opinion about various positions. Please, tell me from 1 'do not agree at all' to 5 'fully agree', how much you agree with these positions". Thus for each argument, respondents received a score from

[35] Ten arguments for the asylum law referendum and eleven arguments for the corporate tax referendum.

1 to 5[36]. The list of arguments included the key arguments of the pro and contra camp as well as some secondary arguments which had also been used during the campaign. These are the key arguments of the two campaigns:

Asylum law reform:

- Pro: 'The abuse in the asylum domain has to be stopped'; 'the asylum policy has to be made more efficient'
- Contra: 'The humanitarian tradition of Switzerland must be maintained', and 'the rights of the asylum seekers have to be protected'.

Corporate tax reform

- Pro: 'this tax reform supports the small and medium sized enterprises', and 'this tax reform enhances the competitiveness of the Swiss economy'
- Contra: 'a tax relief for major shareholders is unfair', and 'this reform leads to an unacceptable tax loss for the federal government and the cantons'.

We created a single additive index of respondents' argument position as follows: First, we build the sum of the pro-argument scores and the contra-argument scores separately. Second, we subtract the sum of the contra-scores from that of the pro-scores. Positive values on this index signify support for the proposition while negative values imply opposition to it. The stronger (positive/negative) the value, the stronger the argument position. Again, we standardize this indicator with a mean of 0 and a standard deviation of 1.

In addition to these main variables of the analysis, we included a set of standard control variables which includes gender, age, education level (below secondary vs. secondary/tertiary education), and political knowledge. The latter was measured as issue-specific knowledge, by asking respondents three questions on the content of the propositions. From these three questions we build a simple additive index which consequently ranges from 0 to 3. The question was measured at both waves, for the analysis we use the respondents' average value, as we assume this to be an appropriate indicator of the general level of knowledge of respondents on the votes.

[36] The survey contains a question asking respondents whether they had heard this argument before. The analysis of this question shows that, already at t1, a majority of people were familiar with the arguments, with exception of two argumetns in the corporate tax case.

4.4 Empirical results

The analysis proceeds in two parts. First, we estimate the *effect of party cues and policy arguments on vote intention* during the referendum campaigns. In a second step we estimate *the effect of party preference on policy arguments* to test the partisan biased processing hypothesis. All effects are estimated separately for the two cases.

4.4.1 Part one: direct effects of party preference and policy arguments on vote intention and campaign effects

Table 4.1 presents the coefficients (standard errors in parentheses) of a random-intercept logit regression[37] with vote intention (support vs. opposition of the proposal) as outcome variable. We use a random-intercept model because this allows us to account for the panel structure of the data and at the same time to estimate the effect of party preference, which does not vary over time.

Model 1 (for both cases) shows the effect of policy arguments only, holding control variables constant, while in model 2, we add party preference. The first two rows show the coefficients for the effect of party preference and policy arguments on vote intention The two subsequent rows show interaction effects for the same variables at t2, which is right after the vote. The remaining rows give the coefficients for the control variables and the t2-constitutive term. To test whether the effect of party preference is really due to the use of party cues we need to compare this effect for respondents who know their party's cue and those who do not. For this purpose we calculate the full models separately for respondents *with* and *without* knowledge of their party's position. Model 3 present the results for respondents *without* knowledge of their preferred party's cue.

First, in model 1, we can see that at the outset of the campaign (t1) policy arguments have a strong and statistically significant effect on vote intention. This effect diminishes only slightly once we introduce party cues in model 2. Thus, both party preference and policy information have an

[37] A Hausman test (Prob>Chi2 = 0.136) shows that the coefficients of our random-effects model do no systematically differ from those of a fixed-effects model (for time-varying covariates). Possible bias introduced through omitted individual-level time-invariant characteristic is thus negligible and the use of random effects model is appropriate.

independent, positive, and statistically significant effect on vote intention, holding all other variables constant. As expected however, the effect of party preference is substantively much stronger and statistically significant only for the respondents who know the party cue (model 3), which indicates that party preferences affect vote intention with the use of party cues. Our first hypothesis is thus confirmed (h1). This is true for both issues, the asylum law reform and the corporate tax reform. That is, respondents' vote intention is significantly associated with party preference (if they know the cue), and with their position on policy arguments.

Moreover, the campaign has a significant reinforcing effect on party preference and policy information in the simple case of asylum law (see Table 4.1, rows 3-4). Here too, the effect of party preference is only reinforced for respondents who know the party cue. This means that respondents' association between party preference and vote intention, and between their policy position and vote intention was strengthened during the campaign. In contrast, for the complex case of corporate tax reform, only the argument effect was strengthened (statistically) significantly during the campaign, and only for respondents with knowledge of the party position.

In order to better understand the substantive effects of our main explanatory variables, table 4.2 presents the marginal effects of party preference and policy arguments on vote intention for the full models, and for respondents who know their party's cue – so table 4.2 corresponds to models 2 in table 4.1. The marginal effects correspond to the increase in the probability to vote yes for a given proposition which is associated with a one standard deviation increase in the explanatory variable. The table shows the initial effects at t1, the additional campaign effects at t2, as well as the total effects (in bold).

Table 4.1: Regression of party preference and policy arguments on vote intention, including controls

	ASYLUM LAW REFORM			CORPORATE TAX REFORM		
model	1	2	3	1	2	3
	argument only cue know=1	full model cue know=1	full model cue know=0	argument only cue know=1	full model cue know=1	full model cue know=0
party orientation		0.355	0.216		0.730	0.078
		(0.159)*	(0.133)		(0.169)***	(0.135)
argument position	2.158	1.888	0.815	2.129	1.851	0.819
	(0.285)***	(0.280)***	(0.179)***	(0.256)***	(0.244)***	(0.186)***
t2*party orient.		0.646	-0.019		-0.067	0.272
		(0.244)**	(0.291)		(0.203)	(0.235)
t2*argument pos.	1.587	1.392	1.273	0.658	0.593	0.186
	(0.343)***	(0.345)***	(0.378)***	(0.277)*	(0.279)*	(0.270)
t2	1.452	1.432	0.960	0.580	0.567	0.657
	(0.277)***	(0.277)***	(0.282)***	(0.221)**	(0.219)**	(0.235)**
gender	0.642	0.576	0.065	-0.352	-0.153	-0.124
	(0.236)**	(0.230)*	(0.210)	(0.235)	(0.227)	(0.216)
age	0.006	0.000	0.008	0.143	0.043	-0.061
	(0.007)	(0.007)	(0.006)	(0.083)	(0.081)	(0.070)
education	-0.683	-0.683	-0.252	-0.038	-0.015	0.539
	(0.406)	(0.395)	(0.330)	(0.412)	(0.395)	(0.322)
political knowledge	-0.174	-0.129	-0.061	0.033	0.060	0.234
	(0.120)	(0.117)	(0.106)	(0.125)	(0.123)	(0.121)
_cons	0.545	0.789	0.110	-0.292	-0.041	-0.647
	(0.554)	(0.548)	(0.457)	(0.597)	(0.574)	(0.479)
lnsig2u	0.337	0.056	-2.316	0.962	0.754	-1.041
	(0.631)	(0.768)	(6.063)	(0.393)	(0.443)	(1.504)
sigma_u	1.184	1.029	0.314	1.618	1.458	0.594
	(0.374)	(0.395)	(0.952)	(0.318)	(0.323)	(0.447)
rho	0.299	0.243	0.029	0.443	0.392	0.097
	(0.133)	(0.141)	(0.171)	(0.097)	(0.106)	(0.132)
N	1,126	1,126	536	1,151	1,151	533

Note. Logit coefficients and standard errors in parentheses; dependent variable: vote intention dichotomized; * $p<0.05$; ** $p<0.01$; *** $p<0.001$. Cue know refers to whether respondents know their preferred party's position on the issue.

First of all, the association between vote intention and policy arguments is substantively very strong. At t1, the probability of voting yes increases by 40.5 (asylum law) or 41.2 (corporate tax) percent for one standard deviation change in the pro-direction of the policy argument scale. For party preference by contrast, the probability of voting yes increases by 7.6 or 16.3 percent respectively for one standard deviation change towards the right. At the end of the campaign, the corresponding marginal effects amount to 24.0 or 14.8 percent for party preference, and to as much as 70.4 or 54.4 percent for policy arguments. These percentages are not directly comparable as the two measures represent substantively different concepts, but we can see that the effect of arguments remains substantial, even if we control for party cues.

Table 4.2: Marginal effects of party preference and policy arguments on vote intention

		ASYLUM LAW		CORPORATE TAX	
			total effects		total effects
Party preference	t1	0.076		0.163	
	t2	+0.164	= **0.240**	-0.015	= **0.148**
Policy arguments	t1	0.405		0.412	
	t2	+0.290	= **0.704**	+0.132	= **0.544**

Notes. The table presents results for the full model and for respondents with party cue knowledge, corresponding to models 2 and 5 in table 4.1. Marginal effects are calculated under the assumption that random effects = 0. The numbers represent the increase in probability to vote yes for a given proposition associated with one standard deviation increase in the explanatory variable. Total effects over both t1&t2 are shown in bold.

Comparing the two cases, party cues have, as expected, a stronger initial effect in the complex corporate tax referendum, confirming our hypothesis H1b. At the outset of the campaign, the marginal effect of party cues in the corporate tax vote is twice as large as in the vote on the asylum law. By contrast, the initial effect of arguments does not differ between the two cases, disconfirming H1a. Looking at the campaign effects, policy arguments had a much stronger effect during the campaign in the easy, asylum law case. Somewhat surprisingly, however, by the end of the campaign, the party cue effect is stronger in the asylum law case as well. This only partly

confirms our hypothesis H1c, which expected the initial differences between issues to become more pronounced by the end of the campaign. What happened instead is that the campaign reinforced the association with both, party cues and policy arguments mainly in the easy case.

To sum up this first part of the analysis, party cues do not substitute for policy information, arguments have an independent effect on vote intention, even if we control for the respondents' party preferences. The effects of the campaign are stronger in the easy, asylum case.

4.4.2 Part two: does party preference affect position on policy arguments?

Table 4.3 presents the results of lagged regression models. In order to test our biased processing hypothesis, following Bartels (2002), we regressed argument position at t2 on lagged argument position at t1 (at the start of the campaign), party preference, a constant term, and a set of controls. Again, we only present this analysis for the respondents who know the party cue. The coefficient of interest is given in row 2: the effect of party preference on argument position after the vote, when controlling for the initial argument position. The columns present the results separately for low- and high-knowledge subjects.

Looking at all subjects first, it is clear that our second hypothesis (H2) on partisan biased processing is confirmed in both cases. Party preference has a statistically significant effect on argument position after the vote, even if we control for respondents' initial argument position. Not surprisingly, lagged argument position is the strongest determinant of argument position at t2, but at the same time party preference still exhibits a significant effect on argument position during the campaign. As party preference does not change over time, this means that respondents align their argument position with their party preference in the course of the campaign.

Substantively, among all subjects, a change in party preference of one standard deviation is associated with a change in t2 argument position of 0.146 for the asylum case or 0.287 for the corporate tax case. The maximum amount of change in t2-argument position associated with a change from the radical right pole of the party spectrum to the radical left, when controlling for initial argument position, is 0.68 or approximately 12 per cent for the asylum law, and 1.1 or approximately 19 per cent for the corporate tax case. These effects are substantively meaningful.

Comparing the two cases once more, this biased processing effect seems to be stronger for the more complex corporate tax referendum, while in the easy case, t2 argument position is more strongly determined by t1 argument position. However, as to our hypothesis H2a on biased processing for different political knowledge levels, the results are mixed. In the easy asylum law case, the biased processing effects are stronger for the highly knowledgeable, than for the less knowledgeable respondents. Thus highly politically knowledgeable individuals display a stronger partisan bias in information processing than less well-informed ones. This is not true for the corporate tax case, where both, the ones who know more or less on the referendum issue, exhibit comparable biased processing effects.

To sum up this second part, party cues interact with arguments in the course of the campaign, they shape the way subjects change their position on arguments during the campaign. In other words: the change in argument position during the campaign is strongly associated with respondents' party preference.

Table 4.3: Regression of lagged argument position (at t1) and party preference on argument position at t2.

	ASYLUM LAW			CORPORATE TAX		
	all subjects	low knowledge	high knowledge	all subjects	low knowledge	high knowledge
Lagged argument position	0.793	0.664	0.812	0.564	0.509	0.590
	(0.028)***	(0.083)***	(0.028)***	(0.033)***	(0.050)***	(0.044)***
party preference	0.146	0.090	0.156	0.287	0.308	0.274
	(0.027)***	(0.069)	(0.030)***	(0.033)***	(0.048)***	(0.045)***
gender	0.093	0.011	0.094	-0.146	-0.209	-0.087
	(0.043)*	(0.102)	(0.048)*	(0.061)*	(0.090)*	(0.084)
age	0.000	-0.004	0.001	-0.060	-0.075	-0.059
	(0.001)	(0.003)	(0.001)	(0.021)**	(0.033)*	(0.029)*
education	-0.106	0.035	-0.178	-0.102	-0.178	-0.052
	(0.076)	(0.142)	(0.090)*	(0.108)	(0.184)	(0.131)
_cons	-0.022	0.197	0.003	0.505	0.597	0.474
	(0.092)	(0.204)	(0.106)	(0.156)***	(0.221)*	(0.193)*
R^2	0.74	0.56	0.77	0.50	0.48	0.51
N	651	132	519	652	267	385

Note. OLS regression, clustered by person-id, coefficients and robust standard errors in parentheses; dependent variable: argument position at t2; * $p<0.05$; ** $p<0.01$; *** $p<0.001$. Only respondents with knowledge of party position are included in the analysis.

4.5 Discussion and conclusion

First, we find that vote intention is associated with both, party cues and policy information at the same time. Thus the idea that voters are either well-informed about the policy details or, if not, they resort to party cues as a simple heuristic shortcut does not seem to hold. Saying that, in direct democracy, "people base most of their choices, even complex and important ones, on very simple kinds of information […] rules of thumb or heuristics" because they lack the cognitive capacity to "know detailed information, or conduct rigorous research, on the consequences of every choice they face" (Lupia & Matsusaka 2004, 468) does not tell the whole story.

Instead, according to democratic norms, voters are expected to hold meaningful opinions, which are based at least to some extent on substantive policy arguments. Not only do policy arguments in our study have a statistically significant effect on vote intention, they are also substantively strongly associated with vote intention than party cues. This finding is well in line with some recent experimental findings, questioning the radical 'party-over-policy-hypotheses' (Cohen 2003) and finding policy information to be relevant, even if party cues are present (Bullock 2011; Boudreau & McKenzie 2014). This first finding allows some cautiously optimistic conclusions with regard to citizen competence. Citizens are not as ignorant of the policy details as often portrayed.

Simultaneously, however, we find that, overall, party cues have a stronger impact when voters are faced with a difficult proposition, in our case a highly technical and low-salience corporate tax reform. So, at least in part, we do act as 'cognitive misers' (Fiske & Taylor 1991), trying to maximize efficiency and minimize effort in information processing. This perfectly matches the expectation of dual-process models, which argue that with more difficult tasks individuals tend to resort more to heuristic strategies (e.g. Chaiken & Ledgerwood 2011, Petty and Cacioppo 1986).

Another key finding of the study regards the effect of the campaign. Campaign effects differ between the cases. We find that the campaign makes a difference mainly for the easy, asylum law case. In this case voters learn more policy arguments, which is intuitive, because the arguments are more comprehensible than in the complex case. At the same time however, voters also align their vote intention better with their party preference. In the complex case in contrast, people seem to have a hard time learning anything from the campaign. Thus learning effects during direct democratic campaigns are dependent on the complexity of the voters' task.

While party preference does not vary, vote intention and argument position vary over the campaign. With the present data we cannot exclude reverse causation effects of vote intentions on argument positions. In other words, we do not know whether respondents adapt their vote intention to their argument position or the other way around – but, that said, we think that the association between these two variables and its change throughout the campaign is already a very interesting finding, which lines up well with other studies that use experimental methods to better determine the direction of causality.

Despite these optimistic findings showing that policy information is relevant, the processing of this policy information is found to be strongly affected by party preference. We find a clear partisan biased processing effect, meaning that voters tend to align their position on substantive policy arguments with their party preference during the campaign if they know their party's position on the issue. Thus party preferences interact with policy information. This also means that party preference affects vote intention, not only directly through the use of party cues, but also indirectly, through the biased processing of arguments.

With regard to political knowledge levels our results are mixed. In the easy case of the asylum law reform, we found that the biased processing effect was stronger among highly knowledgeable citizens. When it is relatively easy to gather information, well-informed citizens are apparently better able to align their arguments with their preferred party's position. In the more complex corporate tax case in contrast, biased processing did not differ between well-informed and less well-informed. In this case, where people are more disoriented and have a hard time understanding the facts in general, everyone appears to rely strongly on party positions in their interpretation of policy arguments.

These findings are in line with motivated reasoning theory, which assumes all political thinking to be directional and goal-oriented. Recently, Bolsen et al. (2014, 245) have defined directional reasoning as "the default method to forming evaluations in political contexts". Our study contributes an additional piece of evidence to this research. It is also in line with the early insight of the authors of *The American Voter* (Campbell et al. 1960) that partisan preferences are crucial social ties which shape our attitudes towards political objects, and with Bartels' (2003, 117) conclusion that "party identification is a pervasive and dynamic force shaping citizens' perceptions of, and reactions to, the political world". But it is not only individuals' motivation to conform to

their party's line that drives this effect, framing policy of issues by parties themselves contributes to it. As Bullock (2011, 511) notes: "in political debate, cues and frames almost always appear together: Party elites rarely take a position without trying to frame it in a way that will garner support for it" (see also Zaller 1992; Slothuus & DeVreese). Thus, in political campaigns the natural tendency of motivated reasoning and protection of prior beliefs is supported and reinforced by political parties who actively frame the issue at stake in their favour.

This second finding qualifies the optimistic first conclusions drawn above to some extent. If we process information in a biased way, preferring information which conforms to our party preference, and disregarding or devaluating incompatible information, this is problematic democratically speaking. Such a process clearly does not correspond to the ideal of deliberative debate, where citizens listen to both sides and base their decisions on the better argument. Instead, to a great extent, they seem to choose their arguments depending on their political predispositions, *post hoc* as it were. Concerns about *post hoc* rationalization have been expressed by many political scientists recently (Bartels 2005; Haidt 2012; Lodge & Taber 2013).

Not only does partisan motivated reasoning hinder deliberative debate, it is also difficult to remedy. If citizens are incompetent because they lack information and arguments about specific policies, the most obvious answer would be to provide them with more and better information. Another answer, as discussed above, would be to provide them with suitable cues and heuristic strategies which allow them to reach reasonable conclusions. If, however, the problem lies in the partisan processing of information, these strategies will not help. On the contrary, more information may strengthen support for prior partisan beliefs. This is reflected in our finding that highly knowledgeable individuals – those supposed to possess more policy information – exhibit stronger biased processing. There are some studies on the limits of motivated reasoning (Christiansen forthcoming) and on the application of so-called 'debiasing strategies' in political thinking (see Bolsen, Druckman & Cook 2014; Lord, Lepper & Preston 1984; Tetlock 1983), but this topic is only beginning to be analyzed and needs to be developed further.

We should also note here that previous research on Swiss direct democratic campaigns (Kriesi 2005, 2012) may have been overly optimistic in this respect, because it failed to take into account the difference between direct argument effects and biased processing, and because it was not able

to account for the impact of unfamiliar proposals on voters' information processing in such a differentiated manner as we have done it here on the basis of panel data.

In summary, our study and other recent findings suggest, it is not *either* party *or* policy, but most probably party cues *and* policy information which affect opinions. In consequence, it is not true, as has often been suggested, that citizens ignore policy information once they are exposed to party cues (Cohen 2003; Popkin 1991; Rahn 1993; Zaller 1992). In a direct democratic campaign, they are inevitably exposed to both types of information and both have an effect on their vote intention. With this, the present study provides further evidence for the claim that holding meaningful opinions, based on arguments and policy-related information, is in fact important for individuals. Thus voters do not simply copy and paste their party's position onto their ballot paper, but base their position to a great extent on substantive policy arguments.

The idea of party cues as shortcuts and substitutes for policy information, as one of the most important ideas in political psychology of the recent decades, needs to be revisited. Our result, in line with other recent studies, suggests that this is not the mechanism through which party cues work. Cues do not necessarily reduce the elaboration of policy arguments, the two types of information act in parallel, at the same time, and indeed they interact with each other.

The conclusions for the democratic quality of popular ballot decisions are ambiguous. We agree with Bullock (2011) that the concern that elite influence causes citizens to neglect relevant policy knowledge is not entirely justified. Yet the results suggest that this does not exclude the manipulative influence of elites on mass opinion. If elite cues affect how policy information is processed and interpreted, the prospect of elite manipulation is not so limited after all.

The study's main limitation is that we are unable to determine the direction of causality in the relation between vote intention and policy arguments. While we commonly assume that arguments affect our opinions – which correspond to a deliberative norm – several authors have claimed that it is often the reverse: arguments are cited as *post hoc* rationalizations of political decisions. We cannot settle the question with the given data. The results are of substantive interest for the party-over-policy debate, which has mainly relied on experimental data to date.

Chapter 5

Debiasing political opinions - the case of the Scottish independence referendum[38]

Abstract

This study reports the effects of two debiasing strategies on the complexity of people's thinking on a controversial policy issue – the question of Scottish independence. I start from the well-researched assumptions of motivated reasoning theory that individuals tend to protect their beliefs, are often not willing to hear the other side, and fail to integrate contrasting arguments and different perspectives in their political considerations – although considering different viewpoints is a fundamental normative requirement for democratic decision-making. Two different debiasing techniques, which are meant to counteract this tendency, and to evoke more integrative and complex thinking, were tested experimentally, a cognitive and a motivational strategy. The experiment was situated in the context of the Scottish independence referendum. The expectation of *accountability* – having to justify one's opinion in front of unknown others – significantly enhanced integrative complexity of thinking about the issue, while inducing subjects to *consider the opposite* had a slightly positive, but less robust effect. These effects were more pronounced among subjects holding strong opinions.

5.1 Introduction

Biases in political thinking have received much attention in political psychology and their pervasiveness is by now well documented (Lau & Redlawsk 2001; Leeper & Slothuus 2014;

[38] This manuscript is currently under review with *Political Behavior*.

