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## "The Influence of Prior Systematic Processing on Deliberative Group Decision Making Processes"

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## List of Abbreviations

AHP	Analytic Hierarchy Process
CI	Conditional Income (Conditional Social Security System )
DQI	Discourse Quality Index
UBI	Unconditional Basic Income

#### **1** Introduction

And what kind of man am I? One of those who would be pleased to be refuted if I say anything untrue, and who would be pleased to refute anyone who says anything untrue; one who, however, wouldn't be any less pleased to be refuted than to refute. For I count being refuted a greater good, insofar as it is a greater good for oneself to be delivered from the worst thing there is than to deliver someone else from it. (Plato, 1997, p. 802)

Proponents of the normative concept of deliberation argue that people should not make their collective decisions by a mere aggregation of individual preferences,<sup>1</sup> but based on a mutual elaboration of the best action. As Plato (1997) claimed for himself, those participating in a discourse<sup>2</sup> should be willing to be refuted by the strongest argument instead of stolidly following their prior preferences. Such a deliberative process is said to provide benefits for the individual citizens, result in higher quality decisions, foster the legitimacy of a democratic decision and should be a better decision making process as such (Karpowitz & Mendelberg, 2011). However, the concept of deliberation is a normative one and not without critique: While some scholars question the desirability of deliberation (e.g. Mouffe, 2005), nearly all theorists of this field doubt its feasibility – at least the feasibility of Habermas' narrow conception of deliberation (Habermas, 1996; Steiner et al., 2004). In this thesis, I focus on the empirical question whether deliberation is feasible. I thus contribute to the vast number of studies that have been focussing on the impediments and impetuses of deliberative processes and their promised benefits (for an overview of the different empirical investigations, see Gutmann & Thompson, 2009; Ryfe, 2005; Thompson, 2008).

Many factors have been identified that influence the success of a deliberative process. According to Bächtiger and Hangartner (2010), deliberation depends on institutional, cultural, issue related, actor-centric, as well as partisan logics, the context level, and the sociocultural actor attributions. The present thesis is about the actor-centric cognitive requirements for an ideal deliberative process. It is based on the interdisciplinary encounter of Barker and Hansen (2005), who observed that after thinking systematically about two presidential candidates, knowledgeable voters possessed weaker, less consistent and less predictable vote choices and were less likely to vote than individuals who did not think systematically about the alternatives. The authors explained this effect with the complexity-extremity hypothesis

<sup>&</sup>lt;sup>1</sup> In this thesis, I contrast two ways of democratic decision making. In the first way, individual preferences are aggregated by voting without prior discussion, and in the second, deliberative, way, decision makers gather to discuss the decision before they vote about it. In both ways, the final decision relies on voting.

<sup>&</sup>lt;sup>2</sup> Like Steiner et al. (2004), I will use the terms discourse and deliberation simultaneously in this thesis because of their common focus on the dialogical aspect of politics.

of Linville (1982). They suggested that systematic processing induces belief complexity, a concept similar to ambivalence, by making salient that each vote choice has its advantages and disadvantages. However, for unknowledgeable voters, the effect of systematic processing reversed; as they did not know the different presidential programs, they had to use the same heuristic for each evaluation of the candidates on the different criteria. Therefore, they were not able to recognize the complexity of the decision but bolstered their initial preferences.

The results of Barker and Hansen (2005) put into question the benefits of systematic processing for democracy as it discourages knowledgeable voters from voting at all and encourages voters with low political knowledge to preserve their uneducated preferences. However, deliberative forms of decision making have different prerequisites than purely aggregative ones do. By its very definition, deliberation requires some extent of systematic processing and the willingness of individuals to transform their preferences. In this thesis, I argue that systematic processing is able to improve a deliberative process and its expected outcomes. According to the heuristic-systematic model of cognitive processing (HSM, Chaiken, 1980) and the contemporary knowledge about attitude strength, systematic processing might encourage individuals to moderate their prior opinions (Linville, 1982; Linville & Jones, 1980), process further incoming information more systematically (Krosnick et al., 1993; Maio et al., 1996; Wood et al., 1985), and change their attitudes if necessary (Eagly & Chaiken, 1995; Hodson et al., 2001; Maio et al., 1996). Based on this prediction that systematic processing makes individuals more open to persuasion, I analyze the following research question:

Can prior systematic processing improve a deliberative process and encourage participants to reconsider their initial attitudes? To what extent are these effects mediated by ambivalence and conditioned by knowledge and attitude commitment?

I examine these supposed causal effects by conducting a laboratory experiment. In the experiment, participants have to decide collectively whether to implement an Unconditional Basic Income (UBI)<sup>3</sup> or to maintain the Conditional Social Security System (Conditional Income CI) as it is used in Austria and most other welfare states. While the control groups

<sup>&</sup>lt;sup>3</sup> The Unconditional Basic Income is also known as the Universal Basic Income. Because the experiment emphasizes the unconditional aspect of the basic income and regards to the European Citizens' Initiative for an Unconditional Basic Income, this thesis uses the first term instead of the second.

have to discuss this topic without preparation, participants in the treatment groups have to think systematically about the various aspects of this redistributive decision with the help of an Analytic Hierarchy Process (AHP) tool.

This thesis consists of six chapters. In the following chapter, the theoretical framework is introduced. The research question is illustrated in Chapter 3. Chapter 4 explains the method of this study and Chapter 5 presents the results of the first sessions. Chapter 6 summarizes and discusses the findings. The documentation of the experiment can be found in the appendices.

#### 4

#### 2 Theoretical Framework

Deliberation is an ancient term that addresses two modes of decision-orientated thinking. According to the Oxford Dictionary of English, the word deliberation comes from the Latin word 'deliberare' that translates as 'to weight down'. It characterizes a long and careful consideration or discussion (Stevenson, 2010). This careful weighting can be conducted in an internal reflective or in an external collective way (Goodin, 2000): The internal reflective mode of deliberation is an intrapersonal mode. In this mode, the reasons for and against the available options are weighted by an individual without interaction with others. In the external collective way of deliberation, as it is promoted by deliberative democrats, free and equal participants gather together and elaborate a collective decision based on the strongest argument. Of course, Goodin (2000) argues, the external mode of deliberation necessarily includes some extent of internal deliberation and also internal deliberation is to some degree shaped by interpersonal experiences of discussion and debate, id est external deliberation. Hence, he pointed out, these two modes are in practice inextricably intertwined.

In this chapter, I review the literature about both modes of decision-orientated thinking and explain the influence of internal deliberation on the reception of persuasive messages in external collective modes of deliberation. To avoid confusion, I use the word deliberation hereafter only for external collective ways of thinking. In order to address the comprehensiveness of internal deliberation, I use the two different modes of cognitive processing – heuristic and systematic.

#### 2.1 Group Decision Making – Deliberation

The idea of deliberation as a way of making politics dates back to the ancient Greeks (Steiner et al., 2004). Since then, the concept of deliberation has been taken up by multiple philosophers – by all with their own distinctive conceptions of it (Steiner et al., 2004). Yet, for Gutmann and Thompson (2009) it was not before Habermas' (1989) discourse theory that the idea of deliberation revived in the present days. Jürgen Habermas' very narrow conception of a deliberative procedure was best summarized by Bächtiger and Wyss (2013), who stated that a deliberative process is one in which all participants can equally take part and justify their positions and views in detail and with reference to the public welfare (p. 156). In this process, participants treat each other with empathy and respect and do not try to enforce their preferences but let themselves be persuaded by the better argument (p. 156). Such an ideal speech situation in which everybody is free of inner and outer constraints should

ultimately lead to a change of attitude away from an ego perspective toward an inclusive 'we'-perspective and a rational consensus (p. 156).

