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Veröffentlichungsversion / Published Version

Sammelwerksbeitrag / collection article

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:

Verlag Barbara Budrich

Empfohlene Zitierung / Suggested Citation:

Reiber, L. (2019). Opening the Black Box of Deliberation: What are Arguments (Really) Based On? A theory-driven and exploratory analysis of the role of knowledge in the process of deliberation. In K. Zimmermann, & J.-O. Heuer (Eds.), *"Fördern und Fordern" im Diskurs: Einstellungen in der Bevölkerung zu Hartz IV und aktivierender Arbeitsmarktpolitik* (pp. 149-168). Opladen: Verlag Barbara Budrich. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-69861-0>

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Opening the Black Box of Deliberation: What are Arguments (Really) Based On?

A theory-driven and exploratory analysis of the role of knowledge in the process of deliberation

von Lisa Reiber

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How much knowledge do you need to form opinions and talk about them? Located within a broader body of work on the relation between knowledge and attitude formation, this research explores the role of knowledge in the process of deliberation by taking an in-depth look at a real-world deliberation exercise on social welfare in Germany. Deliberative theory is based on the assumption that while deliberating, informed citizens weigh information in order to form 'ideal' opinions. Yet, empirical findings suggest rather low levels of political knowledge among the population. Taking a real-world case of deliberation on social welfare in Germany, this article has two goals: first, it draws on data collected on the level of knowledge regarding the German welfare system to get an initial insight into the distribution of political knowledge, which has been scarce to non-existent to date. Second, it applies a qualitative content analysis to explore the kind of information people in real-world deliberation exercises use as the basis for their arguments and ends with a discussion of the role of knowledge in group attitude-formation processes. While the results confirm previous findings on relatively low levels of political knowledge among the participants, this study raises three further issues that are relevant for understanding the role of knowledge in transferring theoretical deliberative norms and ideals to reality. These issues, which relate to the weighing of arguments, the handling of false or missing information, and the issue of procedural knowledge, are highlighted, and implications for further research and possible procedures for the transfer of normative deliberative goals to real-world deliberations are outlined.

abstract

Keywords

deliberation; subjective knowledge; factual knowledge; information, arguments

Introduction

We all hold opinions on a wide range of topics and have differing amounts of knowledge about them. If someone asked you about your opinion on the German welfare state, what would you base your opinion on and how would you communicate your views during a debate in order to persuade others? How much knowledge do you need to form opinions and talk about them? Research regarding the public's political knowledge suggests that people generally might not have access to a lot of knowledge to base their opinions on. While some individuals possess a lot of knowledge on some topics, knowledge levels in the population seem to be rather low in general and in relation to political issues particularly.

One strand of research that theorizes about how people discuss and come to conclusions is deliberative theory. From this theoretical perspective there are specific conditions for successful deliberations, such as a knowledgeable, informed citizenry and a rational exchange of arguments. Theories suggest that participants form a sort of group consensus by exchanging arguments, evaluating them and possibly altering their opinions in the process. Based on propositions regarding the role of knowledge within deliberative theory and findings on the real-world distribution of political knowledge within the population, one might

ask: what knowledge do people draw on to discuss political issues within deliberative settings, given that they are not fully informed? Do people know and talk about objective facts on the wealth distribution in Germany when discussing opinions on the German welfare state or do they base their arguments on subjective experiences?

Research regarding knowledge and deliberation has so far focused largely on the effects that deliberative settings have on individuals' political knowledge and the circumstances under which knowledge can be increased, but there is surprisingly little research focusing on the role of knowledge in actual deliberation (cf. Ryfe 2005) or the micro-mechanisms by which it operates (cf. Smets et al. 2014). Often, while participants' knowledge levels can be evaluated with quantitative methods from questionnaires, the deliberation process itself is a black box. Many studies look at the effects of deliberation on opinion by analysing pre- and post-surveys, yet they do not actually look at the content of what is being said (see Bucy et al. 2014; e.g. Smets et al. 2014; Gastil et al. 1999; Fishkin et al. 1999; Jacobs et al. 2009; Sturgis et al. 2005; Morrell 2005). Even though these studies find changes in attitudes or knowledge levels, the specific mechanisms leading to the change of attitude or increase in knowledge remain unclear. Regarding the process of deliberation, one could ask whether the debates were in fact rational and what kind

of knowledge the arguments were based on. The question of which information was utilized in the discussions and what was ignored or left out is also a relevant one. Especially when seeking to understand the process of attitude formation, it may be relevant to look at the actual discussion instead of pre- and post-evaluations.

Within the broader literature on the relation between knowledge and attitude formation, this paper therefore opens the black box of deliberation and goes beyond the established survey methods to measure political knowledge with a qualitative content analysis of an actual debate. Empirically, the paper draws on discussion data gathered in the context of a Deliberative Forum (DF), as explained in greater detail in the introduction to this volume (see Heuer et al). It aims to explore the role of knowledge within real life deliberations by gaining an insight into the participant's level of political knowledge regarding the welfare state as well as by assessing the different kinds of knowledge that participants base their arguments on. In a broader sense, this research is motivated by the desire to learn about how theoretical conceptualizations and ideal notions of deliberation are applied in real life in order to improve the transition from theory to practice.

The remaining article is structured as follows: the next section focuses on the theoretical level and outlines the ideal

assumptions of deliberative theory regarding the role of knowledge in deliberations. Then, I shift the focus to the real-world application of deliberation and empirical findings in this regard. In the final step, I bring together and discuss the theoretical ideals against the backdrop of real-world application regarding the role of knowledge in the process of deliberation. The findings highlight three main issues that play a role in transitioning from deliberative theory to practice, namely the weighing of information, the handling of false or missing information, and the issue of procedural knowledge in the attitude formation process. In the conclusion, I introduce the concept of procedural knowledge and map out possibilities for improving real-life uses of deliberation.