Redlawsk 2002). As Taber and Lodge (2006, 576) have noted, in politics "all reasoning is motivated". New questions arise now however: What is a considered and unbiased opinion? Which psychological mechanisms underlie motivational and cognitive biases? And how can such biases be counteracted? These questions have received much less attention so far (Bolsen, Druckman & Cook 2014). As Druckman (2012) pointed out, motivated reasoning occurs under certain conditions and depends on an individual's motivation and the context. He considers the role of different conditions in prompting accurate versus motivated reasoning a "particularly fruitful area in need of more study" (Druckman, 206). This paper approaches these questions by testing two different debiasing mechanisms. To this purpose, a laboratory opinion experiment was run in the run-up to the Scottish independence referendum. I found that announcing that subjects will have to justify their opinions in a group discussion at the end of the experiment ('accountability'), as well as – to a lesser extent – inducing them to think about the arguments of the other side ('consider-the-opposite'), both have positive effects on the considerateness of subjects' opinions. This positive effect is stronger with subjects holding strong opinions. A considered opinion is defined as one which integrates different perspectives of an issue and which is well justified with substantive arguments. This study adds to a recent debate in political psychology on the conditions, under which motivated reasoning occurs in offering possible strategies to reduce it. This paper is structured as follows: first I explain the main concepts and by developing my hypotheses. Then I describe the experimental design, before presenting and discussing the results.

5.2 Motivated reasoning and considered opinions

Citizens' participation in political decisions constitutes the very essence of democracy. Ever since democracy exists, citizens' competence to participate in political decisions has been questioned though. This is true for representative democracy, but the scepticism is even greater for direct democratic decisions where citizens decide over policy matters themselves. Citizens' low political knowledge levels have been criticised ever since public opinion research exists (Converse 1964; Delli Carpini & Keeter 1996). More recently however, the question arose whether high political knowledge is an adequate measure of citizens' competence at all – as political scientists discovered the concept of motivated reasoning (Kunda 1990; Lau & Redlawsk 2006; Lodge & Taber 2013;

Redlawsk 2002; Redlawsk & Lau 2005; Taber & Lodge 2006). Motivated reasoning describes a process whereby (political) reasoning is not necessarily led by a goal to be accurate (an *accuracy goal*) – which would correspond to a normative ideal - but more often by *directional goals*, such as a personal motivation to protect existing beliefs or to follow a certain party line. A directional goal is defined as “when a person is motivated to arrive at a particular conclusion” (Kunda 1999, 236). This means that citizens select and process information in a biased way, preferring information that is consistent with their existing knowledge and disregarding and/or devaluating incompatible information. Motivated reasoning is different from simple cue-taking (e.g. following a party cue to make a political decision) – which is used as a shortcut to avoid the effort of processing political information (Lupia, McCubbins & Popkin 2000) – here individuals use arguments and information about the issue at stake – but they use it to confirm a certain position. Interestingly, some studies have found motivated reasoning and belief protection to be just as strong (Cohen 2003; Taber, Cann, and Kucsova 2009) or even stronger in highly politically knowledgeable individuals than in low knowledgeable (Bartels 2008; Meffert et al. 2006; Mutz 2006; Taber & Lodge 2006), while others found a reduction of bias among highly knowledgeable (Anduiza, Gallego & Muñoz 2013; Arceneaux 2008; Kam 2005). Furthermore, several studies have found an attitude strength effect, meaning that citizens holding stronger attitudes on an issue, because the issue is of high personal relevance to them, are more prone to motivated reasoning (Druckman, Fein & Leeper 2012; Holbrook et al. 2005; Taber & Lodge 2006).

The research on motivated reasoning is based on earlier studies on belief protection and a confirmation bias in social judgments conducted in social psychology (Lord, Lepper & Preston 1984; Lord, Ross & Lepper 1979). Recent studies found evidence for motivated reasoning processes on political opinions on different issues such as the 2003 Iraq war (Gaines et al. 2007), political corruption in Spain (Anduiza, Gallego & Muñoz 2013), climate change policies (Hart & Nisbet 2011), perceptions of the economy (Evans & Andersen 2006; Gerber & Huber 2010; Ramirez & Erickson 2014), and welfare and healthcare policies (Bullock 2011; Cohen 2003). At the same time, partisan biases – when political thinking is led by the motivation to follow a certain party line – have received much attention (Bartels 2000, 2002; Lebo & Cassino 2007; Levendusky 2010; Lupia, McCubbins & Popkin 2000). Leeper and Slothuus (2014) give an excellent review of the recent debate on motivated reasoning.

Given the intense research interest in motivated reasoning and biased thinking, it is surprising that only little thought has been devoted to the question how to counteract these biases and how to foster considered opinions. So far, political scientists have concentrated on analyzing various factors moderating biased thinking – in particular political sophistication, opinion strength, elite polarization, and message repetition (Druckman, Peterson & Slothuus 2013). Only very recently the question about the impact of motivations and cognitive mechanisms at the time of opinion formation was raised, linking political psychology more closely to experimental work in social psychology (see Leeper & Slothuus 2014, Bolsen et al. 2014). The present study adds to this current debate by testing the effect of two different experimental stimuli on the considerateness of political opinions.

Why is it important to study 'considerate opinions'? This is a concept which has not had much attention in political psychology and public opinion research to date. I think it is worth exploring it in more depth for at least two reasons. First, on a theoretical level, I think that a political decision taken by citizens who hold well considered opinions is more legitimate. On the one hand, considerate opinions are supposed to be more resistant to manipulation by elites and news media. The concern that elites and opinion leaders may manipulate public opinion is an old one (Katz 1957; Schattschneider 1975; Schumpeter 1950). More recently, the large literature on framing effects has shown (Chong 2013; Chong & Druckman 2007; Druckman, Peterson & Slothuus 2013; Sniderman & Theriault 2004), citizens' opinions are often malleable and susceptible to the way political information is presented to them. The problem is that when citizens' opinions are manipulated they no longer their values and political predispositions.

But not only elite manipulation or distorted information can be problematic: as the literature on motivated reasoning summarized above shows, we often follow 'in-built' cognitive biases and heuristics when we form our opinions, such as trying to protect our own beliefs or blindly following party cues. These cognitive heuristics can constitute efficiency-enhancing shortcuts, which bring us to a reasonable decision with less effort, as has been argued by some (Bowler & Donovan 1998; Lupia 1994; Lupia, McCubbins & Popkin 2000). But they may also lead us astray, if we rely blindly on our party's position or if we are not ready to update our opinions in light of new evidence.

Second and related to the first point, on an empirical level the study of citizens' competence has often focused on factual political knowledge (Lavine, Johnston and Steenbergen 2012). The gold

standard of the knowledgeable citizen is called in question though, by studies which find that often the more knowledgeable are more prone to cognitive biases such as motivated reasoning. Thus, it is important that opinions are not only informed, but also well considered (Fishkin 2006). Therefore, I present an attempt to move in the direction of measuring 'considerate opinions' in order to assess citizens' competence instead of relying exclusively on factual knowledge scores. The present study presents a suggestion of how such a considered opinion could be operationalized empirically.

The questions how to define and measure considered opinions is not trivial. One option, which is compatible with a deliberative model of democracy, is to set the consideration of different viewpoints and alternative arguments, as well as the ability to justify one's position, as a key normative requirement for citizens' participation in democratic decisions (see e.g. Bächtiger & Wyss 2013; Fishkin 2009; Gerber et al. 2014; Lavine, Johnston & Steenbergen 2012; Luskin, Fishkin & Jowell 2002; Minozzi, Neblo & Siegel 2012). Thus for the present study, a considered opinion is defined as one which integrates arguments of different sides and one which can be well justified by substantive reasons.

On the level of individual citizens, we lack knowledge on how exactly – through which psychological mechanisms – exposure to differing viewpoints affects opinion formation, and in particular, through which mechanism belief protection biases are reduced. There are at least two possible experimental stimuli which might foster considered opinions. Both have been discussed mainly in social psychology under the heading of 'debiasing strategies' (Fischhoff 1982). Debiasing strategies are defined as techniques that eliminate bias or diminish its intensity or frequency. Thereby "the goal of debiasing techniques should be to help people grasp and appreciate alternative points of view, not necessarily to accept them as equally valid or moral (Lilienfeld, Ammirati & Landfield 2009). First, the fact that participants are explicitly *induced to consider different viewpoints* on an issue, might enhance the cognitive accessibility of opposite information. Social psychologists have argued that a biased preference for pre-existing opinions can be counteracted by a '*consider the opposite'* strategy (Fischhoff 1982; Hirt, Kardes & Markman 2004; Lord, Lepper & Preston 1984; Mussweiler, Strack & Pfeiffer 2000). Thereby individuals are instructed to think explicitly about the arguments of the opposite side, and this process is supposed to make the information accessible in memory, leading to more balanced, unbiased and well-justified opinions. From this research, I derive a first hypothesis:

Hypothesis 1**:** *Being induced to consider arguments of the opposite side leads to more considered opinions*

The consider-the-opposite strategy is a *cognitive* debiasing mechanism. It is assumed to enhance the cognitive accessibility of diverging information in memory. The assumption of Hypothesis 1 is that individuals in general are motivated to be accurate, but often disregard attitude-incongruent information simply because it requires more cognitive effort to process.

Second, the conventional approach within psychology for *inducing an accuracy motivation* is to tell them they would later have to justify the reason for their judgments. Accountability, i.e. the pressure to justify one's opinion to others, was found to "motivate complex (effort-demanding) information processing by increasing the importance of avoiding 'bad' judgments (embarrassment, loss of self-esteem) and of making 'good' judgments (praise, status)" (Tetlock 1983, 74). Subjects expecting accountability were found to be more likely to consider various options, more receptive to new evidence, more tolerant of inconsistency, and to focus on the content of a message rather than its source (Bolsen, Druckman & Cook 2014; Chaiken 1980; Klahr 2013; Kruglanski & Freund 1983; Tetlock 1983). Based on these findings, I derive a second hypothesis:

Hypothesis 2**:** *The expectation of accountability leads to more considered opinions*

In contrast to examining contrasting viewpoints, accountability constitutes a *motivational* debiasing strategy, as it induces a motivation to be accurate. The assumption of hypothesis 2 is that individuals in general are more motivated to protect existing beliefs than to be accurate. Inducing an accuracy motivation will lead subjects to "evaluate political arguments with the hope of reaching an outcome that is the correct or otherwise best conclusion" (Bolsen et al. 2014, 238). The authors also note, individual motivations in evaluating information in the context of opinion formation constitute "one factor that has not been examined by political scientists" (237). Furthermore, Leeper & Slothuus (2014, 149) argue that "demonstrating the impact of motivations is critical to disentangling whether goals [i.e. motivations] as opposed to some other cognitive processes are at work". This is what the present study aims at.

Beyond the general effects of the two debiasing techniques, the differential effects dependent on subjects' opinion strength and political sophistication are interesting. In line with previous findings, I expect a *political sophistication effect*, where subjects with a high level of political

knowledge react more strongly to treatments. Because they dispose of more political knowledge resources and are better able to process complex information, I expect more politically sophisticated subjects to be better able to react to stimuli, and to provide complex and considered justifications for their positions when induced to do so.

In addition, I expect an *attitude strength effect*, that is, I expect subjects holding strong opinions on the issue at stake to react more sensibly to the debiasing treatments. Subjects holding strong opinions are those who consider the issue as personally relevant, thus they are the ones most involved and with most at stake. For these reasons I expect them to be more willing to react to stimuli which induce consideration and complex thinking on the issue.

> Hypothesis 3: *Both debiasing mechanisms have a stronger effect on subjects with high political knowledge*

> Hypothesis 4: *Both debiasing mechanisms have a stronger effect on subjects for whom the issue at stake is of high personal relevance*

Summing up the preceding paragraphs, the ideal citizen is one who considers different arguments before making political judgments, but in reality belief protection motivation and other cognitive biases often hinder this consideration of different viewpoints. The question is then, how can citizens readiness to think through and integrate different arguments be enhanced, and thus how can considered opinion be fostered?[39] The issue considered in this study, the question of Scottish independence, is a real-life, salient and controversial issue – an issue which motivates people and where listening to the other side is particularly difficult. For such an issue it might also be more difficult to find debiasing effects. Nevertheless, it is important to understand how citizens reason on such divisive issues.

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[39] Note that I am interested in the considerateness of subjects' opinions, and not in the *position* subjects take on a particular issue, as from a normative perspective the position, i.e. agreement or opposition to a policy, is independent of the considerateness of the opinion.

5.3 Research design

A laboratory experiment was conducted in the forefront of the referendum on Scottish independence, taking place in September 2014. The Scottish independence referendum is one of few national-level referendums, where people decide over a substantial political change which affects their lives. The independence question is a highly salient issue, as well as a very controversial one where there are two clearly contrasting positions – a situation in which listening to the other side and holding considered opinions is difficult. The question citizens were asked was: "Should Scotland be an independent country?". The debate involves questions of Scottish identity, but also economic concerns and other pragmatic issues such as EU membership, the future currency, national defense, higher education funding, and welfare.

The experiment took place during one week in April 2014 and involved 179 students from a Scottish university. All subjects were eligible and 75 per cent reported their intention to vote in the referendum. In order to avoid testing effects by asking subjects for their opinion before and after the treatment, a *between-groups design* involving a control group and two treatment groups was used. Subjects were randomly assigned to the different treatment conditions. The treatments were randomized within sessions in order to avoid the effect that certain dates and times might attract subjects with similar characteristics. The randomization procedure was implemented as follows: On arrival in the lab they had to draw a folded piece of paper from a basket (i.e. they did not see what was written on the paper), which contained the number of their computer in the lab, where they would do the experiment. In each of the sessions, the treatments were assigned randomly to the 18 computers in the lab, with exception of the accountability treatment[40]. As the subjects had to come together for group discussion after the accountability treatment, we preferred to have them all together in the same sessions. In total there were 16 sessions with 13-18 participants each. 3 sessions were reserved to the accountability treatment and the last session was mixed. For every session, we booked 6 people more than the maximum of the lab in order to insure that the sessions would fill up. We paid a show-up fee of 5 pounds to the latecomers, while the actual participants received 13 pounds. We noticed that most of the latecomers were males, which increased the rate of females in our sample additionally to the initial gender-imbalance in the lab's subject pool,

[40] Note that the original experiment included 4 treatment groups and one control group. For the present study I use only 3 of these groups.

where women (901) outnumbered men (425) by more than 2:1. The experiment was programmed with Qualtrics.[41] The experiment had four parts: a pre-treatment questionnaire containing socio-demographic information and a political-knowledge quiz; the treatment (reading a set information material on Scottish independence under different instructions); a set of opinion measures on Scottish independence (outcome measures); and a post-treatment questionnaire containing additional measures. The entire session lasted 45–60 minutes.

5.3.1 Stimulus material[42]

All subjects were exposed to a balanced set of 4 pro- and 4 contra-arguments on Scottish independence. With these readings a baseline condition was created, where all subjects shared at least a minimal common knowledge base, in order to avoid the problem that variance in opinion complexity is determined mainly by individuals' prior knowledge of the issue. In other words, the fact that all subjects shared the information in these readings allows us to attribute differences in post-treatment opinion complexity to the respective treatments. Following the procedure used in framing experiments (Druckman, Peterson & Slothuus 2013) the relevant arguments were identified through a content analysis of media coverage and expert interviews. Ten UK political scientists were asked to rate the direction and strength of various arguments and to list their own thoughts on Scottish independence. From their answers we selected the four most prominent arguments for each side. The arguments were all drawn from print and online publications of Scottish and British newspapers and from official documents of the Scottish and British governments. The arguments were of comparable complexity and all were about 300 words long in order to avoid confusing effects on opinions.

5.3.2 Treatments

Subjects in the *control condition* were instructed to read the stimulus material carefully, to report their opinion afterwards. In order to avoid rank order effects, the arguments were presented in a randomized order in all treatments. In addition, there were two different debiasing treatments. In

[41] See http://www.qualtrics.com/.

[42] For arguments and detailed information on the drafting of the stimulus material see appendix.

the *'consider-the-opposite' condition*, subjects received the same set of arguments to read with an additional instruction, which read:

> "*While reading the articles, please write down all the arguments that would be used by the opposite side, i.e. all the arguments that a proponent of the side opposite to yours would use to convince you. That is, if you tend to support independence, write down the arguments of a pro-unionist and if you tend to oppose independence, write down the arguments of an independence supporter. Please use the paper and pencil on the table in front of you.*"

In the last treatment group, the *'accountability' condition* (TG2), subjects learned before reading the arguments, that they would be asked to participate in a group discussion at the end of the experimental session. Here the instruction read:

> "*At the end of the study, you will be asked to justify your opinion on the issue of Scottish independence to the other participants in a short group discussion. The discussion will take place in this room once everyone is done with the computer tasks. The discussion will help us understand the interpersonal communication of attitudes. Please note that the lab managers will take notes on this discussion, keeping the identity of participants completely anonymous*."

Sessions ended with a brief group discussion where participants could express their opinions.[43]

5.3.3 Measures

I am interested in two substantive outcome measures indicating considered opinions. First, *integrative complexity of justification*, [44] and, second, *argument strength ratings*. The main outcome measure is a justification paragraph written by the subjects, then coded for integrative complexity (IC) (Suedfeld, Tetlock & Streufert 1992). All subjects in all three groups were asked to justify their position on Scottish independence as follows: "Please justify your position in one paragraph (4/5 sentences)". Note that the justification paragraph was written after reading the arguments, but before the discussion took place.

[43] Participation in this discussion was voluntary; we did not want to force anyone to disclose an opinion in public.

[44] See appendix table 5-O1 for coding examples.

High IC scores indicate considered opinions. IC is a measure composed of two cognitive structural properties: differentiation and integration. While differentiation refers to the number of characteristics or dimensions of a problem that an individual takes into account, integration refers to the development of complex connections among these different characteristics (Suedfeld & Tetlock 1977; Tetlock 1983). In the present study, I am mainly interested in the occurrence of integration. Low differentiation is reflected by a tendency to focus on only one theme or aspect in the analysis and to rely on simple, one-dimensional rules without qualification (e.g. "Independence is economically unviable"), while higher levels of differentiation are reflected in the recognition and acceptance as valid and legitimate of either alternative perspectives (i.e. pro and contra independence arguments), or different dimensions of an issue (e.g. support for independence for reasons of national identity, financial wealth and democratic representation). Integration is inferred when different elements are linked conceptually. Integration can be expressed through the recognition of interactive causality, such as the idea that which position is taken depends on the perspective. The recognition of value-trade-offs and the suggestion of solutions in the form of overarching principles of perspective are also signals of integration (for example the recognition of a trade-off between stronger democratic representation through independence and the short-term economic risks which can be expected is a sign of integration).

The assessment of integrative complexity typically takes place on a 7-point scale, where 1 means neither differentiation nor integration, 3 implies differentiation but no integration, and 4-7 signal varying levels of integration of perspectives and/or dimensions. Differentiation is thus a necessary, but not sufficient, condition for integration. Over 40 per cent of subjects scored 3, indicating high differentiation (see appendix figure 5-O1)), while only a few scored 4 or over, which is indicative of integration of perspectives. In our student sample with its highly differentiated justifications appeared to be an easy task – the interesting question in the present sample is whether subjects could integrate different perspectives in their justifications. Therefore, we use the *binary distinction between justifications with and without integration* as a dependent variable. To this end, scores of 4 and higher were coded 1, and all other scores were coded 0 (see Tadmor & Tetlock 2009). Over the entire sample, 81.5 per cent of subjects scored 0 (no integration) while 18.5 per cent scored 1 (indicative of integration).

The coding was conducted by a certified coder following the coding manual for cognitive complexity (Baker-Brown et al. 1992).[45] To test for the reliability and objectivity of the coding, a second, independent, certified coder re-coded a random sample of 50 per cent of all justification paragraphs. The two coders achieved a high interrater agreement of $\alpha = 0.89$.

Argument strength rating: After reading each argument, subjects were asked to rate its strength on a 10-point scale (where 0 means extremely weak and 10 extremely strong). Thereby subjects were explicitly instructed to focus on the strength of the argument and not on whether they agree or disagree with it. This measure was used in previous studies to measure a 'prior attitude effect' on argument ratings (Petty & Krosnick 1995; Taber & Lodge 2006). With regard to the debiasing treatments, it captures whether subjects are willing to give some credit to the arguments of the opposite side, even if they do not agree with them, which is taken as an indicator of a considered opinion. The mean strength rating for the whole sample was 6.04 for pro-arguments and 6.15 for contra-arguments.

Additional measures included *political knowledge,* measured by an index based on a political knowledge quiz which was part of the pre-treatment questionnaire (ranging from 0 to 17 points). *General interest in politics* was measured on a 5-point scale. *Opinion strength* was measured with a conventional item asking: "*Compared to how you feel about other public issues - such as immigration, environment, foreign policy, etc. - how strong are your feelings about Scottish independence?"* (0-10 response scale with 0 indicating not at all strong and 10 very strong). Table 5-A1 (Appendix) presents summary statistics of the additional variables.

[45] Both coders completed an online training workshop (http://www2.psych.ubc.ca/~psuedfeld/Workshop.html). After a coding training with 10 sets of different paragraphs provided by the integrative complexity online training workshop, the coder completed an official test set consisting of 30 different paragraphs, which was sent for correction to professional coders. In line with the reliability requirements, she achieved a test-reliability of higher than .85 with an expert coder. The minimum score assigned was 1 and the maximum score 6.

5.3.4 Balance checks

To ensure that the randomization procedure resulted in a balanced distribution of individuals over the experimental groups, a series of balance checks on pre-treatment variables were conductedder.[46] These tests did not yield any significant differences between treatment groups, except for gender, which is not balanced over groups. This might be due to the fact that there is a much larger proportion of women (64 per cent vs. 36 per cent) in the sample. As none of the hypotheses concerns gender effects, I decided to run the experiment on the whole sample and to introduce gender as a control variable in the robustness tests.