Although Habermas might be the most popular deliberative theorist, his conception of deliberation is not the sine qua non in deliberative theory today; Diana Mutz (2008) even alleged that there are almost as many definitions as there are theorists. Bächtiger et al. (2012) distinguished between two ideal-types of definitions. While the first type has a strong Habermasian orientation, the second type, in contrast, is conceptually broader than the first type and includes "all activities that function as communicative influence under conditions of conflict" (p. 4). According to Bächtiger et al. (2012), the central characteristic of all conceptions, regardless the type, is the understanding that a democratic decision should be based on communication through reason giving instead of a mere aggregation of predefined preferences.

Decision making based on common deliberation, in its narrow and in its broad conceptions, is by definition more demanding than a mere aggregation of individual preferences. However, there are several promised outcomes of deliberation that are used by its proponents to nevertheless recommend it as a better process of collective decision making. Mutz (2008) collected a list of these: "awareness of oppositional arguments", "political tolerance", "perceptions of legitimacy of opposition", "knowledge/information gain/sophistication", "empathy", "willingness to compromise", "participation/civic engagement", "opinion change toward more public-spirited view", "opinion consistency", "faith in democratic process", "political self-efficacy", "consensual decision", "social capital/feelings of community", "social trust" and "depth of understanding of one's own positions" (p. 530). A more compressed list comes from Karpowitz and Mendelberg (2011), who outlined the following four categories of claims about deliberations' effects:<sup>4</sup>

- (1) Deliberation is assumed to promise benefits for the individual citizens. These benefits may include more public-spiritedness, tolerance, knowledge, self-reflectiveness and empowerment (Karpowitz & Mendelberg, 2011).
- (2) Deliberation should result in higher quality decisions because deliberative decisions are grounded in "increased knowledge, a more complete set of arguments, a fuller understanding of the reasons for disagreement, and a more generous

<sup>&</sup>lt;sup>4</sup> The first three categories of Karpowitz and Mendelberg (2011) are inherited by the three categories of Hibbing and Theiss-Morse (2002). Only the fourth category was added by Karpowitz and Mendelberg.

aggregate attitude toward all groups in society, especially those who have the least" (Karpowitz & Mendelberg, 2011, pp. 259-260).

- (3) Deliberation promises to improve the democratic system by fostering the legitimacy of a democratic decision (Karpowitz & Mendelberg, 2011).
- (4) Additionally, the process by itself is said to be superior: The deliberative process is "one that is more public-spirited, more reasonable, more satisfying, and ultimately more just than adversarial and aggregative forms of decision making" (Karpowitz & Mendelberg, 2011, pp. 260).

However, the concept of deliberation is not without critique. Deliberative values of equality, freedom, rational argumentation, authenticity, perspective taking, and substantial consensus are said to contradict the general understanding of politics as being essentially about conflict and decision (Bächtiger & Wyss, 2013). Mouffe (2005) is one of the opponents of deliberative democracy. She argues that human passions and needs for collective identifications should not be relegated to the private sphere, but be mobilised toward the promotion of democratic designs. For her, deliberation causes citizens' dissatisfaction with politics and bears the potential to cause an "explosion of antagonisms that can tear up the very basis of civility" (Mouffe, 2000, p. 15).

Another critique of deliberation concerns its feasibility. The concept of deliberation is a normative and not an empirical one. It might seem – from a normative standpoint – quite promising, but the deliberative ideal of most narrow definitions is in reality quite improbable to happen as there are both social and cognitive restrictions to deliberation (Habermas, 1996; Steiner et al., 2004).

Since politics is always about power, it is not easy to erase status and hierarchy by the goodwill of a common deliberation (Sanders, 1997). Sanders (1997) and Young (2001) argued that not all individuals are equally equipped to articulate their arguments in rational terms, and not all individuals are listened to equally. Through the diverse exclusive mechanisms and the bias toward the values and norms of dominant groups, maladjusted deliberation can be even more undemocratic than other forms of collective decision making and can even increase existing conflicts (Hickerson & Gastil, 2008; Mansbridge, 1983; Mendelberg & Oleske, 2000; Sanders, 1997; Young, 2001).

Although deliberation relies to a certain degree on dissimilar views to count as deliberation (see, among others, Thompson, 2008), high-quality deliberation can hardly be implemented

when the actors differ too much in their policy preferences and when therefore there is a fundamental conflict in their basic values (Bächtiger & Hangartner, 2010; Steiner et al., 2004). Steiner et al. (2004) observed more cooperative orientations among political actors in parliaments when issues were less polarized and explained it with higher costs of "undermining a prior discursive consensus or a highly valued goal" (p. 89). Likewise, Wojcieszak and Price (2012) reported higher discourse qualities in groups where perceived disagreement was low. They argue that disagreement negatively affects individuals' self-expressions when they feel to be in a minority. Additionally, they observed less interest and enjoyment and more confusion in discussions with high perceived disagreement. Similarly, Esterling et al. (2010) observed higher deliberative qualities on moderate levels of disagreement, with individuals being more easily persuaded by stronger arguments compared to high levels of disagreement about policy preferences are fundamental factors that hinder successful deliberation.

Also on the psychological side, it is questionable whether humans have the abilities necessary for a rational discourse (Bächtiger et al., 2010a). To participate in a deliberative process, individuals must have the cognitive capacity for reasonable argumentation and must be motivated to do so. However, humans have limited energy and paying attention and remembering new information is costly (Baumeister et al., 1998; Lupia, 2002). New information is rather processed based on priming (Lupia, 2002) and motivated reasoning (Kunda, 1990) instead of pure objectivity – or in other words: new information is rather processed heuristically than systematically (see, among others, Chaiken, 1980). Attitude strength is one important factor that determines how information is processed. As individuals with strong attitudes are especially prone to heuristic information processing and are not easily persuaded by counterattitudinal arguments (Krosnick et al., 1993), ideal deliberation might not be possible if its participants possess attitudes that are too strong. Hence, I will examine in this thesis the effect of attitude strength on deliberation and will concentrate hereby on the attitude strength component ambivalence.<sup>5</sup>

Deliberative theorists are aware of the improbability of ideal deliberation. Even Habermas (1996) emphasized that a complex society could never exhibit purely communicative social relations. The concept of deliberation has to be understood in ideal-typical terms. As such,

<sup>&</sup>lt;sup>5</sup> Chapter 2.2 gives a detailed overview on the current literature about information processing, attitudes, and their interplay.

it can present only a benchmark against which the existing institutions or the reformist projects can be compared to, in order to distinguish the degrees of their deviation from this ideal – in this way it is useful for evaluative purposes (Habermas, 1996; Steiner et al., 2004).

Several measurements have been proposed to evaluate the quality of a deliberative process (for an overview, see Black et al., 2011). The most popular one is the Discourse Quality Index (DQI) of Steiner et al. (2004) that is based on Habermas' (1989) discourse ethics. It calculates the position of a political actor – id est an individual or institution – on a continuum of 'no deliberation' at one end to 'ideal deliberation' on the other end.

However, the Discourse Quality Index measures only one conception of deliberation. Since there are many other conceptions of deliberation, there is no possibility to test deliberative theory as such (Mutz, 2008). Mutz (2008) even describes deliberation as moving target: "If every theorist's definition is somewhat different from the next, then it is impossible to study deliberation in a way that theorists collectively find relevant to their work" (p. 527). Mutz argues that deliberative theory itself is not falsifiable and lacks clearly defined concepts, lacks specifications of logical relationships among concepts within the theory, and lacks consistency between the hypotheses and evidence accumulated to date. Thus, she raises the question how to turn a normative theory into an empirically testable one. Her solution is that instead of testing grand theories, researchers should rather develop middle-range theories "that are each important, specifiable, and falsifiable parts of deliberative democratic theory" (p. 522). In that way, vaguely defined entities are replaced by more concrete, circumscribed concepts and grand theoretical frameworks are replaced by hypotheses about the specific relationships between these concepts. Considering her claim, I examine in this thesis the influence of systematic processing on each defining component of discourse quality separately as well as its influence on one important deliberation outcome: Transformation of attitudes. The next chapter will discuss systematic processing and its implications for deliberation – and persuasive settings in general – in more detail.