Theoretical Assumptions: Deliberation and Knowledge

Although the use of the term deliberation has become widespread, there is no coherent, conceptual definition of it (cf. Abelson et al. 2003; Burkhalter et al. 2002; Macedo 1999; Niemeyer et al. 2007). As André Bächtiger (cf. 2010: 35) puts it: 'beyond the bedrock agreement that democratic process should involve communication about, rather than merely aggregation of (fixed), preferences, there is not much consensus about how deliberation is best conceptualized.' The main idea that has

been promoted by deliberation theorists such as Joshua Cohen (1998), Jürgen Habermas (1984), John Dryzek (2000), James Fishkin (1991), and others is that within certain deliberative settings, groups are able to make 'better' decisions regarding societal problems. John Hibbing and Elizabeth Theiss-Morse (2002) state that deliberation should lead to 'better citizens', 'better decisions', and a 'better system'.

With respect to attitude formation, deliberation can be seen as a process by which minds can be changed provided that individuals come into this setting with both a willingness and the means to communicate, advocate, and ultimately to become persuaded along with and by others (cf. McCubbins et al. 2006: 14). What conditions enable productive deliberation? And what is necessary for people to be able to deliberate? In theoretical terms, James Fishkin (2005) suggests the following criteria based on the idea that deliberation is mostly rooted in the 'weighing' of arguments in a discussion: the arguments need to be 'informative' as well as 'balanced' such that discussions include contrary arguments; they should also be 'substantive', meaning that arguments are considered on their own and not based on who made them. The participants in deliberations are supposed to be 'conscientious', willing to talk and listen with civility and respect, and the deliberation itself should be 'comprehensive' and reflect all points of view held by significant proportions of the

population (cf. Fishkin et al. 2005: 2). This normative concept of deliberation entails assumptions that do not hold true in so-called 'real-world' deliberations, which is why a discussion has emerged around the question of which circumstances enable the achievement of the normatively described outcomes of deliberation (cf. Risse 2000; Bächtiger et al. 2010; Sachweh et al. 2006; Esterling et al. 2011; Thompson 2008; Ulbert et al. 2005).

What does the literature say regarding the role that knowledge plays within deliberation and the mechanisms underpinning it? First of all, normative deliberative theory postulates that deliberation takes place as a reasoned process, in which arguments are often backed up by objective facts, which in turn can stem from the participants' knowledge. Here, the role of knowledge is to serve as the basis for arguments and to give them more weight in order to convince others. As participants exchange information, this increases their knowledge, because they listen to the information and perspectives of others and take them in. 'This occurs because deliberation requires that individuals transcend private concerns and that they engage with competing views, taking them into account as part of their evaluations' (cf. Niemeyer et al. 2007: 500). Concerning the change in attitude, Thomas and Keith Pool (1987) point out that individuals' information affects their confidence in their beliefs, playing a role in the activation of values.

Deliberative theory envisions that deliberation will enable citizens to develop more informed or reflective preferences than would otherwise be the case. Several empirical research projects have found that deliberation increases knowledge (see e.g. Min 2007: 1371; Fishkin et al. 2005; Gastil et al. 1999) and leads to opinion change on political topics, because it can enable participants to deeply engage with political topics, share information, and weigh alternatives. Findings show a clear positive association between deliberation and citizens' political knowledge (Gastil and Dillard 1999). While it seems intuitive that deliberation will result in increased knowledge and attitude change and this has also been shown empirically, it is worth examining in detail the process of how deliberation affects political knowledge.

Real-world Implications: Political Knowledge and its Distribution

How can we conceptualize knowledge? Michael Delli Carpini and Scott Keeter (cf. 1996: 10) offer a rather broad definition of political knowledge as 'the range of factual information about politics that is stored in long-term memory'. Thus, information is the key term that differentiates knowledge from other belief systems, such as attitudes, values, or opinions. This type of knowledge—i.e. knowledge that an individual actually has—is defined as objective

political knowledge. In addition to that, there is subjective political knowledge, which refers to information that an individual believes he or she possesses. This distinction is especially important in the context of deliberation. While objective and subjective knowledge overlap with regard to objective facts, it is harder to assess whether claims based on an individuals' perception of reality accurately depict the real world (cf. Maier et al. 2009: 143). Political knowledge can be distinguished in terms of its breadth and depth. Breadth refers to knowledge in different areas and depth refers to knowledge in individual areas. Research has found that the greater the amount of (objective) political knowledge an individual has, the more new political knowledge is gained through media consumption or election campaigns (cf. Oberle 2012: 20). The concept of political knowledge also includes the normative question of what citizens should know about politics, and although there are multiple answers to this question, it is generally agreed that political knowledge should include stored information about the structures of the political system ('what government is and does' (cf. Barber 1969: 38)), its political institutions (cf. Neuman 1986: 196), and knowledge about current political questions (cf. Berelson et al. 1954: 308).

But what is political knowledge with respect to deliberation on the social welfare state? Hard facts include knowledge on the

different programmes that are part of the social welfare system in Germany and how they emerged and developed. Other important facts may include information on the current economic situation in Germany and the current state of the job market. In order to form a reasoned opinion on the German welfare state, it is necessary to have some knowledge on the distribution of wealth in Germany, for example, on how unequally wealth is distributed in Germany or how many people are living in relative poverty.

Regarding the distribution of political knowledge in a very general sense, research finds that citizens' knowledge falls short of the theoretical ideal (Butler et al. 1974; Campbell et al. 1960; Converse 2006) and most ordinary citizens know and think remarkably little about politics (Carpini et al. 1996). While the majority of these findings come from the United States, and although it has been shown that US citizens on average possess less knowledge than citizens of other western democracies (cf. Almond et al. 1963; Carpini et al. 1996; Dimock et al. 1997; Bennett et al. 1996), studies on other countries also find low levels of overall knowledge (for Denmark see Paldam et al. 2000; for New Zealand see Karp 2006; for Netherlands see Vettehen et al. 2004). While findings show generally low levels of overall knowledge, there are some political facts that are known by almost everyone (e.g. the

recent US president, cf. Carpini et al. 1996: 70–74), but there are also topics where knowledge is almost non-existent—e.g. knowledge about arms control and nuclear weapons (Graham 1988). While there are numerous Anglo-Saxonian academic controversies regarding political knowledge, literature on Germany is still fairly scarce, especially with regards to knowledge about the welfare system (Osterberg-Kaufmann 2019: 4). Jürgen Maier et al. (2009) attribute this to the poor availability of data on citizens' knowledge (with a few valuable exceptions, e.g. the International Social Survey Programme/ISSP). A study by Rüdiger Schmitt-Beck finds that only just about half of Germans knew the number of federal states in Germany (Schmitt-Beck 1993). Studies have also found that Germans have a reasonable breadth of knowledge regarding the existence of political institutions such as NATO or the EU (cf. Rattinger 1994), but relatively limited knowledge of the German election system (cf. Schmitt-Beck 1993).