5.4 Analysis

5.4.1 Integrative complexity

In a first part of the analysis, I test whether the treatments have an effect on the integrative complexity of subject's justifications for their position on Scottish independence. Let us first examine the difference in integrative complexity across experimental groups for all subjects in the sample: In the accountability group, as compared to the control group, there is more than double the share of high IC scorers (12 per cent vs. 25 per cent, $p>0.04$, see Figure 5.1). This difference is substantive and statistically significant at the 5 per cent level, as shown by a difference-in-proportion test (see also Table 5-A2, appendix). In the consider-the-opposite group, by contrast, there are 7 percentage points more subjects with a high IC score as compared to the control group, but this result is not statistically significant.[47]

[46] Variables are: political interest, political knowledge, age, personal importance of the issue, likelihood to vote, feeling of Scottish identity, country of origin, residence, student status, gender. ANOVA used for quantitative variables, Kruskal-Wallis rank tests for categorical variables, and proportion tests for dichotomous variables.

[47] The analysis of treatment effects on the 7-point IC measure gives similar results, providing additional evidence for the robustness of the findings: relative to the control group, the consider-the-opposite treatment led to an increase of 0.26 points in mean IC score ($p<0.07$) and the accountability treatment led to a 0.31 points increase ($p<0.06$). See table 5-O2 in the appendix for more information. The size of these effects is comparable to previous studies of integrative complexity (see Tadmor and Tetlock 2009).

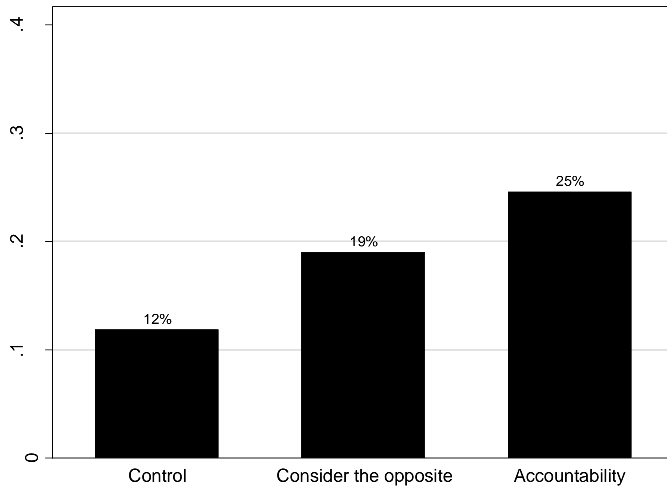

Figure 5.1. Proportion of high IC scores over experimental groups
Note: y axis: proportion of high IC scores in the sample (n =178); *x* axis: experimental groups

Subsamples of subjects divided by their political knowledge levels gives a similar picture (see Figure 5.2, Table A2): The consider-the-opposite group has small positive effects on integrative complexity, with an 8 per cent rise in high IC scores for highly knowledgeable and 5 per cent for less knowledgeable subjects (n.s.). Accountability has a stronger effect, with an increase from 10 to 22 per cent (n.s.) for the less knowledgeable and from 14 to 28 per cent ($p<0.1$) for the highly knowledgeable. Even though the treatment effect is only significant for high knowledge subjects, the substantive effect is comparable for both subgroups. While more knowledgeable subjects give higher IC scores in general, there are no substantial differences in treatment effects between subjects with high vs. low political knowledge levels.

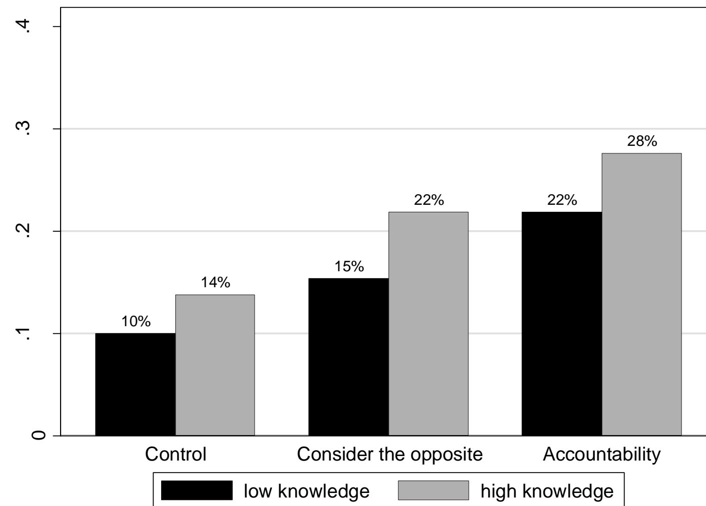

Figure 5.2. Proportion of high IC scores over experimental groups by political knowledge
Note: y axis: proportion of high IC scores in the sample (n = 178). *x* axis: experimental groups. The grey bars present the treatment effects for subjects with high political knowledge (n = 90), while the black bars represent the results for subjects with low political knowledge (n = 88).

Reactions to treatment differ for subjects with strong opinions, who react more strongly to both treatments (see Figure 5.3 and Table A2)[48]. While there are no significant differences across treatment groups for subjects with weak opinions, those holding strong opinions in the consider-the-opposite group have 16 percentage points higher IC scores ($p<0.04$) than the control group. In the accountability group this share even rose by 18 per cent to 26 per cent ($p<0.03$). Holding strong opinions thus enhances subjects' sensitivity to treatment.[49] Appendix table 5-A2 summarizes the results of the difference-test between groups.

[48] Also on the 7-point LOJ scale, the effects were stronger for strong opinion holders, where the consider-the-opposite treatment had an effect of +0.61 points ($p<0.01$) and the accountability treatment had an effect of +0.32 points (n.s.). For the highly sophisticated the consider-the-opposite treatment had an effect of +0.42 points ($p<0.05$), while the accountability treatment had an effect of +0.3 (n.s.). See appendix table 5-O2.
[49] Appendix Table 5-O3 gives the interaction effect between opinion strength, but the accountability treatment is not statistically significant.

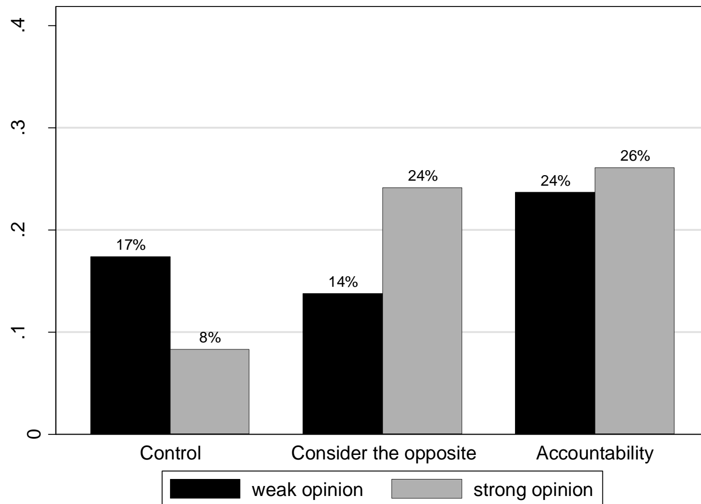

Figure 5.3. Proportion of high IC scores over experimental groups by opinion strength
Note: y axis: proportion of high IC scores in the sample (N=178); *x* axis: experimental groups; grey bars present the treatment effects for subjects holding strong opinions (N=89); black bars represent the results for subjects holding weak opinions (N=89).

5.4.2 Robustness of findings on integrative complexity

The difference-in-proportion tests presented above provide an easily understandable technique to assess the differences in outcome variables across treatment groups. In addition, I tested the robustness of these findings, controlling for other factors that might have an influence. For this purpose, I run individual level logit models to estimate integrative complexity scores as a function of each subject's gender, political interest, political knowledge, and opinion strength. The results are presented in Table 5.1 which shows that accountability has a strong and robust significant positive effect on integrative complexity, while the effect of the cognitive treatment is positive but not robust. Model 1 presents the results of the treatment effects without controls, while in Model 2 I control for gender as pre-treatment variable, because gender was unbalanced over treatment groups. Furthermore, I add political interest and knowledge as measures of political awareness, because highly interested and knowledgeable individuals are likely to have been exposed to more information on the issue before the experiment.

Table 5.1: Robustness tests integrative complexity, accountability and consider-the-opposite

	ACCOUNTABILITY				CONSIDER THE OPPOSITE			
	Model 1		Model 2		Model 1		Model 2	
	Coef. (SE)	p<	Coef. (SE)	p<	Coef. (SE)	p<	Coef. (SE)	p<
Treatment	0.885 (0.503)	**0.078**	1.071 (0.543)	**0.049**	0.554 (0..526)	0.293	0.668 (0.566)	0.238
Gender			1.287 (0.674)	**0.056**			1.032 (0.638)	0.106
Political knowledge			0.055 (0.089)	0.538			0.136 (0.097)	0.162
Political interest			0.497 (0.330)	0.132			-0.169 (0.259)	0.515
Constant	-2.006 (0.405)		-4.725 (1.552)	**0.002**	-2.006 (0..405)	**0.000**	-3.713 (1.376)	**0.007**
N	120		120		117		117	

Note. Logit estimates of binary integrative complexity measure (high=1 / low= 0); standard errors in brackets. Statistically difference p<0.1) in bold. The left panel gives results for accountability treatment; right panel gives results for the consider-the-opposite treatment. Samples only include the control group and the respective treatment group.

In sum we find strong evidence of a positive effect of accountability on integrative complexity. We also find evidence of a positive effect of considering-the-opposite on integrative complexity, but it is only statistically significant for subjects with strong opinions.

5.4.3 Argument strength ratings

In the second part of the analysis, I test for an attitude bias on argument strength ratings (0-10 scale), by comparing the average strength ratings for attitudinally congruent and incongruent arguments. I expect subjects to rate attitudinally congruent arguments as stronger than attitudinally incongruent arguments. Attitude is defined through the subjects' reported vote intention with those answering 'Yes' labeled as 'pro' and subjects answering no as 'contra' independence (the undecided were excluded in order draw a clear distinction in attitude).

Figure 5.4 displays the mean pro- and contra-argument ratings by attitude, broken down by opinion strength (left side) and political knowledge (right side). Dark bars represent average strength ratings for pro arguments, light bars for contra arguments; the first pair of bars shows the responses of proponents of the issue, and the second pair shows responses of opponents. As we can

see, over all subsamples, congruent arguments are rated as substantively stronger than incongruent arguments, indicating an attitude congruence bias on argument ratings as expected. The differences in mean strength ratings range from 1.3 to 3.1 on an 11-point scale. The effect is stronger for subjects with high political knowledge and holding strong opinions.

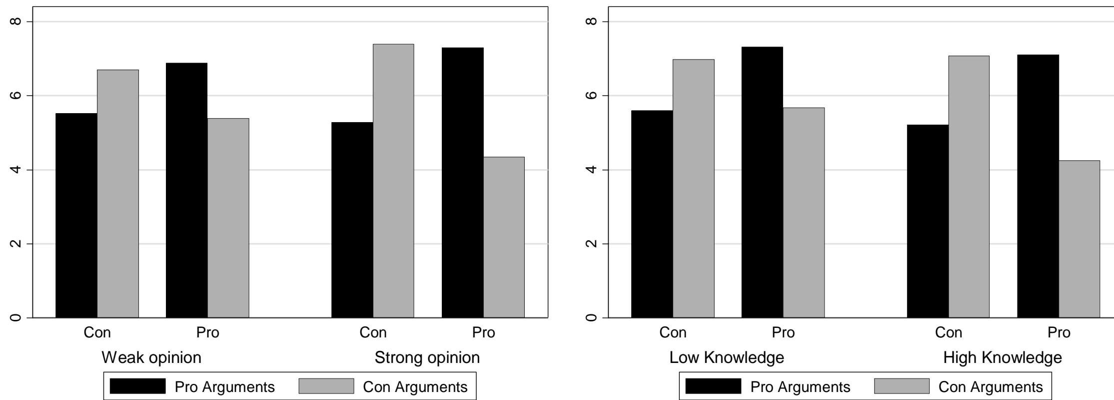

Figure 5.4. Argument strength ratings, by opinion strength and political knowledge
Notes: *y* axis: subjects average argument strength rating (from 0 to 10). Left panel gives results for the subject sample (n=178) split by opinion strength. The right panel gives results for the sample split by political knowledge. Both panels are sub-divided into independence-opponents (contra) and independence-supporters (pro). Black bars give average strength ratings of pro-arguments; grey bars give average strength-ratings of con-arguments. *Reading example:* Independence-opponents holding strong opinions give the contra-arguments an average strength rating of around 7 out of 10 points, while independence supporters give the same contra-arguments a strength-rating of just over 4 points.

Table 5.2 reports regression analyses of independence attitude on argument strength ratings. Subjects overall argument strength rating (the dependent variable in Table 5.2) was computed as the sum of ratings of the pro- arguments minus the sum of ratings of the contra-arguments (ranging from -40 to +40). To test for an attitude effect, these gaps in argument strength ratings were regressed on attitude. In all models, the coefficient of independence attitude on argument strength ratings is positive and highly statistically significant, indicating that subjects rate attitudinally congruent arguments as significantly stronger than incongruent ones (see Taber and Lodge for an analogous procedure). Note that these results are obtained despite the explicit instruction to abstract from the own attitude and concentrate on the strength of arguments, and despite the fact that over the whole sample, as well as in pre-tests, the pro- and contra-arguments were rated as almost equally strong.

Table 5.2: OLS regressions of argument strength ratings on independence attitude, including interaction effects of treatments and moderators[50]

Variable	model 1		model 2		model 3		model 4		model 5	
	Coefficient (SE)	p<	Coefficient (SE)	p<	Coefficient (SE)	p<	Coefficient (SE)	p<	Coefficient (SE)	p<
independence attitude	16.455 (1.39)	**0.000**	17.574 (2.34)	**0.000**	17.574 (2.34)	**0.000**	11.333 (1.51)	**0.000**	11.098 (1.53)	**0.000**
consider the opposite			-2.19 2.313	0.346						
cto*attitude			0.968 3.515	0.784						
accountability					2.365 (1.73)	0.175				
accountability*attitude					-3.318 (3.31)	0.319				
political knowledge							-1.885 (1.73)	0.279		
knowledge*attitude							7.835** (2.51)	**0.002**		
opinion strength									-3.716* (1.73)	**0.033**
strength*attitude									8.998*** (2.54)	**0.001**
_cons	-6.455*** (0.85)	**0.000**	-6.852*** (1.16)	**0.000**	-6.852*** (1.16)	**0.000**	-5.533*** (0.92)	**0.000**	-4.723*** (0.93)	**0.000**
N	139		89		95		139		139	
Adjusted R^2	.51		.57		.52		.53		.54	

Note. Dependent variable: argument strength rating (-40 / +40). Standard errors are in parentheses. Statistically significant differences ($p<0.1$) in bold letters; the effect of the treatment groups was calculated as compared to the control group only, excluding the subjects in the other treatment group.

[50] Threeway-interactions between moderators, treatments, and attitude did not yield any significant effects. They are not reported here, as the small sample size makes it difficult to get reliable results for threeway-interactions. Test on subsamples within treatment groups however yielded a stronger debiasing effect among low-knowledge subjects in both treatment groups, indicating that here debiasing is stronger for subjects with low knowledge. Also these subsamples are very small though, which renders the regression results less reliable.

Replicating Taber and Lodge's (2006) original findings, models 4 and 5 show that there are significant interaction effects between political knowledge and the attitude effect, as well as between opinion strength and the attitude effect. This means that over the whole sample, the more politically knowledgeable, as well as the subjects holding stronger opinions, exhibit a stronger attitudinal bias. Models 2 and 3 include coefficients for the effects of the treatments as well as interaction terms between treatments and attitude. Looking at the interaction terms we see that the consider-the-opposite treatment did not reduce the gap in mean strength ratings between pro- and contra-independence subjects. In contrast, there was a reduction of the gap in the accountability group.

By how much was the gap in ratings reduced? The difference in mean argument strength rating between subjects who are pro and contra independence is 17.6 points in the control group and 14.3 points in the accountability group. Thus accountability reduces the gap in predicted ratings by almost 4 points (on a range of -40/+40). This result provides evidence of the debiasing effect of accountability, although this difference is not statistically significant as we can see looking at the interaction between accountability and independence attitude in Table 5.2.[51] Accountability leads us to give the other side at least some credit.

5. 5 Discussion and conclusion

This study finds that the expectation of accountability has a strong positive effect on the integrative complexity of subjects justifications – being held accountable led to more considered opinions as defined in the introduction. The results are less clear for considering-the-opposite however. Considering-the-opposite seems to work mostly with subjects holding strong opinions. I conclude that hypothesis 2 can be accepted, while there is some – but no definitive – evidence for hypothesis 1.

[51] In comparison, the gap in ratings is 8 points larger for highly sophisticated subjects as compared to low sophisticated (11 vs. 19 points) and it is 9 point larger for strong opinion holders than for weak opinion holders (11 vs. 20 points). The latter two interaction terms are statistically significant (see Table 5.2). This tells us that there is a moderating effect of sophistication and opinion strength on the congruence gap in argument strength ratings, analogous to Taber and Lodge (2006).

The finding that accountability increases cognitive complexity confirms that there is clearly a motivational component to political thinking; when we are motivated to be accurate because we expect to justify ourselves to others (and to avoid embarrassment), we start integrating different perspectives into our opinions, making them more complex. Thus, it is not just the presence and availability of even-handed information *per se* (given in all three groups) that enables people to make complex judgments – the informational environment must meet the appropriate motivation or goal in an individual, i.e. a goal to be accurate.

To a certain extent, cognitive accessibility of arguments matters as well – subjects who were instructed to list the arguments of the other side also showed a tendency to more complex thinking. This is true in particular for subjects holding strong opinions, for whom the issue of independence is personally relevant. Thus part of what has been called 'motivated reasoning' might be due to 'cognitive laziness'. We often simply don't hear what others say because this would cost us more cognitive effort than thinking of more familiar arguments.

Both debiasing techniques work in the same way for highly politically knowledgeable subjects as for the less knowledgeable (even though the highly knowledgeable show significantly higher levels of integrative complexity in general). Hypothesis 3 has thus to be rejected, political knowledge does not moderate the effect of debiasing techniques. At the same time we find evidence for hypothesis 4: The treatments have stronger effects on subjects with strong opinions. Even though the treatment-opinion-strength interaction is not statistically significant, it seems substantively interesting. Subjects who feel strongly about independence may simply have put greater effort into the experimental tasks at hand. On the other hand, this may also be true outside the laboratory – debiasing strategies might generally work better for people who feel strongly about an issue. The implication would be that a high personal relevance constitutes a positive basis for developing considered opinions – a finding which is in line with the predictions of dual-process models of opinion formation (Chaiken & Ledgerwood 2011; Petty & Briñol 2011).

As to the second outcome measure, the analysis of argument strength ratings confirms the presence of an attitude congruence effect in argument-strength ratings, a finding in line with previous studies (e.g. Lord, Ross & Lepper 1979; Taber & Milton Lodge 2006). Independence supporters consistently rate pro-independence arguments as stronger than contra-arguments, and *vice versa*, independence opponents rate contra-arguments as stronger. This happens even though

subjects were explicitly instructed to abstract from their opinion and rate argument-strength in an objective way, and given the fact that in expert pre-tests pro- and contra-arguments were rated as equally strong. The bias is particularly marked for subjects with high political knowledge, and strong opinions – again in line with previous findings. Here again, in the accountability group subjects rated arguments in a more balanced way. This suggests that accountability had a minor debiasing effect, albeit not a statistically significant one, and thus provides some support for hypothesis 2, but not for hypothesis 1.

The fact that debiasing strategies did not have a stronger effect on strength ratings is in line with Taber and Lodge's (2013; 2006) repeated finding that instructions to be balanced and even-handed in the evaluation of argument-strength are ineffective. On the one hand, this ineffectiveness might be taken as evidence of the pervasiveness of directional reasoning (see Bolsen et al. 2014). However, it might also be attributed to the difficulty of the task: Abstracting from our own opinion while reading arguments, and rating them as strong or weak from an 'objective' or 'neutral' perspective, seems like a very 'unnatural' or 'artificial' requirement – and is thus probably too difficult as an experimental task. Seen from yet another perspective, one could question whether this can be called a 'bias' at all - the result may simply mean that subjects clearly prefer one option (independence or union) over the other, and that they therefore believe consistently that the arguments in favour of their preferred option are stronger than the counter-arguments – not so surprising after all. I suggest to be cautious with labelling confirmatory argument strength ratings as "prior attitude effects" as some scholars have done (Bolsen, Druckman & Cook 2014; Druckman, Fein & Leeper 2012; Taber & Lodge 2006). Certainly, a longitudinal study would be better suited to demonstrate that a cognitive bias is at work.

How can we combine the findings that accountability has a strong effect on integrative complexity of justifications, but a less clear effect on the differential bias in argument strength ratings? A possible explanation is that accountability affects more the 'talk' than the attitude of individuals. When held accountable, subjects (in particular the strong opinion holders) adjust the complexity of their justifications and integrate arguments of the other side, while in reality they have not come to agree more with the other side. This may mean that they try to appear more conciliatory and ready to compromise, while their opinions show they are not.

In sum however, through debiasing, subjects start to integrate contrasting arguments in their own opinion-formation – in particular when expecting to justify themselves in a group. And exactly this – the consideration of diverse arguments and perspectives, and their integration in the opinion formation process – is a crucial normative requirement in democratic decision-making.[52]

Motivated reasoning and belief protection are pervasive phenomena in political thinking. Bolsen et al. (2014, 245) have defined directional reasoning as "the default method to forming evaluations in political contexts". At the same time, the authors emphasize that "it is time scholars move beyond testing moderators and/or documenting the presence of partisan motivated reasoning and work towards a more complete theory of […] motivated reasoning" (Bolsen et al. 2014, 252). To date, little is known about the psychological mechanisms underlying the phenomenon of motivated political thinking. And even less is known about the question how to counteract it.

The present study takes a step in this direction by testing strategies to counteract motivated reasoning. Accountability to others – which in turn induces an accuracy motivation – is key in enhancing the complexity of political thinking (see also Leeper & Slothuus 2014; Bolsen et al. 2014). Mere exposure to balanced information is not enough – a balanced information environment must encounter an individual motivated to be accurate. More complex opinions come closer to a central normative requirement of democratic decision-making.