#### 2.2 Individual Decision Making – Attitudes & Cognitive Processing

To understand the processes of collective decision making, it is necessary to understand how individuals construct their decision-relevant attitudes, how they process decision-relevant information, and how processing feeds back to their initial attitudes. Attitudes can change when confronted with diverging persuasive messages; however, in the following I argue that

the mode of cognitive processing, the structure of the initial attitudes, as well as their interactions are of high importance for this change.

#### The Heuristic-Systematic Model of Cognitive Processing

This thesis relies on the heuristic-systematic model of cognitive processing (HSM) of Chaiken (1980). The HSM assumes that humans possess two qualitatively different modes of cognitive processing: a heuristic and a systematic mode. These two modes are not mutually exclusive, and the following descriptions should be understood as lower and upper ends of a heuristic-systematic processing continuum (Barrouillet, 2011; Chaiken, 1980; Chaiken et al., 1989; Chaiken et al., 1996; Chaiken & Maheswaran, 1994; Chen & Chaiken, 1999; Rudolph & Popp, 2007; Todorov et al., 2002). The extents of the presence of each of these modes affect how comprehensively information is processed, and how much effort and cognitive capacity is spent to form a judgment (Chaiken et al., 1989; Chaiken et al., 1996; Chaiken et al., 1996; Chaiken et al., 1989; Chaiken et al., 1996; Chaiken et al., 2002).

The systematic processing mode is a comprehensive and analytical mode of thinking in which all judgment-relevant information is accessed, scrutinized and brought in relation to other relevant knowledge that one possesses about the topic in question (Chaiken et al., 1989; Chen & Chaiken, 1999; Todorov et al., 2002).<sup>6</sup> Judgments that are formed systematically are based on the actual content of information (Chen & Chaiken, 1999). However, systematic processing is cognitively demanding and requires active self-control. Thus, it relies on the individuals' motivation and their necessary cognitive ability to do so (Chen & Chaiken, 1999).

When processing heuristically, people focus only on a subset of the available and relevant information – so called information cues or heuristic cues – to form their judgments with the help of heuristics (Chaiken et al., 1989; Ryfe, 2005; Todorov et al., 2002; Tversky & Kahneman, 1974). Heuristics are simple rules that are used to reach judgments and decisions as accurately and efficiently as possible while avoiding the costs of information gathering. These cognitive shortcuts reduce the required capacity and effort associated with a task and as such save time in the judgment process (Barker & Hansen, 2005; Chaiken et al., 1989;

<sup>&</sup>lt;sup>6</sup> Since systematic processing varies in its extensiveness, this should be understood as a prototype. It must be considered that motivational factors and cognitive factors can cause biased information processing also in the systematic processing mode (Chaiken et. al. 1989).

Chen & Chaiken, 1999; Conover & Feldman, 1984; Gaissmaier et al., 2010; Jain & Maheswaran, 2000; Mondak, 1993; Rudolph & Popp, 2007; Shah & Oppenheimer, 2008).

Heuristics are learned knowledge structures (Higgins, 1996) that are stored in our memory and are used either self-consciously or non-self-consciously (Chaiken et al., 1989). As learned knowledge structures, they are governed by the principles of knowledge activation and use: Availability, accessibility, and applicability (Chaiken et al., 1989; Chaiken et al., 1996; Higgins, 1996; Todorov et al., 2002). They are applied, if they (1) are stored in one's memory (Availability), (2) are applicable to the perceiver's judgmental goals (Applicability), and (3) are made active to be used, id est are triggered by heuristic cues (Accessibility; Todorov et al., 2002). An example of such a decision rule is "Expert's statements can be trusted" (Chaiken et al., 1989). When confronted with a message from an expert, this rule is used to judge the validity of the message based on the status of the expert and not based on a careful scrutiny of the underlying argument. In persuasion settings, like deliberative ones, heuristic processing implies that structural attributes of a persuasive message are more considered than its actual content, which clearly opposes the demand of deliberative theorists for a "rationally motivating force of the better argument" (Habermas, 1996, p. 182).

Although systematic processing leads per definition to more reflective decisions (Barker & Hansen, 2005), heuristic processing can sometimes outperform systematic processing because of their "very simplicity" (Gaissmaier et al., 2010). Heuristics can be sociologically and ecologically rational when they are adapted in physical and sociological environments in which they are able to yield accurate, fast, and effortless decisions (Gaissmaier et al., 2010; Hertwig & Herzog, 2009; Mondak, 1993).<sup>7</sup> In politics, where the costs of information gathering and the limits of cognitive ability make it impossible to evaluate most political phenomena in a systematic way, citizens are compelled to strive for efficiency (Mondak, 1993):

For each of us, there are more policies than preferences, more political leaders than evaluations, and more questions than answers. Thus, it is unrealistic to expect the citizen to hold informed judgments on an endless array of what are often obscure political topics. Still, we frequently see individuals who willingly express opinions on any number of issues. (p. 172)

<sup>&</sup>lt;sup>7</sup> I will not discuss the findings of Wilson et al. (1993), Dijksterhuis and van Olden (2006) and others who confronted unconscious thought with conscious thought. They showed that conscious thought can lead to worse decisions than unconsciously driven processes because of suboptimal weighting and omitting of relevant aspects. However, systematic processing is not equal to conscious thought. Conscious thought in their experiments can be rather compared with "thinking hard". While hard thinking just means, that one thinks intensively about a topic, id est uses an increased depth of thought, it does not necessarily imply a deep breadth of thinking as it is assumed by systematic processing (Barker & Hansen, 2005).

Heuristics help us "to make sense of politics" (Lau & Redlawsk, 2001) and they often produce political outcomes that are equal to outcomes under conditions of complete information (Barker & Hansen, 2005; Lau & Redlawsk, 2001). A candidates' party affiliation, for example, may activate the representativeness heuristics, which prompts an individual to infer that the candidate has the same political disposition as his/her affiliated party (Lau & Redlawsk, 2001). Because politically educated people know the typical structure of the political world, they can efficiently use heuristics and make valid inferences from heuristic cues – at least when their stereotypes are met (Lau & Redlawsk, 2001).<sup>8</sup> Hence, it seems that heuristic processing is very helpful for citizens to participate in a political system – without spending too much effort.

Furthermore, heuristic processing does not only sometimes outperform systematic processing, systematic processing might also have severe consequences for collective decision making. This thesis is based on the study of Barker and Hansen (2005), who explored the influence of systematic cognitive processing on voting behaviour in the US presidential elections between George W. Bush and Al Gore in the year 2000. Therefore, they conducted an experiment that induced systematic processing with the help of an Analytic Hierarchy Process tool (AHP; see Chapter 4.2). They revealed that systematic processing can cause intellectual paralysis and hence reduce the strength of candidate preferences, can reduce preference consistency regarding party identification and ideology, can reduce the vote predictability, and most importantly can reduce the intention to vote at all – at least for knowledgeable voters.<sup>9</sup> As a consequence, they argue that systematic processing can reduce the abilities of skilled voters to act as opinion leaders and to participate in the decision-making process at all and lead to a cementation of "bad choices" of unknowledgeable voters.