Since the data and literature regarding political knowledge in Germany is very poor, there is even less information regarding the specific area of knowledge about social welfare availability. There has not been in-depth research regarding specific areas of politics, which is why there are not many findings regarding the research question this paper asks about: namely the level of knowledge regarding social welfare. One

paper gives first insights into the knowledge that 25 to 35 year-olds have of the German public pension system and finds that overall there is good knowledge of the basics and central concepts (cf. Brosig 2016). However, accurate knowledge of individual regulations and other marginal aspects was much less common. The paper also finds that many participants significantly overestimated the level of benefits and the redistribution mechanisms of the pension system and may therefore run the risk of having insufficient social security entitlements in the long term (cf. Brosig 2016). Having established the fact that although knowledge varies across topics, levels in the population seem generally low and that there is not much data regarding knowledge levels in Germany, I will continue to explore how knowledge can be measured and conceptualized.

Exploration: Conceptualizing Knowledge in Deliberation

Research focusing on the knowledge that people rely on in real-world deliberation has outlined the need for a broader conceptualization of knowledge. As mentioned above, research mostly distinguishes between objective and subjective knowledge, with the method of data collection via ‘civic tests’ (Bucy et al. 2014; Thompson et al. 2006). With regard to the role of knowledge in deliberation, there is a need to broaden this

theoretical conceptualization of knowledge to mean something other than a collection of facts. This would make it possible to detect, explore and work with different kinds of knowledge that are not straightforward facts but ‘temporally and spatially situated’ (Thompson et al. 2006). Connected to this, David Ryfe (2006) finds that in the current debate, people do not merely exchange their knowledge via facts, but mostly communicate their knowledge and arguments in the form of stories that make complicated issues amenable to human understanding. In doing so, knowledge is not always stated explicitly, but is also communicated implicitly, with participants relying on their mutual knowledge of the group to connect the implications of their story to the topic of debate. Another source of knowledge that might be found in deliberation is the use of heuristics or information shortcuts. Research from political psychology suggests that in their everyday reasoning, people tend to compensate for their lack of information by relying on heuristics and other cognitive shortcuts (cf. Popkin 1994; Sniderman et al. 1993), which suggests that people might not argue based on direct knowledge but rather state opinions from sources that they trust.

Looking at the existing literature, what level of knowledge regarding the welfare state can be expected and what forms of knowledge will the participants base their arguments on? Since the topic under discussion is very specific and the Hartz

IV benefit we discussed in detail is not an area that a lot of people have spent time reading about, we can expect the level of knowledge not to be high. Regarding the kinds of knowledge, the theoretical deliberative process is envisioned as an exchange of ideas, knowledge, and opinions within a group discussion under special circumstances that leads to normatively 'better' choices on the part of the participants. One would therefore theoretically expect to find participants deliberating based on objective facts and weighing the arguments against each other. On the other hand, real-world findings show low levels of knowledge in the general population and research on real-world deliberations suggests that opinions are often exchanged in the form of 'stories' and that knowledge can also appear in the form of situated knowledge rather than straightforward objective facts.

Procedure and Participants

In order to explore the role of knowledge within deliberative settings, I analysed data collected within a deliberative forum, where people from different social and educational backgrounds were brought together in order to discuss issues regarding the German welfare state. The participants filled out questionnaires before and after the forum and took part in large and small, moderated group discussions

throughout a whole day. For this analysis, I focus on the discussions that centred on the participants' general attitude regarding Germany's Hartz IV benefit, the fairness of the welfare system, and the situation of job centres. No information packs were distributed prior to the forum, meaning that participants' discussions were based on their own political knowledge. During the discussions, participants were allowed and encouraged to raise their own questions. The facilitators were instructed to cover the three mentioned topics, but otherwise to allow the discussion to continue in an unstructured way. The participants themselves decided when to participate and what knowledge they were willing to share in the discussions. Greater details on the methodological approach can be found in the introduction to this volume (cf. Heuer et al.).

Findings: Level of Political Knowledge on Social Welfare

Subjective and objective knowledge in standardized questions

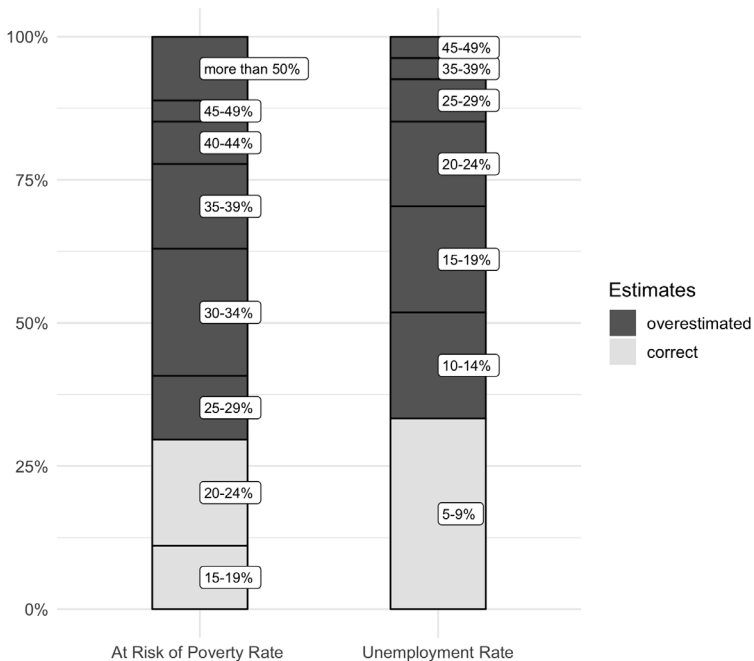
In the first step I looked at the distribution of political knowledge in the 'traditional' sense by evaluating standardized questions that participants answered before the discussions. Regarding subjective knowledge, the participants were asked how well informed they felt they were about the

welfare state in general on a scale ranging from very poorly informed (1) to very well informed (5). They were also asked how well informed they felt regarding the more specific topics of parental leave, pensions, social security, healthcare, and the Hartz IV benefit. The answers provided ranged from very poorly informed to very well informed and on average, the participants reported feeling fairly well informed about the welfare state in general ($\bar{x} = 3.41$, range = 1-5). In contrast, the participants' felt less well informed regarding the specific areas of the welfare state. They felt least informed on the topics of parental leave ($\bar{x} = 2.8$,

range = 1-5) and pensions, followed in increasing order by social security, health care, and Hartz IV ($\bar{x} = 3.3$, range = 1-5; see online-appendix for summary statistics: table 9.2.1 and table 9.2.2).