Thus creating a social environment, where subjects have to discuss their views with diverse others will enhance the considerateness of their political opinions – a claim which has been made for a long time by deliberative democrats (e.g. Mutz 2006). The cognitive and motivational underpinnings of this claim have not yet been analyzed however. In fact, so-called 'deliberative mini-publics' (Fishkin & Luskin 2005; Niemeyer 2011; Smith 2009) entail both debiasing elements tested in the present study: the explicit consideration of opposite arguments, as participants are invited to listen to exponents of different camps, as well as group discussions, where participants themselves have to justify their own positions. Different authors have emphasized the importance

[52] In this study, subjects expected discussion in a group of (mostly) unknown others, which they had met for the first time in the lab. Lerner and Tetlock point out that accountability enhances integrative complexity only when subjects are held accountable to an audience with unknown views, as otherwise conformity effects might occur. Thus we don't know how the effects of accountability would look under circumstances where subjects' know each other's views – a question open for further analysis.

of better understanding the psychological components of such deliberative settings (Bächtiger et al. 2010; Goodin & Niemeyer 2003; Mutz 2006). The present findings can contribute something to this question as well.

By offering a definition of what a considered opinion might be and how to measure it, this study also aims at contributing to a normative debate on citizens' political competence, which has not been led by political psychologists yet. According to Bolsen et al. (2014, 253), there is "a lack of consensus among scholars as to what constitutes a normatively appealing opinion" (see also Druckman 2012). I suggest that political psychology might link to democratic theory, in particular deliberative democracy theory, in search for answers to the question of normative requirements for citizens' participation. This link has rarely been made, and a more detailed exchange between empirical and normative scholars is highly desirable. Finally, conducting a controlled experiment in the context of a real-world political decision, where subjects take part and which affects their life, constitutes an interesting variation of previous experiments, which mostly used political questions taken from the general public debate.

The first limitation of this study is that it only looks at one single policy decision in a certain context, thus the results need to be replicated under different circumstances. It would be interesting to see whether the effects are different with less controversial and less polarizing issues. The selection of such a highly contentious issue as the Scottish referendum may make it more difficult to find debiasing effects and considered opinions, as motivated reasoning is particularly likely with such issues (see Leeper and Slothuus 2014). A second limitation are the justification paragraphs written by subjects. It would have been bettere to have more written material to measure integrative complexity, in order to enhance the validity and reliability of the measurement. Time limits and resource constraints did not allow this however. Furthermore written material can naturally only provide an indirect measure of thought complexity. It is possible, for example, that a subject has very well considered the issue in the past, but decides to write down only a one-sided justification which corresponds to her actual position.

Third, as with every lab experiment using student samples, generalizability is a question. As Druckman and Kam (2011) state, although many social scientists claim that representative samples produce more valid results, the advantages of representative samples over student samples have not yet been empirically proved. Student samples produce biased estimates only if we cannot

assume a homogenous treatment effect for the whole population. In other words, a student sample would only be problematic if I expected students to react differently to the debiasing treatments than the rest of the population – which I do not. Nevertheless, the effects remain to be tested on different samples. Fourth, as mentioned above, in order to demonstrate that the one-sided argument ratings really represent a cognitive bias, a longitudinal study is needed. Finally, a closer analysis of the inconclusive findings on the consider-the-opposite treatment would be worthwhile, as some evidence points in the direction of cognitive accessibility – and not only motivation – as a cause for opinion considerateness.

In sum, I try to link older findings on debiasing from social psychology to the recent debate on the determinants of motivated reasoning versus considered political opinions in political psychology. The strong evidence for the positive effect of having to justify one's political opinion to others constitutes a starting point for further research on how to enhance considered opinions and citizens' competence.

Chapter 6

Conclusion

6.1 Research questions

I started working on this thesis project because I was curious to find out more about how voters made up their minds in direct democracy and how competent citizens are to make decisions on policy matters at the ballot box. Approaching this question from the perspective of a political psychologist, I formulated the following research questions: What is citizen competence in direct democracy? How can we conceptualise and measure it? What role do arguments play? To what extent do citizens justify their decisions with policy-related arguments? And what is the role of motivation, and of processes of motivated reasoning? Finally, what psychological mechanisms can help improve citizen competence?

I investigate these questions in the context of direct democracy because it is here that people decide directly over policy matters which affect their lives. In such a setting it is particularly important to assess citizen competence in order to ensure the legitimacy of the democratic process, because individuals' decisions translate directly into policy changes. This is all the more important in light of the persistent criticism directed at citizen competence and the decisional process in direct democracy. The theoretical review in Chapter 2 shows how citizens are suspected of being ignorant of policy facts, are accused of resorting to simple cues and heuristic strategies, and of being unwilling to deliberate and to listen to their opponents. In other words, they are easy pray for elite manipulation. By investigating some of the cognitive and motivational processing underlying individuals' information processing and opinion formation in direct democracy, I have attempted to shed more light on this question of citizen competence and democratic legitimacy.

At the same time, direct democracy also represents an ideal setting to study processes of opinion formation more generally. Here people are asked to make up their minds on a policy question and they have incentives to put effort into this task, because their decisions have immediate

consequences for their own lives and the welfare of their country. Therefore I believe that direct democracy, as a real-life decision-making opportunity, allows us to conduct studies on the political psychology of opinion formation which are externally valid. Moreover, direct democracy is growing worldwide, as documented in my Introduction, making it even more important to understand how it works 'from the inside'.

In my empirical studies, I try to capture the concept of a considered, reasoned opinion as well as I could within the possibilities of my PhD. In the first study on citizen competence, I take advantage of the existence of a unique dataset containing justifications given by referendum voters for 34 national-level referendums over 4 years. Through quantitative content coding of these open-ended survey answers I aim at assessing the substantive content as well as the complexity of these justifications. Of course the data is not perfect, it would have been desirable to have longer and more detailed answers, and it would have been useful to know more about the interviewers and the interview process itself, ideally I would have liked to take part in the interview process for at least some of the interviews, in order to get a better intuition of how people answer. If I could introduce a change in the standard Swiss Vox post-ballot surveys, I would suggest to introduce an additional open-ended question which asks about respondents' knowledge not only of their own side's arguments, but also of the other side's arguments. This would have allowed more insights into the processes of two-sided vs. one-sided reasoning. In my experimental study, I tried to go further in this direction, by having subjects writing a longer justification-paragraph, which I coded for integrative complexity. Integrative complexity measures both, the diversity of arguments considered, and also their integration, that is to what extent subjects connect and integrate different arguments. In chapter 4 we did not directly assess the considerateness of opinions, but rather we tried to disentangle the effect of party cues and policy arguments on political opinions. It is clear that closed-ended survey questions cannot assess the considerateness or complexity of respondents' thoughts, but what we show in this study is that substantive policy arguments play a substantial role in voters' decision-making, but that at the same time, voters' do not assess these arguments independent of their priors.

6.2 Citizen competence

Considering research on public opinion and deliberative democracy, and the criticism directed at direct democracy from these research fields, I defined a competent or considered opinion as one which fulfils two criteria: first, it is well-justified by substantive, policy-related arguments; and second, it is based on the consideration of different arguments, possibly including arguments of the other side. With this conceptualisation I have tried to grasp the substantive policy knowledge and the deliberative potential present in an electorate. As a concept of citizen competence it has several advantages over previous measures, which mainly take the knowledge of general political facts as a gold standard. First, I focussed on policy-specific knowledge, which is more relevant in the case of direct democratic decision-making. Second, I investigated the ability of individuals to justify their own position; this is an important precondition for political deliberation and debate. Finally, I tried to assess the diversity and complexity of the arguments used. Thus in this definition, someone who considers a wide variety of arguments and perspectives, and integrates them into their justification scores better than someone who has a vast knowledge of one-sided facts. This latter point echoes concerns about one-sided, biased processing of information.

6.3 Main findings

My first empirical finding concerns the role of arguments in direct democratic processes. In all three empirical studies, I find evidence that voters are aware of the most important policy-related arguments. In Chapters 3 and 5, I show that voters are able to reproduce arguments when asked to justify their position, while Chapter 4 provides evidence that arguments also affect their vote intentions. With this I echo Kriesi (2002; 2005), who found arguments to be the main determinants of direct democratic vote choices in Switzerland. This finding casts a positive light on the deliberative potential of the citizenry in direct democracy. Citizens strive to hold meaningful opinions, and are equipped with the corresponding arguments, as desired by normative theories of democracy. As Hirschman (1989) has prominently claimed, holding arguments is an important element of well-being and self-esteem.

This first finding challenges one prominent strand of research in political psychology – the so-called ‘low-information-rationality paradigm’. This starts from the premise that citizens are

minimalist, that is, ignorant of and not interested in policy details and arguments, as has been well documented in the United States political psychology literature. In order to take political decisions in an efficient way, instead making the effort to get informed, they resort to simple heuristic strategies such as following parties' or interest groups' cues. This idea of party cues as shortcuts and substitutes for policy information, as one of the most important ideas in political psychology of the recent decades, needs to be revisited. As Chapter 4 clearly shows, arguments and policy cues both have an independent effect on vote intentions. It is not true that people ignore the arguments and instead blindly follow cues. This research, in line with other recent studies, shows that citizens do in fact know the arguments of the debate quite well.

However, the second main finding introduces a substantial caveat to this optimistic first conclusion. I find that, while people seem to be motivated to possess arguments and justifications, they also tend to process these arguments in a biased way, in order to confirm their prior position. That is, arguments are not considered in a balanced way, but much more weight is given to arguments compatible with our prior knowledge. Chapter 4 shows that, over the course of a three-month referendum campaign, citizens tend to align their argument-position with the position of their preferred party. Furthermore, Chapter 5 shows that even if we give instructions to rate arguments in a balanced way, subjects tend to rate the arguments of their own side consistently as stronger than the arguments of the other side. These findings are completely in line with a wealth of research now conducted under the heading of 'motivated reasoning theory'. In fact, Bolsen *et al.* (2014, 245) have defined directional reasoning as "the default method to forming evaluations in political contexts". It appears to be very difficult to abstract from our position and assess the arguments of all sides impartially. However, this impartial assessment of different arguments is precisely the key requirement of traditional deliberation theory. So how can we foster unbiased thinking, and how can we increase the cognitive complexity of opinions? To date, little is known about the psychological mechanisms underlying the phenomenon of motivated political thinking, and even less is known about how to counteract them.

With the last empirical study, presented in Chapter 5, I tried to take a step in this direction. I applied two experimental debiasing strategies from social psychology research to the context of opinions on Scottish independence. I found that the expectation of accountability, that is, the expectation of being able to justify one's own position to others in a group discussion, is an incentive to be accurate, which in turn leads to more complex and diverse opinions, integrating a

greater number of different aspects of an issue. Mere exposure to balanced information is not enough – a balanced information environment must encounter an individual motivated to be accurate. Therefore, it is important to create social environments where subjects have to discuss their views with diverse others, which in turn enhances the considerateness of their political opinions – a claim which has long been made by deliberative democrats. The cognitive and motivational underpinnings of this claim, however, have not yet been analyzed . Indeed, so-called 'deliberative mini-publics' (Fishkin & Luskin 2005; Niemeyer 2011; Smith 2009) entail both debiasing elements tested in the present study: the explicit consideration of opposite arguments, as participants are invited to listen to exponents of different camps, and group discussions, where participants have to justify their own positions. Various scholars have emphasized the importance of having a better understanding of the psychological components of such deliberative settings (Bächtiger *et al*. 2010; Goodin & Niemeyer 2003; Mutz 2006). This third main finding can help us disentangle the psychological mechanisms underlying deliberation.

Another finding worth mentioning concerns the effect of the context, that is, the complexity of the policy issue at stake, the elite coalitions, and the political campaign preceding a vote. All these factors affect citizens' argument processing considerably. Chapter 3 shows that context factors are just as important determinants of the justification level as individual-level resources such as education and political interest. Chapter 4 (somewhat surprisingly to me) shows that party cues have a stronger effect for easy issues, while arguments have a stronger effect with complex issues. Citizen competence is thus highly dependent on the characteristics of the task citizens' are exposed to. This is something that can and should be considered in the design of direct democratic institutions. First, questions could be formulated in a way which is not too complex to understand. Second, the provision of information during the campaign, by media and elite actors, is crucial. Chapter 3 shows how an intense campaign can even to a certain extent compensate for a lack of political interest. It can help the politically uninterested to get to know the arguments, even though it might probably not help to overcome biased reasoning. Finally, elite polarization seems to have a detrimental effect on citizen competence. Processes of political polarization have been observed in many political systems in recent years, including in Switzerland and the United States, where direct democracy is most frequent. This fact should thus be taken into account when designing or reforming direct democratic institutions.

To sum up, citizens in direct democracy are neither absolutely ignorant of politics as depicted by the minimalist perspective of public opinion research, nor are they the highly rational and impartial judges envisioned by deliberative democracy theory, but they are something in between. Citizens strive to be acquainted with the arguments, they learn from campaigns, and they are able to justify their decisions when asked to do so. And yet, at the same time, they are biased in their assessment of information, they adapt their judgments to their existing beliefs and party attachments, and they often do not listen to the other side. These biases in reasoning can however be mitigated to some extent by inducing people to justify themselves in public or with unknown others, by formulating coherent vote questions, by providing intense, information-rich, and diverse political campaigns, and by a balanced discussion conducted from within the political elite. If we think about how to increase citizens' competence, the simple provision of information is not enough, in the same way as a lack of information is not necessarily the main problem. The problem is instead the incapacity to assess information in an impartial and unbiased way, thus any measure which induces people to abstract from their own beliefs for a moment and listen to the other side has the potential to improve the decision-making process.

6.4 Contributions and limitations

This thesis makes several contributions to the existing literature. First, I elaborate a possible conceptualisation of citizen competence which goes beyond general factual knowledge and which includes the ability to justify a position. In addition, I show possible ways to assess and measure this concept of citizen competence. With this I continue a popular line of research on citizen competence in direct democracy and add additional elements from deliberative theory and political psychology. More generally, the findings address a readership interested in direct democracy, and in particular in the reasoning of citizens in direct democratic votes, not only in Switzerland, but also elsewhere. Furthermore, I add to research on motivated reasoning theory which is by now a well-established subfield of political psychology. And finally, I also address scholars interested in the empirical testing of deliberation theory, by trying to assess some of the micro-mechanisms and preconditions underlying the functioning of public deliberation in the real world context of direct democracy.

This research project has a number of weaknesses and limitations, which also deserve some comment. For the first study in Chapter 3, analyzing justification levels, I analysed only data from subjects who actually voted. It would have been interesting to compare justification levels for non-voters, but unfortunately this was impossible, because the open-ended justification question was asked only addressed to participants. The other two empirical studies, however, include non-participants in the sample (the experiment on Scottish independence was conducted before the vote), and the conclusions overlap to some extent. This can be taken as evidence that these processes do not work very differently for voters and non-voters. Assessing the justification levels of non-voters remains a desirable task for the future, however, particularly as participation in direct democratic votes is strongly correlated to education levels. The finding regarding the secondary role of education in Chapter 3 may therefore have to be revised for non-voters.

The main drawback, however, is that I have mainly data which show individuals' justification of their own position. Citizen competence is composed of two components: Knowledge of substantive policy information, but also consideration of different arguments and viewpoints. This second component is certainly less developed in my empirical studies. Ideally, I would like to have more data on people's knowledge of the arguments of the other side. Unfortunately, Vox data used in Chapter 3 do not address this question. This is something that could be changed in future Vox surveys and which would give a much better insight into the quality of citizens' 'internal deliberation'. Nevertheless, I tried to integrate a complexity-component in my coding of the responses, by assigning an additional point to responses which provide more than one argument. The panel data used in Chapter 4 do not provide this information either. While the integrative complexity measure used in my experimental study in Chapter 5 does to some extent capture whether diverse arguments were considered, this is not yet a perfect measure. With hindsight we are always wiser, and asking respondents more in-depth about the arguments of the other side may well be a task for a future project.

Why is it 'better' to base an opinion on arguments than to simply follow party cues? One could argue that simply the fact of having arguments at hand to justify one's position does not guarantee a considered opinion, arguments can be shallow and meaningless, they can be wrong, a consequence of misinformation, and therefore holding arguments does not necessarily come any

closer to a deliberative way of forming opinions than following party cues. In fact, the idea of heuristic short cuts for political decision making has originally been introduced as an efficient and rational way to make a reasonable decision in an efficient way, that is without spending too much time and effort with studying policy-details.

Are policy arguments an any more desirable base for political decisions than party cues or other heuristic strategies? I think so, because voters following signals and cues are much easier to manipulate. While misinformation can also be spread through arguments and holding arguments does not completely prevent from manipulation, people who start engaging in substantive debate, and thinking about policy details are more likely to reason, discuss and consider different views. At least they can potentially do so. In particular, as experiments on two-sided framing show, when individuals are confronted with strong, contrasting arguments, this might cause a certain level of cognitive dissonance and ambivalence, and lead them to reason. At the same time, by making the argument that citizens are 'not ignorant, but partisan' I also acknowledge that this can lead to biased, one-sided thinking. But I think my more important point is, that the assumption that most people are simply ignorant of policy details and the best we can hope for is that they find the right cue to follow is simply not true. Here my perspective differs from the one of minimalism and low-information-rationality: I find that people are actually very willing to deal with information and arguments, particularly with issue-specific information in the case of direct democracy.

One recent example to illustrate this point is a referendum on an 'expulsion initiative', launched by the right-wing populist Swiss People's Party, which came to the ballot on 28 February 2016. The proposed new legislation would have introduced automatic expulsion of non-swiss-citizens living in Switzerland, even if they were born and raised in Switzerland, and even for minor crimes such as speed limit violations or shoplifting. While until December 2015, the initiative had a support of 60% of the population according to major opinion polls, in the end it failed with a no-vote of 58.9%. The vote reached a record turnout of 63%. This late catch-up was mainly the achievement of a large opposition-coalition made up of civil-society organisation, law professors, and political parties, which managed to mobilise enormously in the last weeks of the campaign. These opponents mobilized their voters based on arguments such as the importance of the 'rule-of-law', 'separation of powers', or the 'principle of proportionality in criminal justice'. As the Swiss justice minister Simonetta Sommaruga rightfully noticed, these are not considered to be

"particularly sexy concepts". After the vote, several comments pointed to the importance of such arguments in this referendum campaign. The German newspaper *Süddeutsche Zeitung*[53] wrote that this referendum showed that "it is worth convincing people with arguments", while the Swiss newspaper *Tagesanzeiger*[54] wrote that "having an opinion on the expulsion initiative became a duty" and that the Swiss People's Party "did not find an answer to the complex arguments of their opponents, and also not to the unexpected passion these complex arguments triggered".

In my view, the role of arguments in political opinion formation deserves more attention in the research. My thesis has been an attempt to find out more about argument processing, but now, at the end of the work, I seem to have more questions and ideas than conclusions. Which arguments have strong effects, and which are associated with what issues, are there certain patterns to be found? When do we listen to the other side, and under what conditions can arguments actually change minds? How much deliberation, in people's minds, but also external face-to-face, takes place in direct democracy? And how can direct democratic settings be changed to improve the consideration of different viewpoints? After a great deal of research on empirically testing the premises of deliberative theory, political psychologists, based on the findings of motivated reasoning theory, seem to have recently turned to the perspective that all reasons are *post hoc* rationalizations. I believe this to be an excessively cynical view of human opinions. Certainly, protecting our prior beliefs and behaving consistently is a fundamental motivation of human thinking, but so is holding meaningful opinions and behaving accurately or appropriately in a given situation. Accuracy may often not be the default motivation at work, especially in heated political debates, where identities and emotions are often the focus of discussion. It is, however, possible to activate an accuracy motivation, and future research may well try to find out more about the conditions under which we strive for accuracy in our political thinking.

[53] http://www.sueddeutsche.de/politik/volksabstimmung-lernen-von-den-schweizern-1.2884318
[54] http://www.tagesanzeiger.ch/schweiz/standard/ein-schrecklicher-tag-fuer-die-svp-ein-grosser-tag-fuer-die-schweiz/story/13366835

Appendix

Chapter 3: Citizen competence

Table 3-A1: Summary statistics continuous variables

Variable	N	Mean	Std. Dev.	Min.	Max.
Political interest	26515	2.13	0.70	0	3
Media consumption	26621	2.10	0.91	0	3
Polarization	26621	107.60	16.98	53	99
Campaign intensity	26621	3.28	1.49	0.00	5.61
Issue complexity	26621	0.26	0.09	0.07	0.47

Table 3-A2: Summary statistics categorical variables

Variable	N	0	1	2	3	4
Level of Justification	26,621	21.91	8.89	15.41	46.7	7.08
Education	26,496	5.81	94.19			
Gender (male=1)	26,621	51.47	48.53			
Language (German=1)	26,621	39.07	60.93			
Pro / Contra (pro=1)	22,773	53.94	46.06			
Form	26,621	25.89	20.53	53.58		
Policy domain	26,621	15.16	41.34	23.41	20.09	

Note: Education: 0=below secondary / 1=secondary/tertiary; Form: 0=mandatory referendum / 1= optional referendum / 2=popular initiative; Policy Domain: 0= institutional-fiscal / 1=cultural-social / 2= foreign-immigration / 3=ecology.

Table 3-A3: Level of justification by highest educational attainment in percent

LOJ	Education			
	below secondary	secondary	tertiary	Total
0	33.85	23.01	19.23	21.82
1	7.99	8.8	9.11	8.9
2	12.54	14.88	16.25	15.41
3	40.55	46.34	47.92	46.76
4	5.07	6.97	7.48	7.11
Total	100	100	100	100

Table 3-A4: Level of justification by political interest in percent

LOJ	Political interest				
	very low	low	moderate	high	Total
0	42.47	34.36	22.24	14.51	21.86
1	10.34	9.2	8.99	8.5	8.9
2	11.62	14.7	15.56	15.69	15.41
3	32.85	36.79	46.41	52.51	46.76
4	2.72	4.95	6.8	8.78	7.08
Total	100	100	100	100	100

Note: The question was “In general, how interested are you in politics?” with a 4-point answer scale ranging from “not at all interested” to “very interested”.