<sup>&</sup>lt;sup>8</sup> Not everybody uses all heuristic rules, and not everybody uses all of them equally efficiently (Lau & Redlawsk, 2001). The probability of a correct decision decreases when less educated voters use heuristics, whereby correctness in this context defines a choice that is made in accordance with the preferences of an individual, given that one has fullest information available and fullest attainable understanding of the consequences following the options on-hand (Lau & Redlawsk, 1997, 2001).

<sup>&</sup>lt;sup>9</sup> These effects are moderated by political knowledge. Since uninformed subjects did not have the relevant knowledge for the evaluations of the two candidates on the multiple aspects, they relied even more on heuristic cues to achieve their desired confidence levels. Consequently, for individuals with low political knowledge AHP did not influence preference strength and turnout intention but increased consistency regarding party identification and ideology and made their vote intentions more predictable. When given additional information after AHP, these contrary results for knowledgeable and unknowledgeable subjects even exaggerated (Barker & Hansen, 2005).

Following the research of Barker and Hansen (2005), it can be inferred that systematic processing has disadvantageous effects on collective decision making based on mere preference aggregations. Collective decision making based on common deliberations, however, demands per definition some extent of systematic processing; the argumentative values of messages should be fully scrutinized and not just accepted or devalued aground of simple rules of thumb (Chaiken, 1980; Todorov et al., 2002). Therefore, it is necessary to know when individuals are more likely to withstand heuristic processing but spend cognitive effort to process information systematically.

According to the HSM, the selection of a processing mode is directly linked to the sufficiency principle (Todorov et al., 2002). This principle assumes that individuals are limited in cognitive resources (Baumeister et al., 1998; Chen & Chaiken, 1999; Jonas et al., 1997; Schmeichel et al., 2003; Todorov et al., 2002). Thus, they must be sufficiently motivated and must have sufficient cognitive resources to process systematically (Todorov et al., 2002). The "fundamental motivator" (Jain & Maheswaran, 2000) of processing effort is the deviation of one's actual level of subjective confidence from one's desired level of subjective confidence. Depending on this confidence gap, cognitive effort will be exerted until one's actual confidence level reaches one's desired confidence level – the so called sufficiency threshold (Chen & Chaiken, 1999; Todorov et al., 2002). Thus, as long as heuristic processing provides sufficient confidence in one's own judgment, id est as long as the gap between the actual and the desired confidence is closed, one will use simple heuristic rules to form a judgment (Chen & Chaiken, 1999; Jonas et al., 1997). Conversely, when the gap is widened, id est when heuristic processing cannot provide sufficient confidence in one's own judgment, one will be more likely to exert cognitive effort for systematic processing (Chen & Chaiken, 1999; Jonas et al., 1997).

Hence, to raise individuals' motivations for systematic processing, which by definition would increase the quality of a discourse, one could either reduce the individuals' actual confidence levels or raise their desired confidence levels (Todorov et al., 2002). This study is about reducing the individuals' actual confidence levels. One important factor that influences the individuals' actual confidence levels is the strength of their attitudes (Krosnick et al., 1993). The next section of this chapter will discuss attitudes and their interplay with the two processing modes.

#### Attitudes

It is normatively expected that when it comes to political decisions a choice should reflect an individual's fundamental attitude. Attitudes are global evaluations of objects of thought; these attitude objects can be everything a person holds in mind: Whether one is thinking about people, groups, ideas, things, or anything else from the abstract to the mundane (Barden & Petty, 2012; Bohner & Dickel, 2011). The evaluations have an influence on beliefs, affect, and behaviour (Albarracín et al., 2005). Thus, the knowledge about attitudes is necessary for the understanding of political decision making.

Traditionally, attitudes have been seen as stable and preformed opinions that can be directly summoned from memory when asked for and that can be evaluated on a one-dimensional and bipolar positive-negative evaluation continuum (Cacioppo & Berntson, 1994; Cacioppo et al., 1997; Lavine, 2001). Although attitudes can be changed by personal experiences or other factors, they are seen in this paradigm as enduring evaluations that remain largely stable (Kraft et al., 1990).

This view of attitudes has been challenged by a more constructionist view (Bohner & Dickel, 2011). Attitudes in this paradigm are seen as "poorly integrated belief elements that might or might not be used to construct a summary opinion at a given time" (Lavine, 2001, p. 916). Hodges and Wilson (1992) suggest that people often have a large 'data base' that consists of their behaviour, their moods, and a multitude of beliefs about an attitude object. When people construct their attitudes at a particular point in time, they rarely use the entire database, but only a subset of these data. This subset is often not drawn in a representative way but influenced by the social context and the kind of introspection in which people engage – resulting in an oversampling of beliefs which are most accessible in memory at the time of response (Hodges & Wilson, 1992).

However, by emphasizing the word 'often', Hodges and Wilson (1992) concede that people do not always have to generate their attitudes on the spot. They highlight that under certain conditions people may have pre-formed attitudes. Thus, a mixture of both paradigms seems to be most appropriate and can help to get a deeper understanding of attitudes. Whether an attitude resembles the traditional view or the constructionist view depends on the strength of the attitude in question. While strong attitudes are firmly crystallized and consequential, weak attitudes are rather flexible with few if any effects on thought or action (Krosnick et al., 1993). The stronger the attitudes are, (1) the more persistent they are over time, (2) the

more resistant they are to change, (3) the more impact they have on behaviour, (4) and the more impact they have on information processing (Krosnick et al., 1993). However, attitude strength is not a one-dimensional but a multidimensional construct that consists of several attributes that are overlapping to some extent (Krosnick et al., 1993; Wojcieszak, 2012). Some strength-related attributes are extremity, affective intensity, certainty, importance, interest in relevant information, knowledge, accessibility, direct behavioural experience, latitudes of rejection and non-commitment, structural consistency – and ambivalence (see Krosnick et al., 1993). Because this research is based on Barker and Hansen (2005), it focuses on ambivalence and its interplay with attitude extremity.

Ambivalence is the simultaneous endorsement of competing considerations, positive and negative, toward an attitude object (Jonas et al., 1997; Priester & Petty, 1996; Thompson & Zanna, 1995). According to Thompson and Zanna (1995), there are two necessary and sufficient conditions for these two attitude components to result in ambivalence: They must be similar in magnitude and be at least of moderate intensity.

Being a component of attitude strength, ambivalence has implications for persistency, resistance, information processing and behaviour (Krosnick et al., 1993). Ambivalence can result in unstable attitudes (Clark et al., 2008; Eagly & Chaiken, 1993) since every framing can trigger another set of belief elements. Thus, ambivalent individuals are more likely to be persuaded than univalent ones and, hence, are more likely to change their attitudes when confronted with competing arguments (Eagly & Chaiken, 1995; Hodson et al., 2001; Maio et al., 1996). Ambivalence also can cause systematic information processing (Krosnick et al., 1993; Maio et al., 1996; Wood et al., 1985). This is because it decreases the actual confidence level, causes discomfort and motivates people to actively search for relevant information and process this information more systematically to resolve their psychological tensions and reach their desired confidence level (Jonas et al., 1997; Lee & Chan, 2009; Maio et al., 1996). <sup>10</sup> Several studies support this assumption. Hass et al. (1991) for example found out that white individuals who endorse positive and negative evaluations of blacks show more negative feelings than white individuals do who feel less ambivalent. Considering the HSM, these psychological tensions might be caused by a wider confidence gap as ambivalence reduces the actual confidence level. The impact of ambivalence on persuasion

<sup>&</sup>lt;sup>10</sup> This assumption relies to some extent on cognitive dissonance theory of Festinger (1962) who assumed, that people do not feel comfortable when they feel inconsistence and thus strive to resolve the inconsistency that caused the negative feelings.

was examined by Maio et al. (1996). They observed that ambivalent people process persuasive messages more systematically to become either favourable or unfavourable toward the attitude object. Ambivalent individuals were, hence, more likely persuaded by strong, cogent arguments than by weak and implausible arguments. The authors linked this enhanced inclination for systematic processing to the negative emotions that are associated with ambivalence and thus with the sufficiency principle. Additionally, they emphasized that ambivalent people might have a higher ability for systematic processing as they have positive as well as negative schemata to think about an object. Wood et al. (1985) tested this ability hypothesis and observed that people who had all relevant information salient were more likely to evaluate the validity of the message content instead of just the length of the argument ('length implies strength'-heuristic).