To assess their objective, factual knowledge, the participants were asked to identify the current unemployment rate in Germany and the proportion of people who are at risk of poverty from a selection of possible answers. The unemployment rate and the relative poverty rate in Germany were at 6% and 20% respectively at the time of the survey. The questions were selected because they

Figure 1: Distribution of Participants' Objective Knowledge Estimates



Source: Own Illustration

test overall knowledge about the topic and are not so specific that an average participant could not be expected to know them.

With regards to the unemployment rate in Germany, the participants' answers ranged from 5% to 45%, which indicates that some participants who were discussing the topic of the welfare state were under the impression that over a third of the population is unemployed. One third of the participants identified a percentage range that included the correct answer, while two thirds overestimated the proportion of unemployed people by at least 5%. While there were no underestimates, participants who overestimated the unemployment rate on average did so by at least 13.6% (SD: 9.4) and assumed an unemployment rate of at least 20.6% in Germany; the actual rate being 6%.

There are similar results when it comes to the participants' estimations of the at risk of poverty rate. Participants' answers ranged from an at risk of poverty rate estimation of 15–19% all the way to more than 50%, with less than one third of the participants identifying the correct rate and more than two thirds overestimating the relative poverty rate by at least 5% (Figure 1). On average, people who overestimated the relative poverty rate did so by at least 15.3% (SD: 8.4) and assumed a relative poverty rate in Germany of at least 37.3%. There is a moderate positive correlation between the

answers given for the unemployment rate and for the relative poverty rate ($r_s = 0.6$, $p = .0009$), meaning that participants who overestimated the relative poverty rate also tended to overestimate the unemployment rate. Looking at the answers to both questions, six participants (22%) gave correct answers in both cases, while the other 21 (77.8%) were incorrect at least once.

Implications I

The results on the levels and distribution of subjective and factual knowledge on the welfare state are in line with empirical findings on the distribution of political knowledge in Germany on other topics. Since the sample is not collected at random and the size is so small, the results cannot be generalized beyond this study, but they do give an insight into the levels of knowledge that the participants in the deliberation I analysed brought with them. The findings on subjective knowledge might indicate that the Hartz IV system is what people mostly associate with the welfare state and that their subjective knowledge on the general topic was mostly just their subjective knowledge on Hartz IV, because this is what came to their mind when they thought about their knowledge of the welfare state in general. It is also plausible that people in general feel less confident or informed when it comes to specific topics compared to more general ones.

Only about one-fifth of the participants were able to identify the correct employment and at risk of poverty rates, which are two pieces of information that can be seen as important if people are to develop a rational, informed opinion about the welfare state in Germany. It seems that the participants felt sufficiently informed on a subjective level, but tended to have a lack of specific, factual information about the target groups who are most relevant when discussing the social welfare system.

On a side note: even though this study's primary goal was not to look at the relationship between knowledge and education, it is noteworthy that while I expected knowledge to be positively correlated with education, this was only the case for objective, factual knowledge; there was no substantial difference regarding subjective knowledge with regards to education (see online-appendix for more details: 9.3.).

I will now turn to the results from the qualitative analysis regarding the different kinds of knowledge that participants based their arguments on. Do we find a discussion including arguments at the societal level—i.e. arguments on the impact of certain policies on poverty rates and changes in the distribution of wealth—or do we find discussions at the particular level, based on subjective knowledge such as personal experiences?

Differentiating Knowledge in Deliberation

Sources of Political Knowledge

Motivated by the theoretical assumption that knowledge in deliberative settings enables the formation of normatively better opinions, and bearing in mind the generally low levels of knowledge in the public, I used a qualitative and exploratory approach in order to look at the role of knowledge in the actual debates. This might expand our understanding of how deliberation and political knowledge interact in the process of attitude formation and provide an understanding of how knowledge can be conceptualized and what kinds of knowledge are used in exchanges of opinion with other people. For the exploratory part of the analysis, the participants' discussions were transcribed and read into MaxQDA for a qualitative content analysis. In this process, I used a coding scheme that was partly deductive and partly inductive and captured the different kinds of knowledge the participants drew on in their arguments. The coding scheme started out with previously described categories of knowledge from theory such as subjective and objective knowledge, further categories that appeared in the data were added until category saturation occurred.

After briefly introducing the different kinds of knowledge that emerged from

the content analysis, I will discuss the implications of these categories in the deliberation with regards to the deliberative goals formulated in theory. In line with the literature, I analysed the participants' arguments and statements of opinion based on the categories of subjective and objective knowledge. In the process, further distinctions between different sources of knowledge emerged within those categories.

A) *Subjective Knowledge*: Most arguments were based on subjective knowledge, which was conveyed in the form of personal experiences or observations. Looking at the discussion, I can further differentiate subjective knowledge into knowledge based on personal experience and knowledge gained from other people's experiences, which I will call hearsay. The following quote is a prime example for hearsay:

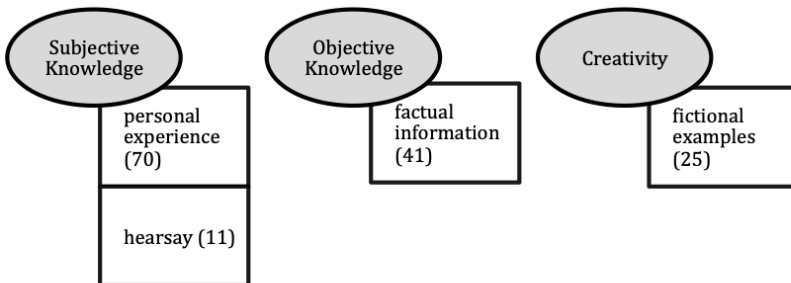
And this trained attendant, who

does this for several people, told me that there are many cases where people are flushed out and kicked out of statistics, so to speak. (EL1: 62)

Hearsay was used in two different ways. On some occasions, it served as a substitute for the participants' own experience. In those instances, participants would mention that they did not have their own experiences with the topic and then substituted information that they had heard from third parties (online-appendix: 9.1.2). In other instances (see above), hearsay was used to lend more credibility to a subjective claim, which is to make it more objective by citing a more experienced or more credible person.