Table 3-A5: Level of justification by media use during campaign in percent

LOJ	Media Use (newspaper, tv, radio)				
	0	1	2	3	Total
0	33.29	24.6	20.5	20.23	21.91
1	10.07	9.05	8.66	8.84	8.89
2	13.45	15.91	15.33	15.57	15.41
3	37.96	44.08	47.88	48.17	46.7
4	5.22	6.35	7.63	7.2	7.08
Total	100	100	100	100	100

Note: The question was "Which of the following media did you use to get informed about the proposition" with the answers "used", "not used", "don't know"

Table 3-A6 : Binary logit regression results on LOJ tresholds with 3 educational categories

Level of Justification		*Model 1: 0/1*	*Model 2: 1/2*	*Model 3: 2/3*	*Model 4 3/4*
Fixed effects					
Individual	*secondary education*[1]	0.508	0.379	0.180	0.249
		(0.206)*	(0.164)*	(0.149)	(0.361)
	tertiary education	0.547	0.392	0.152	0.261
		(0.207)**	(0.165)*	(0.149)	(0.361)
	political interest	0.451	0.310	0.311	0.451
		(0.082)***	(0.059)***	(0.050)***	(0.111)***
	age	-0.004	-0.001	-0.002	-0.005
		(0.002)**	(0.001)	(0.001)*	(0.002)***
	male	0.115	0.049	-0.008	0.107
		(0.050)*	(0.036)	(0.030)	(0.051)*
	language (german)	0.469	0.282	0.190	0.398
		(0.050)***	(0.037)***	(0.031)***	(0.056)***
	pro / con	0.235	-0.129	-0.124	-0.183
		(0.055)***	(0.039)**	(0.032)***	(0.054)***
	media use	0.088	0.084	0.067	0.026
		(0.028)**	(0.021)***	(0.017)***	(0.030)
Context	*campaign intensity*	0.175	0.159	0.170	0.312
		(0.091)	(0.074)*	(0.081)*	(0.133)*
	elite polarization	-0.017	-0.018	-0.015	-0.017
		(0.006)**	(0.005)***	(0.007)*	(0.008)*
	mandatory referendum[2]	0.573	0.145	0.039	0.073
		(0.253)*	(0.205)	(0.263)	(0.308)
	optional referendum	0.614	0.411	0.231	0.196
		(0.214)**	(0.174)*	(0.223)	(0.259)
	institutional/fiscal	-0.251	-0.043	-0.102	-0.615
		(0.297)	(0.244)	(0.317)	(0.380)
	foreign/immigration	-0.262	-0.292	-0.147	0.192
		(0.190)	(0.155)	(0.200)	(0.229)
	ecology[3]	-0.534	-0.377	-0.492	-0.246
		(0.206)**	(0.169)*	(0.219)*	(0.258)
	complexity	-5.832	-5.500	-3.481	-2.641
		(1.026)***	(0.833)***	(1.071)**	(1.252)*
Interaction	*education*intensity*	0.019	-0.005	0.002	-0.026
		(0.057)	(0.046)	(0.041)	(0.093)
	*interest*intensity*	-0.053	-0.017	-0.023	-0.069
		(0.023)*	(0.017)	(0.014)	(0.029)*
	_cons	1.999	1.473	0.353	-3.491
		(0.390)***	(0.310)***	(0.356)	(0.558)***
Random effects					
Context level variance		0.388	0.325	0.436	0.488
		(0.057)	(0.045)	(0.056)	(0.069)
N		22,597	22,597	22,597	22,597

Note : cells report logit coefficients and standard errors in parentheses ; * p<0.05; ** p<0.01; *** $p<0.001$.

Binary logit models of the single thresholds of LOJ (calculated with xtlogit). For creating the dependent variables, the sample was collapsed the 4 different thresholds of LOJ. [1]Reference category for education : below secondary ; [2]Reference category for form of vote : popular initiatives ; [3]Reference category for policy domain: social/cultural issues

Table 3-A7: Coefficients for random-intercept logit regression models. Dependent variable:LOJ

Level of Justification		Ordered Logit Model individual level	Ordered Logit Model individual & context	OLS full model two levels	OLS full model three levels
Fixed effects					
Individual	education	0.256	0.255	0.180	0.012
		(0.059)***	(0.059)***	(0.071)*	(0.016)
	political interest	0.234	0.234	0.187	0.192
		(0.020)***	(0.020)***	(0.024)***	(0.024)***
	age	-0.003	-0.003	-0.001	-0.002
		(0.001)**	(0.001)**	(0.000)**	(0.001)**
	male	0.031	0.031	0.021	0.028
		(0.026)	(0.026)	(0.014)	(0.016)
	language (german)	0.249	0.250	0.145	0.143
		(0.027)***	(0.027)***	(0.014)***	(0.017)***
	pro / con	-0.112	-0.108	-0.041	-0.036
		(0.029)***	(0.029)***	(0.015)**	(0.014)*
	media use	0.066	0.066	0.036	0.037
		(0.015)***	(0.015)***	(0.008)***	(0.009)***
Context	campaign intensity		0.104	0.102	0.008
			(0.056)	(0.037)**	(0.003)*
	polarization		-0.014	-0.008	-0.074
			(0.006)*	(0.003)**	(0.038)*
	mandatory ref.		-0.018	0.017	0.018
			(0.229)	(0.115)	(0.134)
	optional ref.[1]		0.279	0.148	0.145
			(0.208)	(0.097)	(0.113)
	institutional/fiscal		-0.146	-0.119	-0.122
			(0.246)	(0.138)	(0.161)
	foreign/immigration		-0.053	-0.086	-0.087
			(0.162)	(0.087)	(0.101)
	ecology[2]		-0.416	-0.243	-0.245
			(0.190)*	(0.095)*	(0.111)*
	complexity		-3.776	-2.121	-2.122
			(0.993)***	(0.466)***	(0.545)***
Interaction	interest*intensity			-0.019	-0.021
				(0.007)**	(0.006)***
	education*intensity			-0.004	0.032
				(0.020)	(0.011)**
	_cons			1.829	2.383
				(0.223)***	(0.168)
Random effects					
Context level variance		0.439	0.175	1.009	Issue: 0.222 (0.033)
		(0.109)	(0.036)	(0.005)	Person: 0.431 (.001)
					Residual 0.914 (0.001)
N		22,597	22,597	22,597	22,597

Notes: cells report proportional odds ratios for OLM and coefficients for OLS. Standard errors are in parentheses; * p<0.05; ** p<0.01; *** p<0.001.OLM = Ordered logit regression of LOJ (calculated with *gllamm*). OLS = Ordinary least squares random-intercept model, calculated with *xtreg*. Two-level OLS includes single answers and issue clusters; Three-level cross-classified OLS (calculated with *xtmixed*) includes single answers, as well as person-level and issue-level clusters. Reference category for form of vote: popular initiatives; [2]Reference category for policy domain: social/cultural issues.

Online Appendix Chapter 3

Alternative operationalization of dependent variable

LOJ-2:

0 = no justification

1 = only cue

2 = only argument

3 = argument & cue

Table 3-O1. Distribution of LOJ-2

LOJ-2	frequency	%	cumulative %
no justification	5,909	22.20	22.20
cue only	2,345	8.81	31.01
argument only	17,667	66.36	97.37
argument & cue	700	2.63	100
Total	26,621	100	

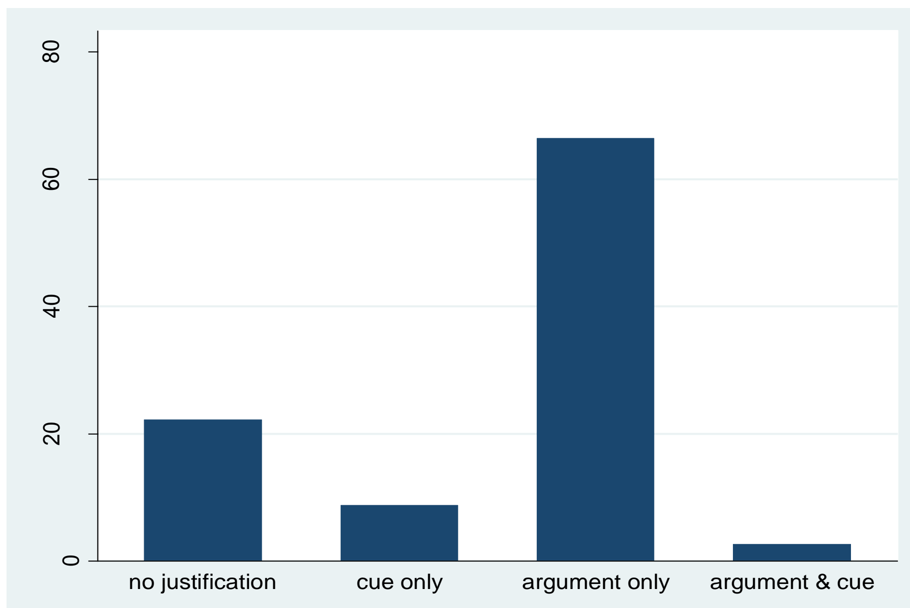

Figure 3-O1. Distribution of LOJ-2

Table: 3-O2: Logit regression on use of cues (models 1 + 2) and use of arguments (models 2 + 4)

		ANYCUE		ANYARG	
		model 1 Ind. level	model 2 Full model	model 3 Ind.level	model 4 Full model
Fixed effects					
Individual	education	0.001	-0.105	0.383	0.441
		(0.092)	(0.191)	(0.073)***	(0.163)**
	political interest	-0.077	-0.083	0.258	0.314
		(0.031)*	(0.065)	(0.027)***	(0.059)***
	age	-0.003	-0.003	-0.001	-0.001
		(0.001)*	(0.001)*	(0.001)	(0.001)
	male	0.035	0.034	0.050	0.050
		(0.041)	(0.041)	(0.036)	(0.036)
	language (German)	0.035	0.032	0.280	0.282
		(0.042)	(0.042)	(0.037)***	(0.037)***
	pro / contra	0.258	0.250	-0.138	-0.129
		(0.044)***	(0.044)***	(0.039)***	(0.039)**
	media use	-0.057	-0.057	0.084	0.084
		(0.023)*	(0.023)*	(0.020)***	(0.020)***
Context	campaign intensity		-0.119		0.173
			(0.083)		(0.072)*
	elite polarization		0.010		-0.018
			(0.006)		(0.005)***
	mandatory ref.		0.241		0.130
			(0.217)		(0.198)
	optional referendum[1]		-0.130		0.402
			(0.184)		(0.168)*
	institutional/fiscal		-0.018		-0.050
			(0.261)		(0.236)
	foreign/immigration		0.575		-0.295
			(0.164)***		(0.150)*
	ecology[2]		0.113		-0.362
			(0.181)		(0.163)*
	complexity		4.268		-5.509
			(0.892)***		(0.805)***
Interaction	interest*intensity		0.035		-0.019
			(0.055)		(0.046)
	education*intensity		0.002		-0.017
			(0.018)		(0.017)
	_cons	-1.696	-3.737	0.331	3.178
		(0.168)***	(0.633)***	(0.160)*	(0.568)***
Random effects					
Context level variance		0.609 (0.079)	0.344 (0.049)	0.679 (0.085)	0.313 (0.043)
N		22,597	22,597	22,597	22,597

Note. Cells report logit coefficients and standard errors in brackets; * $p<0.05$; ** $p<0.01$; *** $p<0.001$. Dependent variables: *anycue*=use of any cue in first or second response vs. no cue-use. *anyarg*=use of any argument in first or second response v. no argument. [1] Reference category for form of vote: popular initiatives; [2]Reference category for policy domain: social/cultural issues

Table 3-O3: Chronological list of propositions with mean issue complexity ratings

Date	Title	mean complex-ity rating	turnout
01.06.2008	Popular initiative 'For democratic naturalizations' at the ballot box	0.190	45.3
01.06.2008	Popular initiative 'Popular sovereignty instead of government propaganda'	0.259	45.0
01.06.2008	Constitutional article 'For quality and efficiency in health care' (counterproposal to a withdrawn SVP initiative)	0.466	44.9
30.11.2008	Popular initiative 'For exemption of child pornographical crimes from the statute of limitations'	0.305	47.7
30.11.2008	Popular initiative 'For a flexible retirement age'	0.227	47.8
30.11.2008	Popular initiative 'Against an extensive right of appeal for associations'	0.346	47.4
30.11.2008	Popular initiative 'For a reasonable cannabis politics'	0.267	47.5
30.11.2008	Referendum on the federal narcotics regulation	0.353	47.3
02.02.2009	Referendum on the extention of free movement of people to Bulgaria and Romania	0.220	51.6
17.05.2009	referendum on 'The future of complementary medicine'	0.182	38.9
17.05.2009	Referendum on biometrical passports	0.287	38.9
27.09.2009	Referendum on a front-end financing of the disability insurance	0.246	41.1
27.09.2009	Referendum on renunciation of the introduction of the general popular initiative	0.416	40.5
29.11.2009	Referendum on a special financing for the airforce	0.380	52.8
29.11.2009	Popular initiative 'For an export ban on war materials'	0.177	53.5
29.11.2009	Popular initiative 'For a ban of minaret constructions'	0.165	53.9
07.03.2010	Referendum on research on humans	0.325	45.5
07.03.2010	Popular initiative 'For the introduction of animal advocates'	0.109	45.9
07.03.2010	Refrendum on pension reform (BVG)(Mindestumwandlungssatz)	0.310	45.8
26.09.2010	Referendum on the unemployment insurance	0.253	35.9
28.11.2010	Popular initiative 'For the deportation of criminal foreigners'	0.262	53.1
28.11.2010	Counterproposal to the deportation initiative	0.314	53.1
28.11.2010	Popular initiative 'For a fair tax system'	0.318	52.5
11.03.2012	Volksinitiative 'Schluss mit uferlosem Bau von Zweitwohnungen'	0.241	45.3
11.03.2012	Volksinitiative 'Für ein steuerlich begünstigtes Bausparen zum Erwerb von selbst genutztem Wohneigentum und zur Finanzierung von baulichen Energiespar- und Umweltschutzmassnahmen (Bauspar-Initiative)'	0.299	45.1
11.03.2012	Volksinitiative '6 Wochen Ferien für alle'	0.120	45.5
11.03.2012	Referendum on casino law reform (counterproposal to a withdrawn initiative)	0.298	44.8
11.03.2012	Referendum on price fixing for books	0.310	44.9
17.06.2012	Popular initiative 'Get your own home through building society savings'	0.256	38.6
17.06.2012	Popular initiative 'For the strengthening of popular sovereignty in foreign policy'	0.269	38.6
17.06.2012	Referendum on health care reform (managed care)	0.381	38.7
23.09.2012	Referendum on promoting youth music (counterproposal to a withdrawn initiative)	0.090	42.5
23.09.2012	Popular initiative 'Secure living in old age'	0.070	42.6
23.09.2012	Popular initiative 'Protection from passive smoking'	0.311	42.9
Total		0.262	45.46

Table 3-O4: Binary logit regression results for low-complexity issues

Level of Justification		Model 1: 0/1	Model 2: 1/2	Model 3: 2/3	Model 4 3/4
Fixed effects					
Individual	education	0.874	0.619	0.017	-0.239
		(0.416)*	(0.272)*	(0.231)	(0.494)
	political interest	0.387	0.282	0.308	0.476
		(0.174)*	(0.103)**	(0.077)***	(0.166)**
	age	-0.008	-0.005	-0.005	-0.006
		(0.003)***	(0.002)**	(0.001)***	(0.002)**
	male	0.091	0.108	0.055	0.072
		(0.079)	(0.055)	(0.042)	(0.063)
	language (German)	0.652	0.396	0.267	0.428
		(0.079)***	(0.056)***	(0.043)***	(0.070)***
	pro / contra	-0.138	-0.291	-0.356	-0.224
		(0.084)	(0.059)***	(0.045)***	(0.066)***
	media use	0.071	0.109	0.097	0.038
		(0.044)	(0.031)***	(0.024)***	(0.037)
Context	campaign intensity	0.233	0.349	0.297	0.244
		(0.176)	(0.115)**	(0.125)*	(0.188)
	elite polarization	-0.009	-0.011	-0.010	-0.002
		(0.008)	(0.005)*	(0.008)	(0.009)
	mandatory referendum	1.269	0.912	0.690	-0.186
		(0.394)**	(0.259)***	(0.344)*	(0.383)
	optional referendum[1]	0.915	0.372	0.171	0.176
		(0.330)**	(0.219)	(0.302)	(0.335)
	institutional/fiscal	-0.862	-0.157	-0.494	-1.288
		(0.525)	(0.359)	(0.506)	(0.630)*
	foreign/immigration	-0.149	-0.129	-0.099	0.315
		(0.247)	(0.170)	(0.238)	(0.263)
	ecology[2]	-0.019	0.195	0.021	-0.053
		(0.344)	(0.236)	(0.330)	(0.370)
	complexity	-4.022	-5.495	-2.779	-1.849
		(1.762)*	(1.209)***	(1.680)	(1.882)
Interaction	interest*intensity	-0.107	-0.071	0.038	0.095
		(0.115)	(0.076)	(0.063)	(0.127)
	education*intensity	-0.033	-0.007	-0.019	-0.080
		(0.048)	(0.029)	(0.021)	(0.042)
	_cons	1.109	0.067	-0.828	-3.406
		(0.785)	(0.516)	(0.607)	(0.854)***
Random effects					
Context level variance					
N					

Note*:* cells report logit coefficients and standard errors in brackets; * $p<0.05$; ** $p<0.01$; *** $p<0.001$; binary logit models of the single thresholds of LOJ (calculated with xtlogit). For creating the dependent variables, the sample was collapsed the 4 different thresholds of LOJ. [1]Reference category for form of vote: popular initiatives; [2]Reference category for policy domain: social/cultural issues.

Table 3-O5: Binary logit regression results for high-complexity issues

Level of Justification		Model 1: 0/1	Model 2: 1/2	Model 3: 2/3	Model 4 3/4
Fixed effects					
Individual	education	0.423	0.265	0.265	0.728
		(0.237)	(0.203)	(0.195)	(0.556)
	political interest	0.455	0.317	0.297	0.424
		(0.093)***	(0.072)***	(0.067)***	(0.146)**
	age	-0.002	0.002	-0.000	-0.005
		(0.002)	(0.002)	(0.001)	(0.003)
	male	0.143	0.008	-0.082	0.168
		(0.064)*	(0.048)	(0.042)*	(0.084)*
	language (German)	0.343	0.192	0.122	0.332
		(0.066)***	(0.049)***	(0.043)**	(0.091)***
	pro / contra	0.488	-0.007	0.116	-0.119
		(0.073)***	(0.053)	(0.046)*	(0.093)
	media use	0.091	0.061	0.032	0.003
		(0.036)*	(0.028)*	(0.024)	(0.050)
Context	campaign intensity	0.120	0.077	0.112	0.345
		(0.099)	(0.082)	(0.099)	(0.184)
	elite polarization	-0.026	-0.027	-0.020	-0.048
		(0.009)**	(0.007)***	(0.010)	(0.010)***
	mandatory referendum	0.090	-0.294	-0.335	0.317
		(0.292)	(0.234)	(0.363)	(0.387)
	optional referendum[1]	0.387	0.268	0.158	0.339
		(0.212)	(0.167)	(0.253)	(0.256)
	institutional/fiscal	0.217	0.396	0.245	0.656
		(0.359)	(0.283)	(0.430)	(0.426)
	foreign/immigration	0.207	0.038	0.136	0.533
		(0.281)	(0.219)	(0.330)	(0.335)
	ecology[2]	-0.480	-0.275	-0.529	0.155
		(0.224)*	(0.179)	(0.275)	(0.289)
	complexity	-2.886	-3.124	-1.566	2.061
		(2.202)	(1.780)	(2.775)	(3.138)
Interaction	interest*intensity	0.073	0.030	-0.018	-0.139
		(0.067)	(0.057)	(0.054)	(0.148)
	education*intensity	-0.056	-0.021	-0.025	-0.052
		(0.026)*	(0.020)	(0.018)	(0.040)
	_cons	-0.249	-0.354	-1.097	-8.082
		(0.924)	(0.739)	(1.097)	(1.339)***
Random effects					
Context level variance					
N					

***Note**:* cells report logit coefficients and standard errors in brackets; * *p*<0.05; ** *p*<0.01; *** *p<0.001.*

Binary logit models of the single thresholds of LOJ (calculated with xtlogit). For creating the dependent variables, the sample was collapsed the 4 different thresholds of LOJ. [1] Reference category for form of vote: popular initiatives; [2]Reference category for policy domain: social/cultural issues

Chapter 4: Biased processing

Table 4-A1: Means and standard deviations of continuous variables by panel wave and case

		ASYLUM LAW REFORM			
variable	N	mean	sd	min	max
t1					
party orientation	1029	0	1	-2.54	2.07
argument position	1091	0	1	-2.78	2.65
political knowledge	1092	1.23	1.05	0	3
age	1092	50.44	17.14	18	88
t2					
party orientation	1029	0	1	-2.54	2.07
argument position	1090	0	1	-2.78	2.53
political knowledge	1092	1.99	0.88	0	3
age	1092	50.44	17.14	18	88
		CORPORATE TAX REFORM			
variable	N	mean	sd	min	max
t1					
party orientation	987	0	1	-2.55	1.93
argument position	989	0	1	-2.95	3.82
political knowledge	1001	0.80	0.83	0	3
age	1001	51.25	16.82	18	88
t2	N	mean	sd	min	max
party orientation	987	0	1	-2.55	1.93
argument position	997	0	1	-2.86	3.24
political knowledge	1001	1.51	0.93	0	3
age	1001	4.38	1.45	1	6

Note. Party orientation is time-invariant as it was asked only in the first wave

Table 4-A2: Distribution of categorical variables (%) by panel wave and by case

	ASYLUM LAW			CORPORATE TAX		
variable	N	0	1	N	0	1
t1						
vote intention	1,092	43.86	56.14	962	53.64	46.36
party cue knowledge	831	42.84	57.16	866	40.42	59.58
sex	1,092	54.58	45.42	1,001	49.65	50.35
education	1,092	11.45	88.55	1,001	11.49	88.51
t2						
vote intention	1,092	35.81	64.19	984	41.46	58.54
party cue knowledge	831	21.66	78.34	866	24.36	75.64
sex	1,092	54.58	45.42	1,001	49.65	50.35
education	1,092	11.45	88.55	1,001	11.49	88.51

Note. Sex and eduction are time-invariant. Vote intention: 0=opposition / 1 = support; Sex: 0=female / 1 = male; education: 0=below secondary / 1=secondary or tertiary.