However, being ambivalent does not only bear the impulse to process information more systematically or at least more thoughtful. It is also possible that it will lead to a higher bias in processing information to resolve ambivalence (Festinger, 1962; Lee & Chan, 2009; Nordgren et al., 2006). The study of Clark et al. (2008), for example, showed that ambivalent people might process pro-attitudinal messages to a greater extent than counterattitudinal messages. Thus, while ambivalence might increase processing, it can also lead to the neglect of counterattitudinal persuasive information (Clark et al., 2008).

Ambivalence – being one attribute of attitude strength – correlates with other attitude strength attributes. It is for example closely related to structural consistency (Visser et al., 2006) since both "refer to the degree of evaluative harmony among the various components of an attitude that are stored in memory" (Visser et al., 2006, p. 5). Ambivalent attitudes are also less accessible in memory and cannot be retrieved from memory as quickly as univalent attitudes (Lavine, 2001). But most important to this thesis is its negative correlation with attitude extremity, which is a concept that describes the degree of favourableness or unfavourableness – and thus the deviation from an evaluative neutrality – about a given object (Krosnick & Abelson, 1992; Krosnick et al., 1993; Linville, 1982; Linville & Jones, 1980; Visser et al., 2006). Attitude extremity, and attitude strength in general, has severe consequences for deliberative settings. As Wojcieszak (2012) showed, strongly opinionated individuals perceive more disagreement within deliberative settings – even with participants who possess similar but less extreme positions.

However, not all individuals are equally susceptible to ambivalence. Thompson and Zanna (1995) showed that the personality-based factor 'need for cognition' correlates negatively

with ambivalence and that the personality-based factor 'personal fear of invalidity' correlates positively with ambivalence. Nevertheless, there are also non-personality-based antecedents for ambivalence. The confrontation with counterattitudinal messages may remind individuals of the simultaneous advantages and disadvantages of each decision. Thus, individuals finding themselves in environments with more heterogeneous information are more likely to experience ambivalence (Lee & Chan, 2009). The same effect can be obtained by systematic processing.

Systematic processing can make individuals aware of their complex attitude structures and thus make them more ambivalent and less extreme in their attitudes (Barker & Hansen, 2005). According to Linville's (1982) complexity-extremity hypothesis,<sup>11</sup> the more a person thinks in complex terms about an attitude object, the less extreme he or she will evaluate a stimulus of this domain. She showed in her research that when people think about a relatively large number of non-redundant attributes, the more likely it is on average that some attributes are evaluated positively while others are evaluated negatively. Because the attitude object is not seen as consistently good or consistently bad anymore, these mixed judgements result in evaluative moderation (Linville, 1982; Linville & Jones, 1980).<sup>12</sup> Barker and Hansen (2005), who based their research mainly on Linville's (1982) complexity-extremity hypothesis, found out that systematic processing can provoke this belief complexity and may thus cause ambivalence, which in turn leads to attitude moderation.

However, induced systematic processing does not always lead to attitude moderation. When the considered aspects are more redundant than independent, attitudes become increasingly polarized because even more reasons are available to favour one option (Barker & Hansen, 2005; Cowan & Tesser, 1975; Lavine et al., 2000; Linville, 1982; Millar & Tesser, 1986; Rudolph & Popp, 2007; Shaffer & Tesser, 1990; Tesser & Leone, 1977; Tetlock, 1989). This might explain the findings of Tesser et al. (1995) or Wilson and Schooler (1991), who on the first glance seem to contradict Linville's findings. The scholars observed attitude extremity and polarization after thought inducement in their studies. However, these studies have examined the effect of effortful thought, or "hard thinking" (Barker & Hansen, 2005),

<sup>&</sup>lt;sup>11</sup> The complexity-extremity hypothesis was originally developed by Linville & Jones (1980), but Linville (1982) elaborated the underlying model in more detail.

<sup>&</sup>lt;sup>12</sup> Especially for political decisions where a vote choice is inherently complex, consisting of several relevant and orthogonal decision criteria, and where no single choice option is likely to be favoured or opposed on every decision criterion, systematic processing can reveal this possible ambivalence (Barker & Hansen, 2005).

and not systematic processing per se. When processing systematically, every relevant aspect of a topic is considered. Simple hard thinking, however, can result in biased information search where many redundant factors are used to support one opinion (Barker & Hansen, 2005; Wojcieszak, 2011). Therefore, the aspect of non-redundancy is most important for the distinction between systematic processing and simple contemplation.

Summing up the main points of this chapter, the important role of social psychology for the understanding of deliberative processes cannot be ignored. Although deliberation relies to a certain degree on dissimilar views to count as deliberation, high-quality deliberation can hardly be implemented when actors perceive too much disagreement in policy preferences. Deliberation also requires, per definition, some extent of systematic processing and the will-ingness of participants to be persuaded by a stronger argument. Ambivalence seems to influence these aspects. Ambivalence correlates highly with attitude moderation that in turn reduces the participants' perceived disagreement within a discourse. Ambivalence also increases systematic processing of persuasive messages as well as the likelihood of attitude change toward counterattitudinal messages. Because systematic processing of all decision relevant aspects can cause ambivalence, it should have advantageous effects for deliberative processes when its participants think systematically about the various options before they enter the discourse. The next chapter will elaborate this assumption in more detail.

## **3** Research Question

The last chapter showed that heuristic processing can not only outperform systematic processing in mere preference aggregation situations (Gaissmaier et al., 2010; Hertwig & Herzog, 2009; Mondak, 1993), but can also avoid the potentially disadvantageous effects of systematic processing, such as paralysis and discouragement of knowledgeable voters (Barker & Hansen, 2005). Following the research of Barker and Hansen (2005), who explored the influence of systematic processing on voting behaviour, I want to explore this topic further and test the influence of systematic processing, the process behind an internal reflective way of deliberation, on deliberation in small group settings.

While mere aggregative forms of collective decision making rely on citizens with strong attitudes and thus might be impaired by systematic processing, deliberative forms of collective decision making, in contrast, demand per definition some extent of systematic processing. Additionally, deliberation rests on the assumption that people listen carefully to each other and that they are able and willing to change their minds in favour of a better argument. Therefore, the caused ambivalence might be an advantageous precondition for deliberation as it motivates individuals to think more systematically (Krosnick et al., 1993; Maio et al., 1996; Wood et al., 1985) and to be more easily persuaded by strong arguments (Eagly & Chaiken, 1995; Hodson et al., 2001; Maio et al., 1996). It furthermore decreases attitude polarization (Bächtiger et al., 2005; Steiner et al., 2004) and can cause individuals to perceive less disagreement (Wojcieszak & Price, 2012). In the following, my hypotheses about how prior systematic processing can influence a deliberative encounter and its outcomes are discussed.

#### 3.1 Systematic Processing and the Quality of a Deliberative Process

Like Barker and Hansen (2005), I expect that systematic processing causes belief complexity and thus increases individuals' ambivalence levels. As has been argued before, I expect that these higher ambivalence levels increase the quality of a discourse.