B) *Objective Knowledge*: Normative deliberative theory describes factual information as a necessary deliberative circumstance. Yet, in our deliberation

Figure 2: Overview of Sources of Political Knowledge



Source: Own Illustration

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Normative deliberative theory describes factual information as a necessary deliberative circumstance. Yet, in our deliberation [...] more arguments were based on subjective, rather than on factual knowledge

this was not the case: more arguments were based on subjective, rather than on factual knowledge. The factual knowledge that participants based their arguments on also ranged from very specific information, such as the fact that state transfer payments also cover costs of acquiring a driver's licence (ET1: 37) to very general information such as information on the recent economic growth in Berlin (MIX1: 333). There were also instances where participants claimed factual, objective information that was objectively wrong: 'There are about two million long-term jobless people in Germany' (EL1: 130).

- C) *Creativity*: In addition to subjective and objective knowledge, participants also drew on their stored knowledge and used their creativity to come up with examples that would fit their argument or underline it. Those examples were not specifically based on personal experience or objective facts, but were rather loosely inspired by them and tailored to the situation.

Imagine the following scenario: Somebody works their whole life, when they are 56, [a locksmith] gets laid off and doesn't find a new employment. He falls into the Hartz IV category. And then they [employees at Jobcenter] say: "You're approaching 60, does it even make sense to put you in another training program?" So they basically say no. The people have worked their whole life, have paid taxes their whole life and then they get treated like this. (MIX1: 267)

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The role of knowledge in the process of deliberation

As mentioned before, the weighing of arguments is one of the crucial factors leading to positive outcomes in deliberations. Theory assumes that participants weigh information and then come to a better solution; in this respect, the discussion from this deliberation raises some issues that are relevant to the real-world implications of deliberations. In the qualitative content analysis of the discussion, it became apparent that

participants' ability to weigh arguments in the deliberation was inhibited for multiple reasons, which will be highlighted below.

A) *Generalizability*: In a rational discussion, one would expect people to support arguments with evidence. This means that broad and general claims at the societal level would be based on objective facts, while claims on the individual level would also be based on personal experiences. In the deliberative forum, when asked to discuss their opinion on one aspect of the welfare state in Germany, some participants talked about what is best for society and pitched their arguments at that general, societal level, while others argued based on what is best for them and argued at the specific, individual level. Subjective knowledge was used as a basis for arguments at the individual level, but also for arguments at the societal level, meaning that the information participants provided to support their arguments did not always match the level of generalization that the argument was aiming for.

And at that moment the whole thing is unfair, yes. Well, let's just say a few cases I've had lately: Domestic violence: A woman is in the women's shelter. The whole family situation is unclear. The children are unclear. Her health is under threat, finances

are under threat. Everything is in dissolution somewhere. And the job center demands she submit ten job applications a month. That is extremely unfair. (MIX1: 66)

In this case, the participant argues that the whole system is unfair, but only provides subjective experiences describing individual occurrences of unjust situations; the participant does not offer information about how common those situations are to justify her claim that the system in general is unjust. In the deliberation, no one pointed to this evidence mismatch, which might indicate that people did not notice or process this shortcoming. The fact that participants did not always make valid claims and argued at both the individual and the societal level also means that people did not necessarily debate at the same level or craft linear arguments. On multiple occasions, the participants did not respond to each other, but started talking about their own points of view, bringing in new aspects. This made the weighing of arguments more difficult because it hindered the discussion and examination of some aspects or thoughts. When a discussion turns into a chain of arguments about Hartz IV that do not refer to each other, it is harder to evaluate them and reach a group consensus.

B) *Perspective*: Another aspect that also connects to different levels of generalizability is perspective. The participants in the deliberation did not seem to put the information provided for a specific claim into perspective. This became apparent in two ways. First, there were the creative examples people used, which were highly tailored to the argument but did not necessarily have a lot of weight when put into the perspective of the bigger picture. On the question whether Hartz IV is just or not, one participant stated:

[Hartz IV] is unfair, because some [people] do not want to work. It happens that some simply arrange with it and simply says: (sigh) I do not want to; I do not feel like it. I do not try, even if I write my ten applications [...]. And then the taxpayer, meaning the rest of society that works and practically contributes with their taxes, finance those. And that is unfair. (MIX1: 94)

If looked at from a normative, deliberative perspective, these more or less made-up examples can be disadvantageous because they might influence people by perfectly fitting their argument, while leaving the questions of how often and at what rate this particular situation actually occurs at the societal level unanswered. A second way in which

participants illustrate a lack of perspective in their weighing of arguments is when they provide one positive and one negative example in order to describe a neutral position towards a topic. Again, the weighing process, i.e. the question of which situations are more important or happen more frequently, is not part of the deliberative process:

'Uh, I would situate myself in the middle, because I believe that, so, to assess [Hartz IV] generally, is totally difficult, because there are many aspects in there that are partly fair and partly unjust.' (ET1: 187)

In these instances, the weighing of arguments can be regarded as incomplete. From a deliberative perspective, it is not enough to know that a specific situation exists; it is also necessary to assess how much weight the situation has in relation to the issue under debate (e.g. what is the proportion of fair and unfair aspects of Hartz IV?). This example also raises the question why the participant does not simply weigh the just and unjust aspects known to them. One possibility is that they might need additional information that they do not possess.

C) *No knowledge, no opinion*: In some instances, the participants asked questions and signalled a lack of informa-

tion with regards to certain topics or the overall topic. Most of the time, the participants combined the claim of no knowledge with a claim of a neutral opinion towards the topic.