Chapter 5: Debiasing

Table 5-A1: Summary statistics additional variables

Variable	N	Range (min/max)	Mean	Std. Dev.	Var.	Skew.	Kurt.
Political Knowledge	179	1 / 17	9.63	3.54	12.51	.08	2.08
Political Interest	179	0 / 4	2.34	1.02	1.03	.13	2.40
Opinion strength	179	0 / 10	6.13	2.4	5.77	-.37	2.56

Table 5-A2: Differences in integrative complexity relative to control group

	Consider the opposite			**Accountability**		
	z-value	p<	N	z-value	p<	N
All subjects	-1.06	0.15	117	-1.80	**0.03**	120
High knowledge	-0.82	0.29	61	-1.30	**0.09**	58
Low knowledge	-0.61	0.28	56	-1.27	0.11	62
Strong opinion	-1.76	**0.04**	64	-1.84	**0.03**	59
Weak opinion	0.36	0.37	52	-0.58	0.29	61

Note. The cells represent z-values and p-values from proportion tests of high vs. low integrative complexity of justification across experimental groups and for different subsamples in the rows. Statistically significant differences (p<0.1) in bold. The left-hand panel shows the values for the consider-the-opposite group vs. control group and the right-hand panel shows the values for the accountability group vs. control group. The first row shows the values for all subjects, the subsequent rows for subgroups of subjects.

Online Appendix Chapter 5

A) INFORMATION ON SELECTION OF ARGUMENTS FOR STIMULUS MATERIAL:

We conducted a content analysis of newspapers and policy documents. The newspaper analysis was conducted with a keyword search through LexisNexis. We drafted the arguments based on the information yielded by this content analysis.

Media sources: The Herald Glasgow (Scottish); The Scotsman (Scottish); The Guardian (UK); The Daily Telegraph (UK); The Independent (UK); The Times (UK)

Timeframe: all articles from 1 September 2013 to 19 Feb 2014

Selection keywords: HEADLINE (referendum OR independence) AND BODY (scot*)

Policy documents:

Allison, Arthur, Stuart Bramley, John Coggins, Jim Gallacher, Jim Gallagher, Patrick Harkness, Peter Holmes, Hugh Pennington, and Susan Shaw. "Excelling Together: The Future of Scotland's Universities." Better Together Campaign (ed.), 2014.

Huose of Commons. "Implications for Development in the Event of Scotland Becoming an Independent Country." International Development Committee (ed.). London, 2013.

Crawford, Rowena and Gemma Tetlow. "Fiscal Challenges and Opportunities for an Independent Scotland." In *National Insitute Economic Review*, National Institute of Economic and Social Research (ed.), 2014.

Cuthbert, Margaret. "The Dysfunctional UK Economy." The Jimmy Reid Foundation (ed.), 2014.

Scottish Government. "Scotland's Future - Your Guide to an Independent Scotland (a Summary)." Edinburgh, 2013.

Scottish government. "Building Security and Creating Opportunity: Economic Policy Choices in an Independent Scotland." Edinburgh, 2013.

Government of the United Kingdom. "Scotland Analysis: Defence." Secretary of State for Defence (ed.). London, 2013.

Government of the United Kingdom. "Scotland Analysis: Currency and Monetary Policy." Chief Secretary to the Treasury (ed.). London, 2013.

Sturgeon, Nicola. "50 Question the No-Campaign Must Answer." Edinburgh, 2014.

Expert-survey questions

1) Thought-listing task: Before looking at our arguments, please write down (in a Word document) all the arguments pro and contra Scottish independence which come spontaneously to your mind and send the document back to us together with the list of arguments attached.

2) Rating strength and direction of arguments: Now, AFTER having finished task 1), please take a look at the list of arguments we send you in the attachment. We would kindly ask you to read each text carefully and tell us **first**, whether one argument in your opinion is **PRO or CONTRA** Scottish independence. **Second**, please tell us, how **WEAK or STRONG** you believe the argument is. Use a scale from 0 to 10 for this, where 0 is a very weak argument and 10 a very strong one.

PLEASE NOTE: We want to know how WEAK or STRONG you believe the argument is, NOT WHETHER YOU AGREE OR DISAGREE WITH THE ARGUMENT. Please try to leave your feelings about Scottish independence aside and indicate how strong or weak you feel the argument is.

response: pro / con

response: very weak (0) – very strong (10)

3) Open question: Now we are interested in every possible feedback you can give us on the texts. (open question)

B) EXPERIMENTAL STIMULUS MATERIAL: ARGUMENTS PRO AND CONTRA INDEPENDENCE

1. PRO-FRAME: SELF-DETERMINATION

With a Yes vote Scotland's future will be in Scotland's hands

A Yes vote will guarantee that Scotland's future will be in Scotland's hands. Decisions about Scotland will be taken by the people who care most about it – those who live and work here. This vote is a colossal opportunity given to very few in the course of history. People all over the world, dead and alive, would have loved to achieve independence for their country by doing something as straightforward - and, importantly, as peaceful – as voting in a polling booth. Independence isn't about supporting a specific political party: it is about supporting self-determination and having the right to freely elect the government the majority of Scottish actually want, whatever political colour it may have. Independence, therefore, would address a profound democratic deficit in Scotland, by replacing the current Westminster system in which Scottish representatives make up just 9 per cent of the 650 MPs. At its heart independence is about a fundamental choice: the people of Scotland will have the power to build a country that reflects their priorities as a society and their values. It will no longer be possible for governments to pursue policies against the wishes of the Scottish people. Independence will put the people of Scotland in charge of their own destiny.

2. PRO-FRAME: OIL AND ENERGY

Energy-rich Scotland would be wealthier as an independent state

Scotland disposes of the largest oil reserves in the EU as well as huge renewable energy potential. Investment in the oil and gas sector is at a record level of £13.5 billion this year, and planned future investment is estimated at £100 billion. Production is expected to extend beyond the middle of the century. In terms of wholesale value, North Sea reserves could be worth £1.5 trillion – a greater value than the amount extracted to date. With 25 per centof Europe's total tidal energy potential, 25 per cent of its wind energy potential and 10 per cent of its wave energy potential, Scotland has also a huge potential in renewable energy. This has the power to reindustrialise Scotland, bringing more jobs and greater prosperity. However, under successive Westminster governments this energy wealth has not been invested, instead it has gone straight to the UK Treasury. Independence gives Scotland the opportunity to harness this energy wealth for the people of Scotland. All the evidence demonstrates that an independent Scotland would be one of the wealthiest countries in the world. It would be the 14th wealthiest nation in the developed world by GDP per head of population, four places higher than the UK as a whole.

3. PRO FRAME: WELFARE, EQUALITY

Independence will mean a fairer and more equal Scotland

Scotland is a prosperous country, but too many people and communities are trapped in poverty. In 2011/12, 710,000 people (14 per cent of the population) were living in relative poverty in Scotland. The current Westminster approach is making the situation worse. Recent estimates reveal that the child poverty rate in Scotland will increase to 22.7 per cent by 2020. Under the Westminster system, Scotland is also locked in to one of the most unequal economic models in the developed world. The UK is now one of the ten least equal countries in the OECD and since 1975 income inequality among working-age people has increased faster in the UK than in any other country in the OECD. If Scotland remains in Westminster's hands, its welfare state is likely to be changed beyond recognition.

Independence will allow the Scottish Parliament to determine the future direction of the welfare system in Scotland; reverse the most damaging of the Westminster changes, such as the 'bedroom tax'; and ensure a social security system for the future that meets the needs and objectives of Scottish citizens. Voting Yes at the referendum is the only way forward for anyone who wants to see a fairer, more equal and more prosperous Scotland.

4. PRO-FRAME: Education / University

Independent Scotland's universities would avoid funding cuts and gain a stronger reputation

Scotland is home to some of the world's oldest and most prestigious universities and research at Scottish universities is among the most highly cited per capita in the world. An independent Scotland will be in a stronger position, as a sovereign nation state, to promote Scottish higher education. A dedicated overseas diplomatic and trade network for example could enhance Scotland's visibility on the international stage. With an enhanced international profile, Scottish institutions will be able to attract leading research talents from around the world. Moreover, under independence, Scotland would collect its own taxes and be completely responsible for its own funding arrangements – unlike the present situation which sees annual cuts being imposed by Westminster. With an increasingly anti-EU and anti-immigrant UK government, the principles of Scottish higher education have been under threat. The relentless reduction in public spending, the current pressures to reduce university support in England even more, and the privatisation of universities in England through fees will lead to knock-on reductions in public funding in Scotland. A Yes vote is the only way to avoid these threats, guarantee full control over higher education spending, and strengthen the international profile of Scotland's universities.

1. CON-FRAME: FINANCE

Scots worse off? Tax hikes and spending cuts will be the cost of independence

In case of independence, a significant further fiscal tightening would be required in Scotland, on top of that already announced by the UK government, in order to put Scotland's long-term public finances onto a sustainable footing. First, revenues from the North Sea made up a much larger share of total Scottish revenues (18.6 per cent) in 2011–12 than they did for the UK as a whole (2.0 per cent). This means Scotland's public finances are more exposed than the UK's public finances to revenues from the North Sea, which are volatile and expected to decline in the long run. Scotland seems to be putting all its eggs in the oil basket, which is risky. What if there's not as much as experts say? Second, spending per person is also higher in Scotland as in the UK as a whole. Third, the population of Scotland is expected to age more rapidly. A go-it-alone Scotland would face a punitive £9 billion-plus pensions bill in the first year of independence, almost three times its projected income from North Sea oil.[55] As a consequence Scotland would have the second highest fiscal deficit of any advanced economy. This is not a sustainable position. Even under the most optimistic scenario independence would leave Scots worse off by an average of £1,000 a year from 2020.

[55] *The Herald*, 22.04.2014: Independent Scotland 'would need one million immigrants'

2. CON-FRAME: CURRENCY

The only way to keep the pound is staying in the UK

The best option for an independent Scotland would be to maintain the Sterling in a shared currency zone with the rest of the UK. The UK is one of the most successful monetary, fiscal and political unions in history. It has brought economic benefits to all parts of the UK because taxation, spending, monetary policy and financial stability policy are co-ordinated across the whole UK. This has helped the whole UK weather the recent global economic crisis. However, it is by no means clear whether the UK would agree to a shared currency zone with an independent Scotland. And even if this was the case, an independent Scottish state would have to accept significant policy constraints under such a pact. The failings of the Eurozone show that to have a successful monetary union you require fiscal and political union, while the whole point of independence is to break the fiscal and political union that makes monetary union possible. Support for a sterling currency union is one of the fundamental weaknesses of the pro-independence campaign. Independence means leaving the UK's monetary union and leaving the pound. The only way for Scotland to keep the pound as it is now is to stay in the UK.

3. CON-FRAME: EDUCATION

Leaving the UK would threaten Scotland's research funding and kill off free tuition fees

Scotland has more universities in the world top 200 per head of population than any other country in the planet, but these universities need to be properly funded. Independence threatens the survival of one of Scotland's most keenly defended and popular policies: guaranteeing free university tuition for all Scottish students. At present, English, Welsh and Northern Irish students can be charged to study in Scotland since they come from within the same EU member state – the UK. And thanks to devolution within the UK. But what if the rest of the UK becomes a different EU state, can Scotland keep discriminating against its citizens? Charging tuition fees to students from the rest of the UK in an independent Scotland would break European law against discrimination of member states' citizens. Ending that arrangement would be a disaster. It could cost Scotland £150m extra. What is more, Scotland's scientific research funding could be threatened by a break from the UK. While Scotland's population share is 8.4%, it wins 10.7% of research grant funding. An independent Scotland could lose £210 million each year in research funding from UK based sources, which would seriously hamper the research conducted by Scotland's world class universities.

4. CON-FRAME: EU

An independent Scotland would face a mountain of problems to be part of the EU

A newly independent state, breaking away from an existing EU member, Scotland would have to apply as a new member state - meaning that the accession would have to be approved by ALL the other 28 member states. If even just one country says no, Scotland will not be in. This will be extremely difficult. Some member states may be unwilling to grant opt-outs to an independent Scottish state on measures which they have had to adopt themselves. Others have their own independence movements to consider. Spain, fuelled by a desire to stem Catalonian nationalism in its own territory, could use its veto to prevent permanently a separate Scotland joining. Croatia strictly adheres to the position that all prospective EU members have to undergo a thorough negotiating process. France would even have to hold a referendum to accept the new state. Official EU accession talks with Scotland might not be able to start until the envisaged independence date of 24 March 2016, and with such discussions potentially lasting 18 months or more, it could prolong uncertainty around the economic outlook. Tough negotiations would lie ahead on issues such as the UK's current multi-billion-pound budget opt-out, the Schengen ‘open borders’ area, and agricultural policy.

C) CODING EXAMPLES INTEGRATIVE COMPLEXITY

Table 5-O1: Examples of justification paragraphs for different scores of integrative complexity

Score	Justification
1	I have always felt that Scotland is a country in it's own right and as such it should be independent from the UK and fully in charge of it's own affairs. For better or worse, we should stand on our own two feet, but I also believe it will be for the better.
2	I feel that though there may be benefits of becoming independent they are far too small and hard to guarantee to make it worth the massive risk which moving from the UK undoubtedly is. I also feel that though there are some strong arguments pro independence that the pro union arguments are still significantly stronger and have more solid evidence to back them up. Overall though, I basically just don't think it's worth the risk when, although the UK certainly has its problems, we're still one of the most democratic and successful developed countries in the world.
3	I reject an independent Scotland because I believe it would be far too risky in terms of economy and government to leave the UK. I also think an independent Scotland would promote and even normalize nationalism to a point where it could be likened with racism. Integration and globalization would be worked against, rather than supported, which to me seems the wrong way to go in today's society. Finally, an independent Scotland may not lead to a wealthier community, but rather the opposite, because of the necessary new costs in establishing a well-functioning country, and it would destabilize much of the entire Europe, in terms of economy and politics.
4	I have heard many convincing arguments for and against independence. Some of them, particularly those of the Radical Independence campaign, are quite appealing. However, I think they are selling a Scotland that we most definitely will not get under Salmond. He is a snake who I don't trust, as he was responsible for the Donald Trump fiasco. I think he wants independence and will give over all of his points (such as Faslane getting the boot) to get it. These factors should be decided and voted on by the Scottish public, not by the SNP. Ultimately my main objection is a personal struggle with the very idea of left-wing nationalism, which in many cases is a contradiction in terms, and basically means the division of people and abandoning the non-Tory English to their fate. This doesn't seem quite fair. However this is somewhat redeemed by the idea of a European Scotland, which would be great, and represent a union of people. England should be European too. Farage is foul.
5	I've felt undecided about this debate for some time, but my knowledge on some key issues that would I think sway me to one side or not is poor. I understand that Scotland finds it unfair that Britain takes a cut of taxes, however it also puts money into Scotland through research funding and university fees. I believe that the strongest issue is Scotland being unable to make decisions on issues within the country itself, or being under-represented in situations to do so. But this could be resolved without actually splitting from England in revision of government policies.
6	Although I'm not very well informed on this issue, I've come to the conclusion by reading the news, talking to Scottish friends and especially by reading the articles given to me, that Scotland shouldn't become independent. I don't think it is ready to take this step and that the full consequences have not been made known to the public that want to vote 'Yes'. It seems to some extent that support has been gained by painting the rest of the UK, specifically England, as something to fear and oppose - something that threatens and exploits the economic and social interests of Scotland. If the main argument for independence stems from a desire for a Scottish identity, separate from the rest of the UK, then I don't think independence is a necessary step for this. Identity and community don't come from being independent. Moreover, the problems that Scotland could face in joining the EU are risky - it is not certain that they would be accepted, especially due to the problems that Spain is facing with Catalonian independence, which would serve only to threaten their economy etc. If an independent Scotland were accepted as an EU member state, then it could set off various independence movements in other countries and cause chaos in Europe. Europe as a whole should be working towards being united and working together, for the sake of peace and economic and social interests - this also applies to Scotland.

D) ADDITIONAL ANALYSES INTEGRATIVE COMPLEXITY

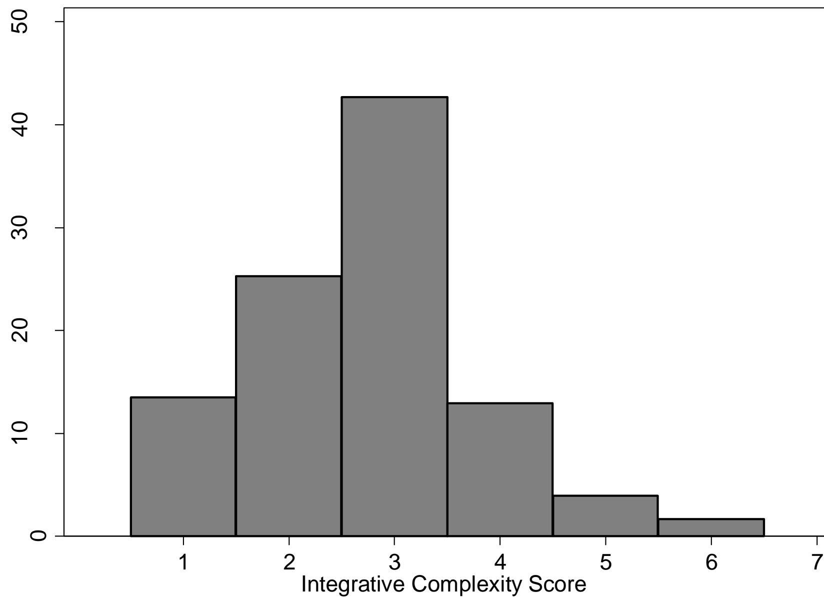

Figure 5-O1: Distribution of integrative complexity of justifications over sample (N = 178)

Table 5-O2: Differences in 7-point integrative complexity scale relative to control group

	Consider the opposite			Accountability		
	t-value	p<	N	t-value	p<	n.
All subjects	-1.46	**0.07**	117	-1.57	**0.06**	120
High knowledge	-1.67	**0.05**	61	-0.97	0.17	58
Low knowledge	-0.156	0.44	56	-1.238	0.12	62
Strong opinion	-2.59	**0.01**	64	-0.96	0.18	59
Weak opinion	0.72	0.78	52	-0.74	0.24	61

Note. The cells represent z-values and p-values from difference-in-mean tests (t-tests) of integrative complexity of justification (range 1-7) across experimental groups and for different subsamples in the rows. Statistically significant differences (p<0.1) in bold. The left-hand panel shows the values for the consider-the-opposite group vs. control group and the right-hand panel shows the values for the accountability group vs. control group.

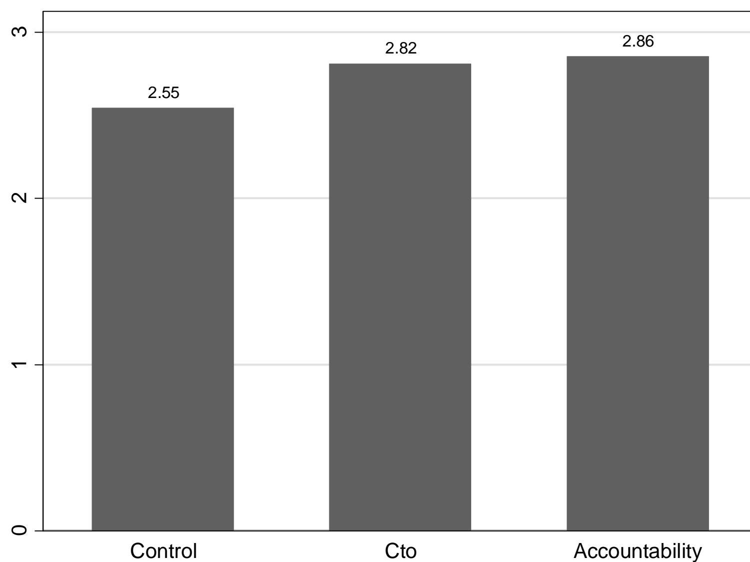

Figure 5-O2. Mean IC score over experimental groups.
Notes: sample (n = 178). y axis: mean integrative complexity score (range 1-7); x axis: experimental groups

Table 5-O3: Interaction effects of treatments and political knowledge / opinion strength

ACCOUNTABILITY TREATMENT				
	Model 1		Model 2	
	Coef. (SE)	p<	Coef. (SE)	p<
Treatment effect	0.925	0.225	0.454	0.509
	(0.762)		(0.689)	
Political knowledge	0.494	0.558		
	(0.842)			
Knowledge*Treatment	0.069	0.946		
	(1.024)			
Opinion strength			-0.758	0.363
			(0.833)	
Strength*Treatment			0.962	0.351
			(1.032)	
Constant	-2.974	**0.001**	-2.196	**0.005**
	(0.887)		(0.776)	
N	120		120	

CONSIDER-THE-OPPOSITE TREATMENT				
	Model 1		Model 2	
	Coef. (SE)	p<	Coef. (SE)	p<
Treatment effect	0.530	0.523	-0.215	0.784
	(0.830)		(0.785)	
Political knowledge	0.486	0.563		
	(0.841)			
Knowledge* treatment	0.206	0.847		
	(1.066)			
Opinion strength			-0.754	0.366
			(0.834)	
Strength* treatment			1.663	0.123
			(1.079)	
Constant	-2.918	**0.001**	-2.245	**0.005**
	(0.879)		(0.799)	
N	117		117	

Note. Logit estimates of binary integrative complexity measure (high = 1 / low =0); Standard errors are in parentheses. Statistically significant differences (p<0.1) in bold letters. Upper panel shows the results for the accountability treatment and lower panel shows the results for the consider the opposite treatment.

Bibliography

Abelson, Robert (1963). "Computer simulation of 'hot' cognition." In *Computer Simulation of Personality, Frontier of Psychological Theory*, eds. Silvan Tomkins and Samuel Messick. New York: Wiley & Sons, Inc.

Abelson, Robert P., Elliot Aronson, William J. McGuire, Thomas Newcomb, M.J. Rosenberg and P.H. Tannenbaum (eds) (1968). *Theories of Cognitive Consistency: a sourcebook*. Chicago: Rand McNally.

Achen, Christopher H. and Larry M. Bartels (2006). "It Feels Like We're Thinking: The rationalizing voter and electoral democracy." In *Annual Meeting of the American Political Science Association,* Philadelphia.

Altman, David (2010). *Direct Democracy Worldwide*. Cambridge: Cambridge University Press.

Althaus, Scott L. (2003). *Collective Preferences in Democratic Politics: Opinion surveys and the will of the people*. Cambridge: Cambridge University Press.