*Hypothesis 1: Prior systematic processing improves the quality of a discourse by raising the individuals' ambivalence levels.* 

There are not only many conceptions of deliberation, there are also many ways to measure its extent. This thesis defines and tests discourse quality with the Discourse Quality Index (DQI), an index comprising the components justification, respect, participation, truthfulness and constructive politics. Originally, the DQI was thought as a coherent set of components that reinforce each other (Bächtiger et al., 2009). Indeed, the literature suggests that some components of deliberation correlate highly with each other; other components, however, seem to contradict each other (Steiner et al., 2004). When Bächtiger et al. (2009) analysed the discourse quality of parliamentary debates in Switzerland, United States, and Germany, they observed only an average partial correlation of 0.12. Their factor analysis of the deliberative components in these parliamentary debates showed that the components loaded on two different factors: Sophisticated justifications and justifications that were orientated to a common good loaded on a first factor; respect and constructivity loaded on a second factor. This challenges the classical deliberative theory that postulates that deliberation is a onedimensional phenomenon (Bächtiger et al., 2010b; Steiner et al., 2004) and implies that not all aspects of discourse quality might be equally affected by an experimental manipulation. Thus, I do not only explore the influence of systematic processing on the DQI of a discourse but also look at each of its components separately.

#### Justification

As decisions should be guided by the force of the better argument, it is a necessity that the discussants logically justify their assertions to make them compelling to the other participants (Steiner et al., 2004).<sup>13</sup> Steiner et al. (2004) discriminated between the level of justification and the content of justification. The first concerns the sophistication of a justification and the second whether a justification addresses a common good.

Steiner et al. (2004) observed that justifications are more sophisticated in debates with low polarization because there is a prior consensus or a highly valued goal and no fundamental conflict in the basic values of its participants. Since systematic processing is said to increase ambivalence (Barker & Hansen, 2005) and thus reduce attitude polarization, it can be expected that the level of justification will be higher after systematic processing.

Furthermore, when people have the opportunity to consider all relevant criteria in detail before a group decision process, they will be better aware of their own position and more able to present their opinions in a more logical way. Additionally, they will more likely

<sup>&</sup>lt;sup>13</sup> Logical justification means that an argument should contain a premise, a conclusion and a linkage between reason and conclusion (Steiner et al., 2004).

realise the ambiguity of the topic, will understand that their viewpoint is only one of many, and will thus spend more effort to explain to other participants their distinctive attitude.

While I assume that the level of justification will increase after systematic processing, there is only a weak assumption about the relationship between systematic processing and the orientation toward the common good. As systematic processing encourages individuals to think about both self-interests and values, there should be no direct influence of systematic processing on the content of justification within a discourse. However, there might be a slightly higher common good orientation as a by-product of higher respect levels and more constructive politics.

#### Respect

Ideal deliberation requires that the discussants listen to each other and show mutual respect. According to Steiner et al. (2004), individuals must, therefore, feel empathy, which means that they must have "the capacity and the willingness to put oneself in the shoes of others and to consider a situation from their perspective" (p. 22). The authors distinguished three dimensions of respect: (1) Respect toward groups whose needs and rights are under discussion, (2) respect toward the demands under discussion, at least as long as they can intersubjectively be seen as justified and (3) respect toward counterarguments. In this work, however, only an overall understanding of respect like it was used by Caluwaerts and Reuchamps (2014) will be considered.

I assume that systematic processing increases respect levels in a discourse because of the aforementioned reduced attitude polarization and the reduced perceived disagreement (Steiner et al., 2004; Wojcieszak & Price, 2012). However, my main assumption is that respect levels increase because of a wider confidence gap that is caused by higher ambivalence levels. As shown by Barker and Hansen (2005), systematic processing enhances ambivalence and raises the gap between the desired and the actual confidence level. I expect that ambivalent individuals show a higher valuation of the input of their discourse members and thus listen more carefully to each other because the other discourse participants are the only sources of additional information that can be used to reach their desired confidence levels. Hence, it can be expected that the level of respect will be higher in groups that enter a discourse without preparation.

#### **Participation**/ Equality

Norms of democracy call for inclusion and political equality, because political outcomes can only be considered morally legitimate if those who must abide by or adjust to them have had a part in their formation. (Young, 2000, p. 53)

Participation is fundamental for the legitimation of democratic decisions (Young, 2000) and thus also an important component of deliberation (Habermas, 1996; Steiner et al., 2004). Full and equal participation means that everyone should have the possibility to put any assertion in the debate and express his or her attitudes, desires and needs (Steenbergen et al., 2003). No person or advantaged group should dominate the discourse (Thompson, 2008). However, the question arises if it is possible to overcome pre-existing inequalities regarding dominance and the ability and feeling of empowerment to express oneself (Mendelberg & Oleske, 2000; Sanders, 1997; Young, 1996).

According to Young (2000), there are two forms of exclusion: External and internal exclusion. External exclusion refers to the exclusion of individuals and groups of the fora for discussion and decision-making. Internal exclusion refers to the individuals' lack of effective opportunities to influence the thinking of others despite having access to the fora and procedures of decision-making. In my experiment, participants are chosen from a student's pool. Thus, external exclusion is conducted by the experimenter. Additionally, since the discourse is held in a computer chat room, internal exclusion because of an unequal appreciation of persuasive messages based on the speakers attributes, like race or gender, should be ruled out. Internal exclusion because of unequal speaking habits, which are also determined by the speakers' positions in society, is, therefore, the only source of inequality that can occur in the experimental discourse; hence, there should be relatively high baseline levels of participation.

Nevertheless, I expect that the higher justification levels and the higher respect levels will further encourage disadvantaged groups and other individuals to take part in the discourse because of their higher ability to express their views as well as their higher certainty for not being ridiculed. Hence, the participation level should be higher in systematic processing settings than in settings without systematic preparatory work.

#### Truthfulness

The ideal type of deliberative politics requires that the individuals express their views in a truthful way: Participants should be sincere instead of strategic (Steenbergen et al., 2003;

Steiner et al., 2004). To my knowledge, there is no literature that links systematic processing with truthfulness in a discourse. Nevertheless, I expect that due to the higher level of respect in the discourse, and thus due to a lower possibility of being ridiculed, the level of truthfulness should increase after individual systematic processing. However, social desirability will not vanish just because of an allegedly respectful atmosphere, and it is not the only obstacle to truthfulness. Especially for political questions, deception can be helpful to reach someone's goal. Thus, I expect only a minimal increasing effect of systematic processing on truthfulness in a discourse.

#### **Constructive Politics**

In its very ideal, a deliberative process should lead to a rational consensus (Steiner et al., 2004). Therefore, the participants should be open for change and willing to adjust their attitudes according to the strongest argument. Yet, the stronger the prior attitudes are, the less inclined individuals are to change their opinions after a discourse (Barabas, 2004; Eagly & Chaiken, 1995; Hodson et al., 2001; Maio et al., 1996; Wojcieszak, 2012). As systematic processing can cause ambivalence and thus weaken the prior attitudes, it can be expected that groups with prior systematic processing will show higher levels of constructive politics than groups without individual preparation.

To sum up the preceding assumptions about the influence of systematic processing on discourse quality and the various elements of the DQI, the following hypotheses are formulated:

Hypothesis 2: Prior systematic processing improves the quality of every component of the DQI. However, it does not affect every component of the DQI to the same extent.

#### 3.2 Systematic Processing and Preference Transformation

According to the proponents of deliberation, this collective decision making process results in several outcomes (Karpowitz & Mendelberg, 2011; Mutz, 2008). Bächtiger and Wyss (2013) categorized the outcomes that have been shown manageable in empirical studies into four groups: (1) preference transformation, (2) epistemic quality of the decision, (3) consensus and accommodation, and (4) side effects that regard the reinforcement of civic virtues. This work concentrates on preference transformation, namely attitude change and attitude moderation. While attitude change in this thesis is defined by a substantial attitude change between a UBI and a CI preference, attitude moderation, as opposite to attitude polarization, is defined by a decrease of the evaluative extremity of an attitude and does not necessarily imply a substantial change.