I would just settle for the 5, completely neutral because, as I said, I have no personal experience and I only know that by hearsay. (ET1: 61)

When participants stated that they did not have an opinion due to a lack of information, they did not specify what information they would need in order to form an opinion. In connection with the points raised above, it seems that participants do not only lack information, but on a more basic level do not always know what information they would need in order to form an opinion.

Implications II: Procedural Knowledge

The findings above highlight some areas where deliberative settings as described in theory seem to be difficult to implement in real-life debates. It was evident that people argue at different levels of generalizability, do not necessarily make arguments linearly and sometimes do not put arguments into perspective. These issues, combined with the handling of missing knowledge, point to one possible conclusion: participants in deliberations lack the procedural knowledge necessary

to weigh information and formulate an informed opinion as portrayed in theory. How can we overcome these obstacles? It may be beneficial in future deliberative forums to pay attention to this possible lack of procedural knowledge. The following suggestions may be useful:

To address generalizability: If a deliberative process aims at finding and discussing societal problems and finding solutions at the societal level, it might help to structure the discussion such that the first step emphasizes individual experiences and opinions and the second step asks participants to think about and discuss how their opinions may change when the emphasis is put on the aggregated, societal level.

Handling missing knowledge: The findings regarding knowledge gaps in connection with neutral opinions raises questions for future deliberations. How can facilitators deal with missing information? If there are questions that come up in a discussion and nobody is able to answer them, it would be helpful in the future to implement a mechanism that enables people to gain this information on the spot and overcome their uncertainty—moreover, information packs should be distributed beforehand. In addition to this procedural problem of information gaps, a second problem relates to knowledge gaps that people might not even be aware of they have. Since the public often lacks factual information on various

problems, future deliberative forums could incorporate opportunities for participants to improve their procedural knowledge on opinion formation by holding a discussion in which participants talk about what information they think is necessary to form an informed, reasoned opinion. In order to improve the participants' abilities to weigh arguments and information, participants could be asked to reflect on and discuss how their opinion would change hypothetically if certain objective facts change (e.g. What difference would it make if the unemployment rate was 50% compared to 10%).

Outlook

Located within the broader literature on the relation between knowledge and attitude formation in group discussions, this article set out to go beyond pre- and post-questions and quantitative analysis and to explore the distribution and the role of knowledge within a deliberative setting. The descriptive analysis revealed mixed levels of factual information among participants, with around a fifth of them able to identify the German unemployment rate and poverty risk rate in Germany and others estimating the poverty risk rate to be as high as 50% or more. As mentioned in the introduction to this volume (Heuer et al), it needs to be noted that the participants in this study were not selected at random, but rather with the goal in mind to capture a heterogeneous

group with regards to gender, age, political preferences and migration background. Therefore, descriptive results should not be generalized to a broader population. They rather serve as informative environment within which the arguments made in the deliberation are looked at.

The qualitative content analysis uncovered the different kinds of knowledge that arguments are based on, which adds to previous research emphasizing that knowledge may not just be subjective or objective but alternatively be multifaceted and context dependent. This study of a real-world discussion with people from Berlin drawing on their everyday knowledge unfolded the many possible deviations from the theoretical concept of deliberation. This was discussed in terms of generalizability, perspective, and knowledge gaps.

The content analysis of the actual discussion also raises questions for further consideration. What patterns of arguments emerge within the course of deliberation? This is relevant regarding the level of generalizability and the found mismatches between consecutive comments in the deliberation. Would participants use more factual information if they were better informed? To distinguish between the role of factual and procedural knowledge, further research could compare the findings of this work to a deliberative discussion with information input, in order to determine what kinds

” It might not just be a lack of factual knowledge that keeps groups from reaching a well-informed, reasoned consensus, but also the absence of procedural knowledge.

of information people rely on in an information-rich environment and establish whether the distribution of the kinds of knowledge utilized in the debate differ from the categories identified in this article. Likewise, research in this direction would gain insights to the question whether people use subjective experiences as a substitute for a lack of objective, generalizable knowledge.

The findings here allow scholars to reflect on the mechanisms at work in the relationship between deliberation and attitude formation. It might not just be a lack of factual knowledge that keeps groups from reaching a well-informed, reasoned consensus, but also the absence of procedural knowledge. We live in a time when Wikipedia is never far; hence, getting factual information will become less relevant in the future. On a more general level, though, we will still need procedural knowledge in order to decide what information to look for and how to evaluate it. Coming back to the beginning of this article, instead of asking how much knowledge people need to form opinions and talk about them, we should ask what kind of knowledge people need as well as analysing how their opinions change when the underlying information changes.

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Der Beitrag wurde von **Tatiana Huppertz** lektoriert.

9. Anhang zum Artikel „Opening the Black Box of Deliberation: What are Arguments (Really) Based on? A theory driven and exploratory analysis on the role of knowledge in the process of deliberation“

9.1 Table of Examples: Sources of Political Knowledge

1.1 Objective knowledge		
1.1.1 Factual information		
1111	ET1: 37	„Den Leuten wird geholfen bei der Weiterbildung, die kriegen den (räuspert sich) z.B. Führerschein bezahlt; die Leute kriegen, wenn sie ins Arbeitsleben kommen, und benötigen einen PKW, kriegen auch den PKW vom Jobcenter bezahlt“
1112	ET1: 45	„Das lag daran, dass ich an der Uni BAT 2a bezahlt wurde, ich weiß nicht, ob das heute auch noch so heißt, äh, das war also relativ viel. Damals war 2400 DM der Höchstsatz und ich bekam 2300 irgendwas im Monat“
1113	ET1: 55	„Iso bei mir war das so, Arbeitslosengeld 1 war ja ne Versicherungsleistung, also d.h. bekam ich (...) egal, was ich sonst machte, während bei Arbeitslosenhilfe hätte ich meine Bedürftigkeit nachweisen müssen.“
1114	ET1: 197	„Der Hartz4-Satz beträgt zur Zeit jetzte, bei 409 Euro, die der Hartz 4-Empfänger zum Leben bekommt plus die Miete.“
1115	MIX1: 245	„Okay. Also die Schwierigkeit sozusagen, die es auch noch gibt, ist natürlich, dass die Mitarbeiter in den Jobcentern selbst befristet sind“
1116	EL1: 134	„Deren Sätze für Schulbildung und für Schulutensilien ist, um es nett auszudrücken, unter aller Sau.“
1117	MIX1: 333	„Berlin ist ja sozusagen, obwohl die Wirtschaft im Aufstreben ist, ja, ist sozusagen die Stadt oder von den Bundesländern mit den meisten Hartz IV.“