Aronson, Elliot (1969). The theory of cognitive dissonance: A current perspective. *Advances in experimental social psychology* 4: 1-34.

Anduiza, Eva, Aina Gallego and Jordi Muñoz (2013). Turning a Blind Eye Experimental Evidence of Partisan Bias in Attitudes Toward Corruption. *Comparative Political Studies* 46 (12): 1664-1692.

Arceneaux, Kevin (2008). Can partisan cues diminish democratic accountability? *Political Behavior* 30 (2): 139-160.

Aronson, Elliot (1969). The theory of cognitive dissonance: A current perspective. *Advances in Experimental Social Psychology* 4: 1-34.

Bächtiger, André (2010). "On perfecting the deliberative process: agonistic inquiry as a key deliberative technique." *APSA Annual Meeting Paper*.

Bächtiger, André, Simon Niemeyer, Michael Neblo, Marco R. Steenbergen and Jürg Steiner (2010). Disentangling Diversity in Deliberative Democracy: Competing Theories, Their Blind Spots and Complementarities. *Journal of Political Philosophy* 18 (1): 32-63.

Bächtiger, André, Marco R. Steenbergen, Thomas Gautschi and Seraina Pedrini (2011). "Deliberation in Swiss direct democracy: A field experiment on the expulsion initiative." *NCCR Democracy Newsletter*, 5-6.

Bächtiger, André and Dominik Wyss (2013). Empirische Deliberationsforschung–eine systematische Übersicht. *Zeitschrift für Vergleichende Politikwissenschaft* 7 (2): 155-181.

Baker-Brown, Gloria, Elizabeth J. Ballard, Susan Bluck, Brian de Vries, Peter Suedfeld and Philip E. Tetlock (1992). "The conceptual/integrative complexity scoring manual." In *Motivation and Personality: Handbook of thematic content analysis,* 401-418.

Barabas, Jason, Jennifer Jerit, William Pollock, and Carlisle Rainey. 2014. The Question (s) of Political Knowledge: A Temporal-Topical Framework. *American Political Science Review* 108 (4): 840-854.

Barber, Benjamin (1984). *Strong Democracy: Participatory democracy for a new age*. Berkeley: University of California Press.

Bartels, Larry M. (2000). Partisanship and Voting Behavior, 1952-1996. *American Journal of Political Science* 44: 35-50.

Bartels, Larry M. (2002). Beyond the Running Tally: Partisan bias in political perceptions. *Political Behavior* 24 (2): 117-150.

Bartels, Larry M. (2005). Homer Gets a Tax Cut: Inequality and public policy in the American mind. *Perspectives on Politics* 3 (1): 15-31.

Bartels, Larry M. (2007). Homer Gets a Warm Hug: A note on ignorance and extenuation. *Perspectives on Politics* 5 (4): 785.

Bartels, L. M. (2008). *Unequal democracy: The political economy of the new gilded age*: Princeton University Press.

Bauer, Paul C., and Matthias Fatke. 2014. Direct Democracy and Political Trust: Enhancing Trust, Initiating Distrust–or Both? *Swiss Political Science Review* 20 (1): 49-69.

Bennett, Stephen Earl. 1988. " Know-Nothings" Revisited: The Meaning of Political Ignorance Today. *Social Science Quarterly* 69 (2): 476-90.

Benz, Matthias and Alois Stutzer (2004). Are voters better informed when they have a larger say in politics?–Evidence for the European Union and Switzerland. *Public Choice* 119 (1-2): 31-59.

Bernauer, Julian and Adrian Vatter (2012). Can't get no satisfaction with the Westminster model? Winners, losers and the effects of consensual and direct democratic institutions on satisfaction with democracy. *European Journal of Political Research* 51 (4): 435-468.

Bernhard, Laurent (2012). *Campaign Strategy in Direct Democracy*. Palgrave Macmillan.

Bohman, James (1998). Survey article: The coming of age of deliberative democracy. *Journal of Political Philosophy* 6 (4): 400-425.

Bolsen, Toby, James N. Druckman and Fay Lomax Cook (2014). The influence of partisan motivated reasoning on public opinion. *Political Behavior* 36 (2): 235-262.

Boudreau, Cheryl and Scott A. MacKenzie (2014). Informing the electorate? How party cues and policy information affect public opinion about initiatives. *American Journal of Political Science* 58 (1): 48-62.

Bowler, Shaun and Todd Donovan (1998). *Demanding Choices: Opinion, voting, and direct democracy*. Ann Arbor: University of Michigan Press.

Bowler, Shaun and Todd Donovan (2002). Democracy, institutions and attitudes about citizen influence on government. *British Journal of Political Science* 32 (2): 371-390.

Bowler, Shaun, Todd Donovan and Trudi Happ (1992). Ballot propositions and information costs: Direct democracy and the fatigued voter. *The Western Political Quarterly* 45 (2): 559-568.

Bowler, Shaun, Todd Donovan and Caroline J. Tolbert (1998). *Citizens as Legislators: Direct democracy in the United States*. Columbus: Ohio State University Press.

Bowler, Shaun, and Todd Donovan (2002). Democracy, institutions and attitudes about citizen influence on government. *British Journal of Political Science* 32 (2): 371-390.

Budge, Ian (1996). *The New Challenge of Direct Democracy*. Cambridge: Polity.

Bullock, John G. (2011). Elite influence on public opinion in an informed electorate. *American Political Science Review* 105 (03): 496-515.

Butler, David and Austin Ranney (1994). *Referendums Around the World: The growing use of direct democracy*. Washington DC: American Enterprise Institute.

Bütschi, Danielle (1993). "Compétence pratique." In *Citoyenneté et déemocratie directe*, ed. Hanspeter Kriesi. Zurich: Seismo, 99-119.

Campbell, Angus, Phillip E. Converse, Warren E. Miller and Stokes Donald E. (1960). *The American Voter*. New York: Wiley.

Carmines, Edward G., and James A. Stimson (1980). The two faces of issue voting. *American Political Science Review* 74 (01): 78-91.

Chaiken, Shelly (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology* 39 (5): 752-766.

Chaiken, Shelly and Alison Ledgerwood (2011). "A theory of heuristic and systematic information processing." In *Handbook of theories of social psychology: Volume one*, eds. P.A.M. Van Lange, A.W. Kruglanski and Tory E. Higgins. London: Sage, 246-166.

Chaiken, Shelly and Durairaj Maheswaran (1994). Heuristic processing can bias systematic processing: Effects of source credibility, argument ambiguity, and task importance on attitude judgment. *Journal of Personality and Social Psychology* 66 (3): 460-473.

Chambers, Simone (2001). "Constitutional referendums and democratic deliberation." In *Referendum Democracy: Citizens, Elites, and Deliberation in Referendum Campaigns*, eds. M. Mendelson and A. Parkin. New York: Palgrave, 231-255.

Chamber, Simone (2003). Deliberative democratic theory. *Annual Review of Political Science* 6 (1): 307-326.

Chong, Dennis (2013). "Degrees of Rationality in Politics." In *The Oxford Handbook of Political Psychology*, eds. Leonie Huddy, David O. Sears and Jack Levy. Oxford: Oxford University Press.

Chong, Dennis and James N. Druckman (2007). A Theory of Framing and Opinion Formation in Competitive Elite Environments. *Journal of communication* 57 (1): 99-118.

Christiansen, Martin Bisgaard (forthcoming). Partisan Motivated Reasoning During the Great Recession: Does an Unambiguous Economy Eliminate Partisan Motivated Biases? *Journal of Politics*.

Cohen, Geoffrey L. (2003). Party Over Policy: The dominating impact of group influence on political beliefs. *Journal of Personality and Social Psychology* 85 (5): 808.

Cohen, Joshua (1989). "Deliberation and democratic legitimacy." In *The Good Polity: Normative Analysis of the State*, eds. A. Hamlin and P. Pettit. Cambridge: Basil Blackwell. 67-92.

Cohen, Joshua (2007). "Deliberative Democracy." In *Deliberation, participation and democracy: can the people govern?*, ed. S.W. Rosenberg. Basingstoke, UK: Palgrave Macmillan.

Converse, Phillip E. (1964). "The nature of belief systems in mass politics." In *Ideology and discontent*, ed. David E. Apter. New York: Free Press. 206-261.

Dahl, Robert A. (1989). *Democracy and its Critics*. New Haven: *Yale UniversityPress*.

Dalton, R.J (2000). Citizen attitudes and political behavior. *Comparative political studies* 33 (6-7): 912.

Delli Carpini, Michael X. and Scott Keeter (1996). *What Americans Don't Know About Politics and Why it Matters*. New Haven: Yale University Press.

Delli Carpini, Michael X., Fay L. Cook, and Lawrence R. Jacobs (2004). Public deliberation, discursive participation, and citizen engagement: A review of the empirical literature. *Annuual Review of Political Science* 7: 315-344.

Dermont, Clau (2014): "Politische Partizipation "à la carte". Die selektive Partizipation der Schweiz." Masterarbeit, Institut für Politikwissenschaften, Universität Bern.

Donovan, Todd, Caroline J. Tolbert, and Daniel A. Smith. 2009. Political Engagement, Mobilization, and Direct Democracy. *Public Opinion Quarterly* 73 (1): 98-118.

Downs, Anthony (1957). An economic theory of political action in a democracy. *The Journal of Political Economy* 65 (2): 135-150.

Druckman, James N (2001). The implications of framing effects for citizen competence. *Political Behavior* 23 (3): 225-256.

Druckman, James N. (2012). The politics of motivation. *Critical Review* 24 (2): 199-216.

Druckman, James N, and Kjersten R Nelson. 2003. Framing and deliberation: How citizens' conversations limit elite influence. *American Journal of Political Science* 47 (4): 729-745.

Druckman, James N., Jordan Fein and Thomas J. Leeper (2012). A Source of Bias in Public Opinion Stability. *American Political Science Review* 106 (2): 430-453.

Druckman, James N., Erik Peterson and Rune Slothuus (2013). How Elite Partisan Polarization Affects Public Opinion Formation. *American Political Science Review* 107 (01): 57-79.

Dryzek, John S., and Valerie Braithwaite (2000). On the Prospects for Democratic Deliberation: Values Analysis Applied to AustralianPolitics. *Political Psychology* 21 (2): 241-266.

Dryzek, John S., and Simon Niemeyer (2006). Reconciling pluralism and consensus as political ideals. *American Journal of Political Science* 50 (3): 634-649.

Dryzek, John S. 2009. Democratization as deliberative capacity building. *Comparative political studies* 42 (11): 1379-1402.

Elo, Kimmo, and Lauri Rapeli. 2010. Determinants of political knowledge: The effects of the media on knowledge and information. *Journal of Elections, Public Opinion and Parties* 20 (1): 133-146.

Eriksen, Erik O (2007). "Democratic legitimacy–Working agreement or rational consensus?" In *Discursive Modernity*, eds. Nils Gilje and Harald Grimen: Universitetsforlaget.

Esterling, Kevin M., Michael A. Neblo, and David M. J. Lazer. 2011. Means, Motive, and Opportunity in Becoming Informed about Politics: A Deliberative Field Experiment with Members of Congress and Their Constituents. *Public Opinion Quarterly* 75 (3): 483-503.

Evans, Geoffrey and Robert Andersen (2006). The political conditioning of economic perceptions. *Journal of Politics* 68 (1): 194-207.Fazio, Russell H. (1986). "How do attitudes guide behavior." In *Handbook of motivation and cognition: Foundations of social behavior*, eds. Tory E Higgins and Richard M Sorrentino. New York: The Guilford Press. 204-243.

Feldman, Stanley (2003). "Values, ideology, and the structure of political attitudes." In *Oxford Handbook of Political Psychology*, eds. D.O. Sears, L. Huddy and Robert Jervis. New York: Oxford University Press.

Festinger, Leon (1957). *A theory of cognitive dissonance*. Palo Alto, Calif.: Stanford University Press.

Fischhoff, Baruch (1982). 'Debiasing'. In *Judgment under uncertainty: Heuristics and biases*, eds. Daniel Kahneman, Paul Slovic and Amos Tversky. Cambridge: Cambridge University Press.

Fishkin, James (2009). *When the People Speak: Deliberative democracy and public consultation*. Oxford: Oxford University Press.

Fishkin, James S (2010). Response to critics of when the people speak: the deliberative deficit and what to do about it. *The Good Society* 19 (1): 68-76.

Fishkin, James S. and Robert C. Luskin (2005). Experimenting with a democratic ideal: Deliberative polling and public opinion, *Acta Politica* 40 (3): 284-298.

Fiske, Susan T. and Shelley E. Taylor (1991). *Social Cognition*. New York: McGraw-Hill.

Freitag, Markus, and Isabelle Stadelmann-Steffen. 2010. Stumbling block or stepping stone? The influence of direct democracy on individual participation in parliamentary elections. *Electoral Studies* 29 (3): 472-483.

Frey, Bruno S. (1994). Direct democracy: Politico-economic lessons from Swiss experience. *American Economic Review* 84: 338-342.

Gaines, Brian J., James H. Kuklinski, Paul J. Quirk, Buddy Peyton and Jay Verkuilen (2007). Same facts, different interpretations: Partisan motivation and opinion on Iraq. *The Journal of Politics* 69 (4): 957-974.

Gastil, John, and Robert Richards (2013). Making direct democracy deliberative through random assemblies. *Politics & society* 41 (2): 253-281.

Gerber, Alan, and Donald Green (1999). Misperceptions about perceptual bias. *Annual Review of Political Science* 2 (1): 189-210.

Gerber, Alan S. and Gregory A. Huber (2010). Partisanship, political control, and economic assessments. *American Journal of Political Science* 54 (1): 153-173.

Gerber, Marlène, André Bächtiger, Irena Fiket, Marco Steenbergen, and Jürg Steiner. 2014. Deliberative and non-deliberative persuasion: Mechanisms of opinion formation in EuroPolis. *European Union Politics* 15 (3): 410-429.

Gilens, Martin. 2001. Political ignorance and collective policy preferences. *American Political Science Review* 95 (June): 379-396.

Goodin, Robert E. (2000). Democratic deliberation within. *Philosophy & Public Affairs* 29 (1): 81-109.

Goodin, Robert E. (2008). *Innovating democracy: democratic theory and practice after the deliberative turn*. Oxford: Oxford University Press.

Goodin, Robert E, and John S Dryzek (2006). Deliberative impacts: the macro-political uptake of mini-publics. *Politics & society* 34 (2): 219-244.

Goodin, Robert E. and Simon J. Niemeyer (2003). When does deliberation begin? Internal reflection versus public discussion in deliberative democracy, *Political Studies* 51 (4): 627-649.

Graber, Doris A. 2001. *Processing politics: Learning from television in the Internet age*. Chicago: University of Chicago Press.

Green, Donald P., Bradley Palmquist, and Eric Schickler (2004). *Partisan hearts and minds: Political parties and the social identities of voters*. New York: Yale University Press.

Gruner, Erich and Hans Peter Hertig (1983). *Der Stimmbürger und die neue Politik: Wie reagiert* die Politik auf die Beschleunigung der Zeitgeschichte? Bern: Haupt.

Gundersen, Adolf G. (1995). The environmental promise of democratic deliberation. Madison: University of Wisconsin Press.

Habermas, Jürgen (1991). *Erläuterungen zur Diskursethik*. Vol. 975. Frankfurt: Suhrkamp

Haidt, Jonathan (2012). *The Righteous Mind: Why good people are divided by politics and religion*. New York: Vintage.

Hänggli, Regula (2011). "Flow of Messages - Framing and Opinion Formation in Direct-Democratic Campaigns." PhD thesis, University of Zurich.

Hänggli, Regula, Laurent Bernhard and Hanspeter Kriesi (2012). "Construction of Frames." In *Political Communication in Direct Democratic Campaigns - Enlightening or Manipulating?*, ed. H. Kriesi. Basingstoke: Palgrave Macmillan.

Hänggli, Regula and Hanspeter Kriesi (2010). Political Framing Strategies and their Impact on Media Framing in a Swiss Direct-democratic Campaign. *Political Communication* 27 (2): 141-157.

Hart, P. Sol and Erik C. Nisbet (2011). Boomerang effects in science communication: How motivated reasoning and identity cues amplify opinion polarization about climate mitigation policies. *Communication Research*: 0093650211416646.

Held, David (2006). *Models of democracy*. Cambridge: Polity press.

Hirschman, Albert O. (1989). Having Opinions-One of the Elements of Well-Being? *The American Economic Review* 79 (2): 75-79.

Hirt, Edward R., Frank R. Kardes and Keith D Markman (2004). Activating a mental simulation mind-set through generation of alternatives: Implications for debiasing in related and unrelated domains. *Journal of Experimental Social Psychology* 40 (3): 374-383.

Hobolt, Sara Binzer (2006). Direct democracy and European integration. *Journal of European Public Policy* 13 (1): 153-166.

Hobolt, Sara Binzer (2007). Taking cues on Europe? Voter competence and party endorsements in referendums on European integration. *European Journal of Political Research* 46 (2): 151-182.

Hobolt, Sara Binzer(2009). *Europe in question: Referendums on European integration*. Oxford: Oxford University Press.

Holbrook, Allyson L., Matthew K. Berent, Jon A. Krosnick, Penny S. Visser and David S. Boninger (2005). Attitude importance and the accumulation of attitude-relevant knowledge in memory. *Journal of Personality and Social Psychology* 88 (5): 749.

Hug, Simon and George Tsebelis (2002). Veto players and referendums around the world. *Journal of Theoretical Politics* 14 (4): 465-515.

Jackman, Simon, and Paul M. Sniderman (2006). The Limits of Deliberative Discussion: A Model of Everyday Political Arguments. Journal of Politics 68 (2): 272-283.

Jerit, Jennifer, Jason Barabas, and Toby Bolsen (2006). Citizens, Knowledge, and the Information Environment. American Journal of Political Science 50 (2): 266-282.

Kahneman, Daniel (2011). *Thinking, fast and slow*. London: Allen Lane.

Kahneman, Daniel, and Amos Tversky (1984). Choices, values, and frames. *American psychologist* 39 (4): 341.

Kam, Cindy D. (2005). Who toes the party line? Cues, values, and individual differences. *Political Behavior* 27 (2): 163-182.

Katz, Elihu (1957). The Two-Step Flow of Communication: An Up-To-Date Report on an Hypothesis. *Public Opinion Quarterly* 21 (1): 61-78.

Klahr, S. (2013). "Partisanship in a social Setting." Working paper, Northwestern University.

Kriesi, Hanspeter. 2002. Individual Opinion Formation in a Direct Democratic Campaign. *British Journal of Political Science* 32 (01): 171-185.

Kriesi, Hanspeter (2005). *Direct Democratic Choice: The Swiss experience*. Lanham, MD: Lexington Books.

Kriesi, Hanspeter (ed.) (2012). *Political Communication in Direct Democratic Campaigns - Enlightening or Manipulating?* Basingstoke: Palgrave Macmillan.

Kriesi, Hanspeter, Laurent Bernhard and Regula Hänggli (2009). The politics of campaigning–dimensions of strategic action. In *Politik in der Mediendemokratie*: Springer, 345-365.

Kriesi, Hanspeter and Alexander H. Trechsel (2008). *The Politics of Switzerland: continuity and change in a consensus democracy*. Cambridge: Cambridge University Press.

Krosnick, Jon A. 1990. Government policy and citizen passion: A study of issue publics in contemporary America. *Political Behavior* 12 (1): 59-92.

Kruglanski, Arie W. and Tallie Freund (1983). The freezing and unfreezing of lay-inferences: Effects on impressional primacy, ethnic stereotyping, and numerical anchoring. *Journal of Experimental Social Psychology* 19 (5): 448-468.

Kuklinski, James H, Paul J Quirk, David W Schwieder, and Robert F Rich. 1998. "Just the Facts, Ma'am": Political Facts and Public Opinion. *The Annals of the American Academy of Political and Social Science* 560 (November): 143-154.

Kuklinski, James H., Paul J. Quirk, Jennifer Jerit and Robert F. Rich (2001). The political environment and citizen competence. *American Journal of Political Science*: 410-424.

Kübler, Daniel, Michael Surber, Anna Christmann, and Laurent Bernhard (2012). *Mehr Direkte Demokratie in der Aussenpolitik? - Politikwissenschaftliches Gutachten zuhanden von economiesuisse anlässlich der Abstimmung über die Volksinitiative „Für die Stärkung der Volksrechte in der Aussenpolitik (Staatsverträge vors Volk)"*. Aarau: Zentrum für Demokratie Aarau (zda).

Kühne, Rinaldo and Christian Schemer (2015). The emotional effects of news frames on information processing and opinion formation. *Communication Research* 42 (3): 387-407.

Kühne, Rinaldo, Christian Schemer, Jörg Matthes and Werner Wirth (2011). Affective priming in political campaigns: How campaign-induced emotions prime political opinions. *International Journal of Public Opinion Research* 23 (4): 485-507.

Kuklinski, James H (2002). *Thinking about political psychology*. New York: Cambridge University Press.

Kuklinski, James H., Paul J. Quirk, Jennifer Jerit, and Robert F. Rich (2001). The political environment and citizen competence. *American Journal of Political Science:* 410-424.

Kunda, Ziva (1990). The case for motivated reasoning. *Psychological Bulletin* 108 (3): 480-498.

Kunda, Ziva (1999). *Social Cognition: Making sense of people*. Cambridge, MA: MIT Press.

Lanz, Simon and Alessandro Nai (2015). Vote as you Think: Determinants of Consistent Decision Making in Direct Democracy. *Swiss Political Science Review* 21 (1): 119-139.

Lau, Richard R. (2003). "Models of decision-making." In *Oxford Handbook of Political Psychology*, eds. David O. Sears, Robert Jervis and Leonie Huddy. Oxford: Oxford University Press.

Lau, R.R., and C. Heldman. (2009). Self Interest, Symbolic Attitudes, and Support for Public Policy: A Multilevel Analysis. *Political Psychology* 30 (4): 513-537.

Lau, Richard R. and David P. Redlawsk (2001). Advantages and disadvantages of cognitive heuristics in political decision making. *American Journal of Political Science* 45 (4): 951-971.

Lau, Richard R. and David P. Redlawsk (2006). *How Voters Decide: Information processing in election campaigns*. New York: Cambridge University Press.