Attitude transformation does not always happen after a discourse. As they are promised outcomes of deliberation, attitude change and moderation should be more likely in discourses with high deliberative qualities. But also the individuals' prior attitude strengths are crucial for these changes. Attitude strength relates to the ability and motivation to perceive political messages: Individuals with strong attitudes are less likely to be persuaded by counterattitudinal messages and are more likely to polarize their attitudes in a discourse (Barabas, 2004; Eagly & Chaiken, 1995; Hodson et al., 2001; Krosnick et al., 1993; Maio et al., 1996; Wojcieszak, 2011). Because systematic processing prior to deliberation relaxes at least some dimensions of attitude strength – and especially arouses ambivalence (Barker & Hansen, 2005) – it can be expected that individuals who think systematically about the issue before they enter the discourse be more open to persuasion and should shift their attitudes more in the direction of a deliberative consensus than individuals without preparation will.<sup>14</sup> Since attitude transformation includes attitude change and attitude moderation, two different hypotheses are drawn:

Hypothesis 3 Systematic processing raises the likelihood of attitude change after a discourse by raising an individual's ambivalence level.

Hypothesis 4: Systematic processing raises the likelihood of attitude moderation after a discourse by raising an individual's ambivalence level.

Additionally, I assume a direct relationship between systematic processing and attitude transformation after a discourse because the consideration of multiple aspects might cause individuals to rethink their initial attitudes even without the input from other discourse members. However, in this restricted master thesis I will not be able to test for this link.

#### **3.3 Interaction Effects**

It is important to notice that a consideration of all relevant aspects does not always lead to attitude moderation. The Linville effect of attitude moderation just works under certain

<sup>&</sup>lt;sup>14</sup> Like in the former guiding question, this relationship is not only examined for the overall discourse quality (DQI) but also for every component of discourse quality separately.

conditions: For less knowledgeable individuals and individuals who are committed to a certain attitude the opposite effect can be assumed – individuals will feel less ambivalence after systematic processing than individuals who do not think systematically about the topic before the discourse starts (Barker & Hansen, 2005; Cowan & Tesser, 1975; Lavine et al., 2000; Linville, 1982; Millar & Tesser, 1986; Rudolph & Popp, 2007; Shaffer & Tesser, 1990; Tesser & Leone, 1977; Tetlock, 1989).

**Knowledge**. Systematic processing can only be conducted if the necessary information is available. When forced to think about multiple choice criteria, a lack of knowledge about these aspects will tempt individuals to use the same heuristic cue for every criterion; this might result in attitude polarization rather than ambivalence and moderation because even more reasons to favour one side are created (Barker & Hansen, 2005; Lavine et al., 2000; Millar & Tesser, 1986; Rudolph & Popp, 2007; Shaffer & Tesser, 1990; Tesser & Leone, 1977; Tetlock, 1989).

Hypothesis 5: The size of the effect of systematic processing on ambivalence depends on a discussant's knowledge (moderator). If knowledge is high, systematic processing raises ambivalence. If knowledge is low, on the other hand, systematic processing reduces ambivalence.

**Commitment.** There is strong evidence that suggests that attitude commitment influences the way humans perceive persuasive messages. Commitment is the enhanced desire to hold and defend a particular attitude; as such, it motivates individuals to elaborate and judge information selectively (Agrawal & Maheswaran, 2005; Pomerantz et al., 1995). Due to this, I expect the relationship between systematic processing and ambivalence to be reversed for committed individuals: As multiple aspects are used to defend their initial opinions, committed individuals will be less ambivalent and will rather polarize their initial attitudes than moderate them after systematic processing (Rudolph & Popp, 2007).

Hypothesis 6: The size of the effect of systematic processing on ambivalence depends on a discussant's attitude commitment (moderator). If commitment is low, systematic processing raises ambivalence. If commitment is high, on the other hand, systematic processing reduces ambivalence.

### 4 The Experiment

To study the influence of systematic cognitive processing on group decision processes, a computerised laboratory experiment was programmed in z-Tree (Fischbacher, 2007). In this experiment, the participants have to decide within groups of three whether an Unconditional Basic Income (UBI) should be implemented in Austria or not. In this chapter, I firstly describe the structure of the experiment, followed by a detailed presentation of the tool that is used to support the participants to process systematically. Then, I explain the key variables of the experiment. Finally, I present the implementation of the experiment.

#### 4.1 Experimental Design

At the beginning of the experiment, the individuals are randomly assigned to two treatment conditions. Depending on their treatment assignment, they are accompanied to two separate rooms where they have to study an introduction sheet (see Appendix 1 and Appendix 2) before starting the computer program. With this information sheet, participants are introduced to the course of the experiment and are told that they either have to vote for the implementation of an Unconditional Basic Income (UBI) or for the preservation of the Conditional Social Security System (Conditional Income CI) as it is used in Austria. To ensure a certain degree of psychological engagement, the participants are told that this experiment might be published and that their vote decisions might be used in the public discourse about the UBI. This is insofar true as the results of this study are planned to be published and thus might indeed be used within the discourse about the UBI.

After reading the instructions, the computer program randomly allocates the participants in groups of three and the experiment starts. The experiment is composed of 18 z-Tree stages. The first stage is a simple introduction stage. The second stage contains questions about the individuals' prior attitudes about the UBI and the strength of these attitudes. In the third stage, the AHP stage, the individuals are exposed to the Analytical Hierarchy Process (AHP) tool, which makes them consider every relevant criterion in relation to other criteria with the help of pairwise comparisons. In this tool, the subjects have to think about each relevant aspect of that issue for themselves and weight these aspects according to their personal relevance. After this stage, the ambivalence levels of the participants are measured by asking about their positive and negative evaluations of the UBI and the CI. In stages five to eighth, the groups have to discuss 30 minutes about the implementation of the UBI. The discussion is held in a computer chat room that is relatively unconstrained in the sense that no moderator controls the course of the discourse. Within the chat, the participants interact anonymously

with gender-neutral names to exclude factors of social proximity and distance. They can leave the chat ahead of time; however, the longer they stay in the chat room, the more money they get for their participation in the experiment. If some individuals indicate that they want to leave the chat, the payment clock stops for these persons, and the other group members are informed about group members leaving the chat. The individuals who exited the chat are still allowed to read the comments made by other group members but not to participate in the chat anymore. They can annul this decision at any time; then, the payment clock continues, and the subject can participate again in the chat. If all group members announce their willingness to leave, the chat is ended. After deliberation, the individuals have to vote anonymously for one welfare model using a majority voting rule. The rest of the stages consist of the presentation of the election results, questions about the satisfaction with these voting results, questions about attitude transformations, questions about the discourse quality, questions about the perceived disagreement, questions about the knowledge of the individuals, questions about the political orientations of the individuals and information about the payoff. After the experiment ends, a short oral debriefing is offered to the participants. The two treatment conditions differ insofar as the AHP-stage is only completed by the groups in the AHP treatment. Detailed documentation of the computer experiment can be found in Appendix 3.