1.1.2 Wrong facts		
<i>(Factual information that, after being checked, turned out to be wrong)</i>		
1121	EL1: 130	<p>„Meine Meinung ist, dass die Hartz-Sache eine Ungerechtigkeit ist. Weil wir haben weiter große, Millionenmenge Leute im Bundesgebiet, welche arbeitslos sind. Ca. 2 Millionen sind heute Langzeitarbeitslose.“</p> <p><i>This statement is incorrect, as it turns out that the number of longterm jobless people in Germany around the time of the discussion was only half that size, about one million</i></p>
1122	EL1: 200	„Wir haben heute ca. 600 Obdachlose im Berliner Gebiet.“
1.2 Subjective knowledge		
1.2.1 Personal experience		
<i>(Reference to their own experiences)</i>		
1211	ET1: 55	„Also bei mir war das so, Arbeitslosengeld I war ja ne Versicherungsleistung, also d.h. bekam ich (...) egal, was ich sonst machte, während bei Arbeitslosenhilfe hätte ich meine Bedürftigkeit nachweisen müssen. Ich bekam auch noch diesen dicken Fragebogen mit, aus vielen, vielen Seiten zugeschickt, äh, und, äh, ja, das, (...), allerdings von der Bürokratie gabs Probleme, aber das is, ja, alles Kleinigkeiten, das gibts wahrscheinlich heute auch noch, d.h., obwohl denen bekannt gewesen sein müsste, dass ich das nicht beantrage, haben die mich gedrängt, haben mir noch mal einen Brief geschrieben und so weiter, alles son Zeug, also viel Überflüssiges, ja, also wie gesagt, für mich war das positiv“
1212	ET1: 81	„ich glaube auch, dass die, ähm, teilweise und das ist auch meine berufliche Erfahrung, es gibt teilweise ne sehr, sehr schlechte Beratungsqualität.“
1213	ET1: 121	„Nur noch mal ganz kurz auf seine Frage wegen seinem Sohn und nem Job, es gibt genug Jobs, aber das Interesse der Jugendlichen ist nicht vorhanden. Wir hatten mal ne Jobmesse gemacht und da waren über 100 Jugendliche da gewesen und da haben die Vertreter von den Betrieben gesagt, wenn von den 100 einer einen Job annimmt, dann haben wir schon gewonnen. Das Desinteresse der Klassen war katastrophal! Die haben null Bock.“
1214	ET: 177	„Ich find's ungerecht, ich finde das ist ein ungerechtes System. Ich sehe das an den Mitschülern meines Sohnes, äh, Brennpunktschule Neukölln, ähm, 70% in seiner Klasse sind, deren Eltern sind Hartz 4 Empfänger und Chancengleichheit bleibt auf der Strecke, das seh' ich jeden Tag [...]. Das ist so'n Eindruck, dass ich's sehr ungerecht finde.“

1215	MIX1: 113	„Also ich möchte jetzt keine Jobcenter in Berlin nennen, aber das Jobcenter, wo ich angebunden bin seit mehr oder weniger zehn Jahren, da läuft das ordentlich. Da habe ich innerhalb von einer halben Stunde die Erlaubnis gehabt, mir eine neue Wohnung zu suchen. In anderen Jobcentern dauert die Erlaubnis solange, bis der an, bis der, na, vorgeblich Vermieter die Nase voll hat und sagt: „So, die Wohnung kriegt jetzt ein anderer“, ja. Wohnungsmarkt.“
1216	MIX1: 113	„Das stimmt. Also ich kenne das halt auch vom Ausland her, dass es dieses Sicherheitssystem nicht gibt, und dass einfach alles viel mehr auf den Menschen selbst ausgerichtet ist.“
1217	EL1: 37	„Ich habe dort mein Geld gekriegt, aber die Bedingung das zu kriegen und das, was ich nebenbei hören und (unverst.) muss. Und dann wie die Leute dort sind, die das Geld erhalten - ich sage, das ist ein großes Minus. Das ist ein großes Minus.“
1218	EL1: 41	„Also ich muss sagen und auch wie man mich behandelt hat, das war immer zuvorkommend und (...) das andere ist ja mein Bemühen. Ich muss sagen, es gab mir eine Sicherheit und wenn es das nicht gegeben hätte, ich weiß, diese Kämpfe, und die Gelder gehen weg, weil das nicht so reinkommt. Ich habe ja auch Rücklagen gehabt. Also von daher bin ich froh, dass es das so gibt.“
1219	EL1: 141	„Und ich muss wirklich sagen, das kann ich aus eigener Erfahrung sagen, wenn mir meine Familie nicht hier und da etwas zustecken würde, was ich natürlich beim Amt NICHT angeben darf, weil mir das sonst auch wieder abgezogen wird, würde ich wirklich in einer Abwärtsspirale landen. Und ich muss wirklich das Geld zwei Mal umdrehen und es ist wirklich zu wenig. Es ist wirklich zu wenig.“
12110	MIX1: 66	„Und in dem Moment ist das ganze ungerecht, ja. Also ich sage mal bloß ein paar Fälle, die ich in letzter Zeit hatte: Häusliche Gewalt: Eine Frau ist im Frauenhaus. Die ganze familiäre Situation ist ungeklärt. Die Kinder sind ungeklärt. Die Gesundheit ist angegriffen, Finanzen sind angegriffen. Alles ist irgendwo in Auflösung. Und das Jobcenter verlangt zehn Bewerbungen pro Monat. Das ist äußerst ungerecht.“
1.2.2 Hearsay		
1221	MIX1: 267	„Ich bin selber noch nie beim Jobcenter gewesen. Also kann ich das eigentlich nicht beurteilen, aber Freunde halt. [...] Und da sind mir ein paar Sachen aufgefallen.. Ich weiß zwar nicht, ob das jetzt noch so ist, aber die mussten als das erste Mal quasi arbeitslos wurden und in dieses Hartz IV dann reingerutscht sind, zu irgendwelchen, sage ich mal, Kursen. [...] Also die haben dann auch gesagt: „Was soll ich hier?“. Und ich denke halt, so ein Ding wäre, dass irgendjemand mal prüfen muss, diese Firmen [...]. Weil das ist vergeudete Lebensenergie, vergeudete Zeit, und man wird auch, wenn man da hinkommt und da teilnehmen muss, damit man sein Geld kriegt ja auch nicht gerade positiv und motiviert, sondern das geht eher so rum, weil das also völlig beknaecht ist.“
1222	EL1: 62	„Insofern bin ich zufrieden, muss aber sagen, glaube ich, dass ich das alleine nicht geschafft hätte. Das geht wirklich nur mit einem Begleiter. Und dieser Begleiter, der das für mehrere Menschen macht, hat mir erzählt, dass es viele Fälle gibt, wo die Leute sozusagen rausgespült werden und aus der Statistik gekickt werden und ja.“