Lau, Richard R., David J. Andersen, and David P. Redlawsk (2008). An exploration of correct voting in recent US presidential elections. *American Journal of Political Science* 52 (2): 395-411.

Lavine, Howard G., Christopher D. Johnston and Marco R. Steenbergen (2012). *The Ambivalent Partisan: How critical loyalty promotes democracy*. Oxford: Oxford University Press.

Leeper, Thomas J. and Rune Slothuus (2014). Political Parties, Motivated Reasoning, and Public Opinion Formation. *Political Psychology* 35: 129-156.

Lebo, Matthew J. and Daniel Cassino (2007). The aggregated consequences of motivated reasoning and the dynamics of partisan presidential approval. *Political Psychology* 28 (6): 719-746.

Leeper, Thomas J. and Rune Slothuus (2014). Political parties, motivated reasoning, and public opinion formation. *Political Psychology* 35 (S1): 129-156.

Lerner, Jennifer S. and Philip E. Tetlock (1999). Accounting for the effects of accountability. *Psychological Bulletin* 125 (2): 255.

Levendusky, Matthew S. (2010). Clearer cues, more consistent voters: A benefit of elite polarization. *Political Behavior* 32 (1): 111-131.

Lilienfeld, Scott O., Rachel Ammirati and Kristin Landfield (2009). Giving debiasing away: Can psychological research on correcting cognitive errors promote human welfare? *Perspectives on Psychological Science* 4 (4): 390-398.

Lindeman, Martin (2002). "Opinion quality and policy preferences in deliberative research." In *Research in Micropolitics: Political decisionmaking, deliberation and participation*, eds. M.X. Delli Carpini, L. Huddy and R.Y. Shapiro. Greenwich, CT: JAI Press. 199-221.

Lodge, Milton and Ruth Hamill (1986). A partisan schema for political information processing. *American Political Science Review* 80 (02): 505-519.

Lodge, Milton and Charles S. Taber (2013). *The Rationalizing Voter*. New York: Cambridge University Press.

Lord, Charles G., Mark R. Lepper and Elizabeth Preston (1984). Considering the opposite: a corrective strategy for social judgment. *Journal of Personality and Social Psychology* 47 (6): 1231.

Lord, Charles G., Lee Ross and Mark R. Lepper (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology* 37 (11): 2098.

Lupia, Arthur (1994). Shortcuts versus encyclopedias: Information and voting behavior in California insurance reform elections. *American Political Science Review*: 63-76.

Lupia, Arthur. 2006. How elitism undermines the study of voter competence. *Critical Review* 18 (1-3): 217-232.130

Lupia, Arthur and John G. Matsusaka (2004). Direct Democracy: New Approaches to Old Questions. *Annual Review of Political Science* 7 (1): 463-482.

Lupia, Arthur, Mathew McCubbins and Samuel Popkin (eds) (2000a). *Elements of Reason: Cognition, choice, and the bounds of rationality*. New York: Cambridge University Press.

Lupia, Arthur, Matthew McCubbins and Samuel Popkin (2000b). "Beyond rationality: Reason and the study of politics." In *Elements of reason: Cognition, choice, and the bounds of rationality*, eds. Arthur Lupia, Matthew McCubbins and Samuel Popkin. Cambridge: Cambridge University Press, 1-20.

Luskin, Robert C. (2002). "From denial to extenuation (and finally beyond): Political sophistication and citizen performance." In *Thinking about political psychology*, ed. James H Kuklinski. New York: Cambridge University Press. 281-301.

Luskin, Robert C., James S. Fishkin and Roger Jowell (2002). Considered opinions: Deliberative polling in Britain. *British Journal of Political Science* 32 (3): 455-487.

Macpherson, Crawford Brough (1977). *The life and times of liberal democracy*. Oxford: Oxford University Press

Magleby, D.B. (1984). *Direct Legislation: Voting on Ballot Propositions in the United States*. Baltimore, MD: Johns Hopkins University Press.

Mansbridge, Jane (1999). "Everyday talk in the deliberative system." In *Deliberative politics: Essays on democracy and disagreement*, ed. S. Macedo. New York: Oxford University Press. 211-39.

Mansbridge, Jane (1999). "On the idea that participation makes better citizens." In *Citizen competence and democratic institutions*, eds. S.L. Elkin and E.S. Karol. University Park: The Pennsylvania State University Press. 291-325.

Mansbridge, Jane, James Bohman, Simone Chambers, David Estlund, Aandreas Føllesdal, Archon Fung, Cristina Lafont, Bernard Manin, and José L. Marti (2010). The Place of Self - Interest and the Role of Power in Deliberative Democracy. *Journal of Political Philosophy* 18 (1): 64-100.

Marcus, George E. (2003). "The psychology of emotion and politics." In *Oxford handbook of political psychology*, eds. D.O. Sears, L. Huddy and R. Jervis. New York: Oxford University Press. 182-221.

Marcus, George E, W Russell Neuman, and Michael MacKuen (2000). *Affective intelligence and political judgment*. University of Chicago Press.

Marxer, Wilfried and Zoltán Tibor Pállinger (2007). System contexts and system effects of direct democracy-direct democracy in Liechtenstein and Switzerland compared. In *Direct Democracy in Europe - Developments and Prospects*, eds. Zoltan Tibor Pallinger, Bruno Kaufmann, Wilfried Marxer and Theo Schiller. Wiesbaden: VS Verlag für Sozialwissenschaften.

Matsusaka, John G. (2004). *For the Many or the Few: The initiative, public policy, and American democracy*. Chicago: University of Chicago Press.

Matsusaka, John G. (2005). Direct democracy works. *Journal of Economic Perspectives*: 185-206.

Matthes, J., K. Rios Morrison and C. Schemer (2010). A Spiral of Silence for Some: Attitude Certainty and the Expression of Political Minority Opinions. *Communication Research* 37 (6): 774-800.

Meffert, Michael F., Sungeun Chung, Amber J. Joiner, Leah Waks and Jennifer Garst (2006). The effects of negativity and motivated information processing during a political campaign. *Journal of Communication* 56 (1): 27-51.

Mendelberg, Tali (2002). The deliberative citizen: Theory and evidence. *Political Decision Making, Deliberation and Participation* 6 (1): 151-193.

Mendelsohn, Matthew, and Fred Cutler. 2000. The Effect of Referendums on Democratic Citizens: Information, Politicization, Efficacy and Tolerance. *British Journal of Political Science* 30 (04): 669-698.

Mendelsohn, Matthew and Andrew Parkin (2001). *Referendum Democracy: Citizens, elites and deliberation in referendum campaigns*. New York: Palgrave Macmillan.

Milewicz, Karolina, and Robert E Goodin. 2012. "Deliberative Capacity Building through International Organizations." In *APSA 2012 Annual Meeting Paper*.

Milic, Thomas (2009). "Von der Parteilichkeit der Argumente." Presented at the Jahreskongress der Schweizerischen Vereinigung für Politische Wissenschaft, St. Gallen.

Milic, Thomas (2012). Correct Voting in Direct Legislation. *Swiss Political Science Review* 18 (4): 399-427.

Milic, Thomas, Bianca Rousselot and Adrian Vatter (2014). *Handbuch der Abstimmungsforschung*. Zurich: Neue Zürcher Zeitung NZZ Libro.

Mill, John Stuart (1910). *Utilitarianism, Liberty, Representative Government*. of London. JM Dent & Sons Ltd.

Miller, Arthur G, John W McHoskey, Cynthia M Bane, and Timothy G Dowd (1993). The attitude polarization phenomenon: Role of response measure, attitude extremity, and behavioral consequences of reported attitude change. *Journal of Personality and Social Psychology* 64 (4): 561.

Minozzi, William, Michael A. Neblo and David A. Siegel (2010). *Annual Meeting of the Midwest Political Science Association,* Chicago, Il.

Mondak, Jeffery J. (2000). Reconsidering the Measurement of Political Knowledge. *Political Analysis*: 57-82.

Mussweiler, Thomas, Fritz Strack and Tim Pfeiffer (2000). Overcoming the inevitable anchoring effect: Considering the opposite compensates for selective accessibility. *Personality and Social Psychology Bulletin* 26 (9): 1142-1150.

Mutz, Diana C. (2006). *Hearing the Other Side*. New York: Cambridge University Press.

Mutz, Diana C. (2007). "Political psychology and choice." In *The Oxford Handbook of Political Behavior*, eds. Dalton Russell J. and Hans-Dieter Klingeman. New York: Oxford University Press. 80-99.

Nai, Alessandro (2010). Processus cognitifs et formation de l'opinion dans les votations fédérales (1999-2005): une analyse multiniveaux. Thèse de doctorat Université de Genève.

Nai, Alessandro. 2013. What really matters is which camp goes dirty: Differential effects of negative campaigning on turnout during Swiss federal ballots. *European Journal of Political Research* 52 (1): 44-70.

Nai, Alessandro (2015). The Maze and the Mirror: Voting Correctly in Direct Democracy. *Social Science Quarterly* 96 (2): 465-486.

Neblo, Michael A. 2007. Change for the better? Linking the mechanisms of deliberative opinion change to normative theory. *Common voices: The problems and promise of a deliberative democracy*.

Neblo, Michael, David Siegel, and William Minozzi. 2012. "A Theory of Deliberation as Interactive Reasoning." In APSA 2012 Annual Meeting Paper.

Neidhardt, Friedhelm (1994). *Öffentlichkeit, öffentliche Meinung, soziale Bewegungen*. Wiesbaden: VS Verlag für Sozialwissenschaften

Neidhart, Leonhard (1970). Plebiszit und pluralitäre Demokratie: eine Analyse der Funktion des schweizerischen Gesetzesreferendums. Vol. 5. Bern: Francke.

Neijens, Peter and Claes de Vreese (2009). Helping Citizens Decide in Referendums: The Moderating Effect of Political Sophistication on the Use of the Information and Choice Questionnaire as a Decision Aid. *Public Opinion Quarterly* 73 (3): 521-536.

Niemeyer, Simon (2011). The emancipatory effect of deliberation: empirical lessons from mini-publics. *Politics & Society* 39 (1): 103-140.

Nisbett, Richard E, and Lee Ross (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall

Page, Benjamin, and Robert Y Shapiro (1993). "The rational public and democracy." In *Reconsidering the democratic public*, eds. George E Marcus and Russel L. Hanson: Pennsylvania State University Press. 35-64.

Papadopoulos, Yannis (2001). How does direct democracy matter? The impact of referendum votes on politics and policy-making. *West European Politics* 24 (2): 35-58.

Pateman, Carole (1970). *Participation and democratic theory.* Cambridge: Cambridge University Press.

Pateman, Carole (1985). "The Problem of Political Obligation." In. Cambridge: Polity Press.

Pateman, Carole (2012). Participatory Democracy Revisited. *Perspectives on Politics* 10 (01): 7-19.

Pedrini, Seraina. 2014. Deliberative capacity in the political and civic sphere. *Swiss Political Science Review*.

Petersen, Michael Bang, Martin Skov, Søren Serritzlew and Thomas Ramsøy (2013). Motivated reasoning and political parties: Evidence for increased processing in the face of party cues. *Political Behavior* 35 (4): 831-854.

Petty, Richard E. and Pablo Briñol (2011). "The elaboration likelihood model." In *Handbook of theories of social psychology: Volume one*, eds. P.A.M. Van Lange, A.W. Kruglanski and Tory E. Higgins. London: Sage. 224-245.

Petty, Richard E. and John T. Cacioppo (1986). The elaboration likelihood model of persuasion. *Advances in experimental social psychology* 19 (1): 123-205.

Petty, Richard E and Jon A. Krosnick (1995). *Attitude Strength: Antecedents and consequences*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Petty, Richard E., and Duane T. Wegener (1999). "The elaboration likelihood model: Current status and controversies." In *Dual-process theories in social psychology*, eds. Shelly Chaiken and Yaacov Trope. New York: Guilford Press.

Polletta, Francesca, and John Lee (2006). Is telling stories good for democracy? Rhetoric in public deliberation after 9/11. *American Sociological Review* 71 (5): 699-721.

Popkin, Samuel L. (1991). *The Reasoning Voter: Communication and persuasion in presidential campaigns*. Chicago: University of Chicago Press.

Price, Vincent, and John Zaller. 1993. Who gets the news? Alternative measures of news reception and their implications for research. *Public Opinion Quarterly* 57 (2): 133-164.

Prior, Markus. 2007. *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. New York: Cambridge University Press.

Qvortrup, Matt (2014). *Referendums Around the World: the continued growth of direct democracy*. Palgrave Macmillan.

Rahn, Wendy M. (1993). The role of partisan stereotypes in information processing about political candidates. *American Journal of Political Science*: 472-496.

Ramirez, Mark D. and Nathan Erickson (2014). Partisan Bias and Information Discounting in Economic Judgments. *Political Psychology* 35 (3): 401-415.

Redlawsk, D.P. (2002). Hot cognition or cool consideration? Testing the effects of motivated reasoning on political decision making. *The Journal of Politics* 64 (04): 1021-1044.

Redlawsk, David P. and Richard R. Lau (2005). "Toward a procedurally plausible model of the vote choice: decision strategies, information processing, and correct voting." In *Annual Meeting of the Midwest Political Science Association*. Chicago (IL).

Ross, Lee, Mark R Lepper, and Michael Hubbard (1975). Perseverance in self-perception and social perception: biased attributional processes in the debriefing paradigm. *Journal of Personality and Social Psychology* 32 (5): 880.

Rousseau, Jean-Jacques (1766). *Contrat social: ou principles du droit politique*. Marc-Michel Bousquet.

Rühli, Lukas and Tibère Adler (2015). *Die Volksinitiative*. Zurich: Avenir Suisse.

Sager, Fritz and Adrian Vatter (2013). Debatte um das Ständemehr - Föderalismus contra Demokratie. *Neue Zürcher Zeitung*. 06.03.2013.

Sanders, Lynn M. 1997. Against deliberation. *Political theory*: 347-376.

Sartori, Giovanni (1987). *The Theory of Democracy Revisited*. Chatham, N.J.: Chatham House Publishers.

Saward, Michael (1998). *The terms of democracy*. Cambridge: Polity Press.

Saward, Michael (2001). Making democratic connections: Political equality, deliberation and direct democracy. *Acta Politica* 36 (4): 361-379.

Schattschneider, Elmer E. (1975). *The Semi-Sovereign People: A Realist\'s View of Democracy in America*. Hinsdale, IL: Dryden Press.

Schemer, Christian, Werner Wirth and Jörg Matthes (2010). Kognitive und affektive Einflüsse auf Einstellungen in direktdemokratischen Kampagnen. *Information–Wahrnehmung–Emotion*: Springer, 277-289.

Schiller, Theo (2007). "Direct Democracy and Theories of Participatory Democracy—some observations." In *Direct Democracy in Europe,* eds. Zoltan Tibor Pallinger, Bruno Kaufmann, Wilfried Marxer and Theo Schiller. Wiesbaden: VS Verlag für Sozialwissenschaften. 52-63.

Schiller, Theo. 2011. "Local Direct Democracy in Europe–a comparative overview." In *Local Direct Democracy in Europe*, ed. Theo Schiller. Wiesbaden: VS Verlag für Sozialwissenschaften. 9-29.

Schumpeter, Joseph A. (1943). "Capitalism in the postwar world." In Postwar Economic Problems, ed. S.E. Harris. New York: McGraw-Hill. 113-126.

Schumpeter, Joseph A. (1950). *Capitalism, Socialism and Democracy*. New York: Harper & Row.

Sciarini, Pascal and Anke Tresch (2011). Campaign Effects in Direct-Democratic Votes in Switzerland. *Journal of Elections, Public Opinion & Parties* 21 (3): 333-357.

Sciarini, Pascal, Alessandro Nai, and Anke Tresch. 2014. Analyse de la votation fédérale du 9 février 2014. *Bern/Genève: gfs. bern et Université de Genève*.

Serdült, Uwe (2014). Referendums in Switzerland. In *Referendums around the World: The Continued Growth of Direct Democracy*, ed. Matt Qvortrup. London: Palgrave Macmillan, 65-121.

Setälä, Maja and Theo Schiller (eds) (2009). *Referendums and Representative Democracy: responsiveness, accountability and deliberation*. London: Routledge.

Shaker, Lee. 2012. Local Political Knowledge and Assessments of Citizen Competence. Public Opinion Quarterly.

Shermer, Michael (2002). *Why people believe weird things: Pseudoscience, superstition, and other confusions of our time*. New York: Henry Holt and Company LLC.

Simon, Herbert A. (1957). *Models of man; social and rational*. Oxford: Wiley.

Slothuus, Rune and Claes H. de Vreese (2010). Political parties, motivated reasoning, and issue framing effects. *The Journal of Politics* 72 (3): 630-645.

Smets, Kaat, and Pierangelo Isernia. 2014. The role of deliberation in attitude change: An empirical assessment of three theoretical mechanisms. *European Union Politics* 15 (3): 311-327.

Smith, Daniel A., and Caroline J. Tolbert (2010). Direct Democracy, Public Opinion, and Candidate Choice. *Public Opinion Quarterly* 74 (1): 85-108.

Smith, Graham (2009). *Democratic Innovations: Designing Institutions for Citizen Participation-Theories of Institutional Design*. Cambridge: Cambridge University Press.

Sniderman, P.M., and M.S. Levendusky (2007). "An institutional theory of political choice." In *The Oxford Handbook of Political Behavior*, eds. Russel J. Dalton and Hans-Dietrich Klingemann. Oxford: Oxford University Press. 437-456.

Sniderman, Paul M. and Sean M. Theriault (2004). "The structure of political argument and the logic of issue framing." In *Studies in public opinion: Attitudes, nonattitudes, measurement error, and change*. Princeton: Princeton University Press, 133-65.

Sniderman, Paul M., Richard A. Brody and Phillip E. Tetlock (1993). *Reasoning and Choice: Explorations in political psychology*. Cambridge: Cambridge University Press.

Somin, Ilya. 2004. When Ignorance Isn't Bliss. *Policy Analysis* 525.

Stadelmann-Steffen, Isabelle, and Adrian Vatter. 2012. Does satisfaction with democracy really increase happiness? Direct democracy and individual satisfaction in Switzerland. *Political Behavior* 34 (3): 535-559.

Steiner, Jürg. 2012. *The foundations of deliberative democracy: Empirical research and normative implications*. Cambridge: Cambridge University Press.

Steiner, Jürg, André Bächtiger, Markus Spörndli, and Marco R. Steenbergen (2004). *Deliberative politics in action: analyzing parliamentary discourse*. Edited by Robert E. Goodin of *Theories of institutional design*. Cambridge: Cambridge University Press.

Stimson, James A. (2004). *Tides of consent: How opinion movements shape American politics*. Cambridge: Cambridge University Press.

Stokes, Susan (1998). "Pathologies of deliberation." In *Deliberative democracy*, ed. John Elster. Cambridge: Cambridge University Press. 123-139.

Suedfeld, Peter and Philip Tetlock (1977). Integrative complexity of communications in international crises. *Journal of Conflict Resolution* 21 (1): 169-184.

Suedfeld, Peter, Philip E. Tetlock and Siegfried Streufert (1992). "Conceptual / Integrative Complexity." In *Motivation and Personality: Handbook of thematic content analysis*, ed. Charles P. Smith. New York: Cambridge University Press.

Sunstein, Cass R. (2009). *Republic. com 2.0*. Princeton University Press.

Taber, Charles S, Damon Cann and Simona Kucsova (2009). The motivated processing of political arguments. *Political Behavior* 31 (2): 137-155.

Taber, Charles S. and Milton Lodge (2006). Motivated skepticism in the evaluation of political beliefs. *American Journal of Political Science* 50 (3): 755-769.

Tadmor, Carmit T. and Philip E. Tetlock (2009). Biculturalism: A Model of the Effects of Second-Culture Exposure on Acculturation and Integrative Complexity. *Journal of Cross-Cultural Psychology* 37 (2): 173-190.

Tetlock, Philip E. (1983). Accountability and complexity of thought. *Journal of Personality and Social Psychology* 45 (1): 74.

Thompson, Dennis F. (2008). Deliberative democratic theory and empirical political science. *Annual Review of Political Science* 11: 497-520.

Tierney, Stephen (2012). *Constitutional Referendums: The theory and practice of republican deliberation*. Oxford: Oxford University Press.

Tolbert, Caroline J., Daniel C. Bowen, and Todd Donovan (2009). Initiative Campaigns: Direct Democracy and Voter Mobilization. *American Politics Research* 37: 155-192.

Trechsel, Alexander H. (2006). Popular votes. In *Handbook of Swiss Politics*, ed. Ulrich Klöti. Zurich: Neue Zürcher Zeitung Publishing.

Trechsel, Alexander H. and Pascal Sciarini (1998). Direct democracy in Switzerland: Do elites matter? *European Journal of Political Research* 33 (1): 99-124.

Tversky, Amos and Daniel Kahneman (1974). Judgment under uncertainty: Heuristics and biases. *Science* 187 (4157).

Van der Eijk, Cees, Wouter Van der Brug, Martin Kroh and Mark Franklin (2006). Rethinking the dependent variable in voting behavior: On the measurement and analysis of electoral utilities. *Electoral Studies* 25 (3): 424-447.

Vatter, Adrian (2009). Lijphart expanded: three dimensions of democracy in advanced OECD countries? *European Political Science Review* 1 (01): 125-154.

Westen, Drew, Pavel S Blagov, Keith Harenski, Clint Kilts, and Stephan Hamann (2006). Neural bases of motivated reasoning: An fMRI study of emotional constraints on partisan political judgment in the 2004 US presidential election. *Journal of cognitive* neuroscience 18 (11): 1947-1958.

Young, Iris M. 2000. *Inclusion and democracy*. Vol. 18. Oxford: Oxford University Press.

Zajonc, Robert B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist* 35 (2): 151.

Zaller, John (1992). *The nature and origins of mass opinion*. New York: Cambridge University Press.

Zittel, Thomas (2007). *Participatory democracy and political participation: can participatory engineering bring citizens back in?*, eds. Dieter Fuchs and Thomas Zittel. Abingdon, Oxon: Routledge.

Zittel, Thomas and Dieter Fuchs (2007). Introduction: democratic reform and political participation. In *Participatory Democracy and Political Participation: can participatory engineering bring citizens back in?*, eds. Zittel and Fuchs. Abingdon: Routledge.