1223	MIX1: 267	„was ich auch gehört habe, was mich sehr, sehr wütend macht, ist wenn jemand seine Arbeit verliert und, ich sage jetzt mal so, 58, 60, 61, 62 ist. Der wird gar nicht mehr vermittelt, sondern der wird gezwungen, in die Frührente zu gehen, damit der rausfällt aus dem Job. Und das hat aber zur Folge, wenn der in die Frührente geht, dass er natürlich so und so viel Prozent weniger Rente bekommt. Und wenn er eh schon, sage ich mal, wenig Rente, was ja, was ja jetzt verstärkt da ist, dann ist es noch weniger.“
1224	ET1: 81	“oder kenne selber aus dem persönlichen Umfeld ganz viele Personen, man kann sehr schnell in so eine Situation kommen, ähm, man muss nur mal längere Zeit krank sein, äh, nicht arbeiten können, was weiß ich, obwohl man vielleicht n guten Job hatte, gut bezahlt, kann jeder, (...) irgendwann is Vermögen aufgebraucht und ich glaube nicht, äh, dass sich jede Person davon freisprechen kann, irgendwann in diese Situation zu kommen.“
1.3 No knowledge / no opinion		
1.3.1 No knowledge / no opinion		
<i>(Participants stated that they just didn't know anything on the discussed topic or that they had no, or a "neutral" opinion towards it)</i>		
1311	ET1: 59	“Ja, dann mach ich mal gleich weiter. Ähm, ich muss gleich vorwegziehen, ich habe keinerlei Erfahrungen gemacht mit dem Jobcenter, weder positive, noch negative.“
1312	ET1: 61	„Ich würde mich einfach mit der 5 zufrieden geben, vollkommen neutral, weil wie gesagt, ich keine persönlichen Erfahrungen gemacht habe und das nur vom Hörensagen kenne.“
1313	ET1: 115	“Ähm, das Jobcenter ist für mich weitestgehend unbekanntes Revier, da habt ihr mich son bisschen auf dem falschen Fuß erwischt.“
1314	MIX1: 25	„Wenn man halt so im Detail über Hartz IV nicht so genau Bescheid weiß, wie soll man das dann einordnen? Weil ich könne jetzt zum Beispiel sagen. Ich weiß nicht, ob zu Hartz IV gehört, wenn jemand zum Beispiel Ausländer ist und Hartz IV bekommt und Kinder hat, aber nicht in Deutschland sind, sondern noch in der Heimat. Läuft das unter Kindergeld und ist das unabhängig von Hartz IV oder ist oder ist das Hartz IV? Also das kann ich nicht zum Beispiel. Deswegen könnte ich das nicht einschätzen, ob das jetzt gerecht oder ungerecht ist, weil ich nicht weiß, wie es ist.“
1315	MIX1: 106	„Also ich habe ja ein Fragezeichen in die Mitte gepackt, weil ich muss ganz ehrlich sagen. Ich kenne mich mit Hartz IV nicht aus.“
1316	EL1: 193	„Also ich habe ganz die Mitte versucht zu treffen. Weil ich es schlicht nicht weiß.“
1217	ET1: 187	„Äh, ich würde mich in der Mitte verorten, weil ich glaube, dass, also, pauschal so zu beurteilen, ist total schwer, weil da ganz viele Aspekte drin sind, die teilweise gerecht und teilweise ungerecht sind.“

9.2 Summary Tables

9.2.1 Subjective Knowledge

Variable	Obs	Mean	Std. Dev.	Min	Max
Pensions	26	2.81	1.13	1	5
Parental Leave	24	2.83	1.10	1	5
Social Security	27	3.20	1.00	2	5
Health Care	27	3.30	0.95	2	5
HartzIV	26	3.31	1.26	1	5
General	27	3.41	1.12	1	5

9.2.2 Factual knowledge

Variable	Obs	Mean	Std. Dev.	Min	Max
Unemployment Rate	27	9.10	10.00	0	40
Poverty Rate	27	10.74	9.97	0	30

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9.3 Note: Knowledge and Education

When it comes to education and subjective knowledge, people with at least a high school degree on average do not feel a lot more informed about the welfare state in general ($\bar{x} = 3.4$, $n = 18$) than people with less than a high school degree ($\bar{x} = 3.3$, $n = 9$). There is not a very high correlation between general subjective knowledge and school education in years ($r = 0.14$). Other than the results from subjective knowledge, there are differences in factual knowledge when it comes to school education. From a descriptive perspective it seems that there is a relationship between the two variables because none of the participants without a high school degree ($n = 9$) provided any of the correct factual information, while all of the persons who answered both questions correctly ($n = 6$) had at least a high school degree. A Spearman's correlation was run to assess the relationship between factual knowledge and education. There was a moderate negative correlation between factual knowledge and education, which was statistically significant ($r = -0.53$, $p = 0.0045$, confirming what the descriptive results already indicated. The results indicate that as education increases, the size of overestimation decreases (factual knowledge is more accurate) and vice versa. This correlation does not mathematically prove a causal relationship, even though one can assume from a theoretical perspective that it is more probable that more high school education leads to more factual knowledge about the welfare state than the other way around. Since a simple correlation test does not control for other variables, there could also be a third factor influencing both, school education and factual knowledge.