#### 4.2 Analytic Hierarchy Process of Decision Making (AHP)

The experiment induces systematic processing with an Analytic Hierarchy Process (AHP) tool. AHP was developed by Thomas L. Saaty (1980) and is a "multicriteria decision aid" (MCDA; De Montis et al., 2000) that helps individuals or groups to make decisions when there are multiple and conflicting decision criteria – with the help of mathematics. The AHP is a systems approach to problem solving and as such it consists of an evaluation of the relative impact of the components of a system on the entire system (Saaty, 1980). It works with decomposition and synthesis, which were referred to by Saaty (1980) as the fundamental processes of human perception. The complexity of a specific issue is decomposed, and all criteria brought in a hierarchical order that should be an abstraction of the structure of the system in question (Saaty, 1980). With the help of pairwise comparisons, an individual or a group can derive numerical priority measures for all criteria and a numerical priority

measure<sup>15</sup> for the alternatives in question. The advantage of pairwise comparisons is that one can focus exclusively on the relation of two objects at a time. Thus, a priority measure can even be obtained for intangibles like social values (Saaty, 2008; Saaty, 1980).<sup>16</sup>

In sum, the AHP tool consists of the following steps (Saaty, 2008):

- 1 Define the problem and determine the kind of knowledge sought.
- 2 Structure the decision hierarchy from the top with the goal of the decision, then the objectives from a broad perspective, through the intermediate levels (criteria on which subsequent elements depend) to the lowest level (which usually is a set of the alternatives).
- 3 Construct a set of pairwise comparison matrices. Each element in an upper level is used to compare the elements in the level immediately below with respect to it.
- 4 Use the priorities obtained from the comparisons to weigh the priorities in the level immediately below. Do this for every element. Then for each element in the level below add its weighted values and obtain its overall or global priority.

Continue this process of weighing and adding until the final priorities of the alternatives in the bottom most level are obtained. (p. 85)

In this study, steps one and two are prepared by the experimenter. Step three is conducted by the participants, and step four is dropped because it is not needed to answer the research questions.

#### Step 1: Issue. Unconditional Basic Income (UBI)

In this experiment, the subjects have to deliberate about the distribution of a common good in the broadest sense. They have to decide between two prescribed welfare state models,<sup>17</sup> namely whether to implement the UBI<sup>18</sup> or to stay with the CI. Hereby, the unconditional aspect of the UBI is emphasised. The participants are told to focus on the aspect that these two models differ insofar as that within the UBI the welfare benefits do not rely on the recipient's willingness to work, which implies that the welfare benefit of the UBI should be high enough so that nobody will be indirectly forced to work.

<sup>&</sup>lt;sup>15</sup> The results of the comparisons are entered in reciprocal matrices, where a quantified ranking of the alternatives is calculated with the normalized principal eigenvector (Saaty, 1980).

<sup>&</sup>lt;sup>16</sup> The conducted pairwise comparisons must not always be logically consistent. Especially in social sciences, the properties and meanings change in time, in space and in conjunction with other properties. Therefore the AHP provides a measure of cardinal consistency in the strength of preference (Saaty, 1980). With the help of the maximum eigenvalue approach a consistency index is calculated for the preference ratings of a person which then is compared with a an index value that would have happened when there were unrelated/random judgments (Saaty, 1980).

<sup>&</sup>lt;sup>17</sup> By welfare state, I understand the common textbook definition of a state that incorporates the "responsibility for securing some basic modicum of welfare for its citizens" (Esping-Andersen, 2006, p. 161).

<sup>&</sup>lt;sup>18</sup> For Van Parijs (2001), an universal basic income is an is "an income paid by a government, at a uniform level and at regular intervals, to each adult member of society. The grant is paid, and its level is fixed, irrespective of whether the person is rich or poor, lives alone or with others, is willing to work or not. In most versions – certainly in mine – it is granted not only to citizens, but to all permanent residents." (p.5). But there are many different conceptions of how this basic income should look like in detail (De Wispelaere & Stirton, 2004).

This unconditional aspect of the UBI might be the most controversial of all and is one of the main questions of welfare states (Esping-Andersen, 2006). Since the approval or disproval of the UBI cannot be easily inferred from the ideological position or group membership (Blaschke et al., 2010), this topic is expected to offer enough scope for the discourse.

#### **Step 2: Hierarchy**

Figure 1shows the constructed AHP hierarchy of this experiment. At the top of the hierarchy is the goal: The decision for a welfare distribution model (conditional or unconditional); in the second level of the hierarchy are the criteria for the decision, the third and the fourth level contain the respective subcriteria; the alternatives are found in the bottom. This list of aspects is not comprehensive, but it contains the most salient considerations regarding welfare redistribution. Although unambiguous concepts are necessary for scientific research, in this experiment, the concepts are kept as ambiguous as possible: For each of the values and interests countless questions arise, and most of these values and interests can be used for and against the UBI. The detailed list will be discussed in the following paragraphs. It should be noted that these categories are not independent of each other but interact closely.

#### a) <u>Values</u>

For the welfare state is centrally an expression of certain ethical ideals. (...) The political philosopher cannot say in detail what welfare states should look like. But she can certainly clarify the normative terrain of debate and, in this way, assist democratic citizens in deciding between different welfare state futures. (White, 2010, p. 19)

In the following, the fundamental values that are tangled by redistributive questions are presented.

#### **Distributive Justice**

The welfare state is primarily defined by its emphasis on redistribution. As redistribution always strives on distributive justice principles, this work concentrates mainly on the values regarding the distribution of conditions and goods that affect the individual well-being.



**Figure 1: AHP Hierarchy** 

# Deutsch (1975) listed the key values regarding distributive justice, which are repeatedly mentioned in the literature:

- $(\dots)$  the treatment of all people:
- 1. so that all receive outcomes proportional to their inputs.
- 2. as equals.
- 3. according to their needs.
- 4. according to their ability.
- 5. according to their efforts.
- 6. according to their accomplishments.
- 7. so that they have equal opportunity to compete without external favoritism or discrimination.
- 8. according to the supply and demand of the market place.
- 9. according to the requirements of the common good.
- 10. according to the principle of reciprocity.
- 11. so that none falls below a specified minimum.
- (p. 139)

These perceptions of distributive justice can be subsumed in three main principles, which may conflict with one another: Need satisfaction, equity, and equality (Deutsch, 1975).<sup>19</sup> Liebig and Sauer (2013) added the distributive principle entitlement to this list. Their extended list is used in this experiment to form the subcategories of distributive justice.

#### Liberty

According to White (2010), the debate of welfare states in its early emergence was often structured around a dispute between positive and negative conceptions of liberty. Liberty is also said to be one of the main points in the debate about the UBI (Fromm, 1966). Negative liberty is defined by the absence of interferences, id est force and coercion, by others (White, 2010). Positive liberty, on the other hand, is rather seen in the light of capability for self-development (White, 2010). Both conceptions can be used for and against the UBI. For example, while some scholars argue that coercive redistribution is an assault on negative liberty, others argue that a lack of income and wealth limits negative liberty and solely a minimum income would guarantee a minimum degree of negative liberty (White, 2010). Thus, liberty it is an important aspect in the discourse about UBI and needs to be included in the AHP hierarchy.

<sup>&</sup>lt;sup>19</sup> Deutsch (1975) says: "The most needy may not be the most able, those who work the hardest may not accomplish the most, equal opportunity may not lead to equal reward, treating everyone as equals may not maximize the common good" (Deutsch 1975, p. 140).

And Konow (2000) states: "Note that the pursuit of one principle may coincide or conflict with the pursuit of another, depending on the context. For instance, a productivity-based pay system may satisfy both the Accountability Principle by rewarding harder workers as well as the Efficiency Principle by promoting the greatest total output. On the other hand, that same pay system may conflict with the Accountability Principle if productivity differences are due more to differences in innate ability than in work effort or with the Needs Principle if efficient compensation is insufficient to meet the basic needs of some workers. When justice principles do conflict, one must judge the relative importance of each" (p. 139).
#### **Helping the Poor**

The main difference between the CI and the UBI is their different position about means testing. Proponents of both the UBI and the CI use this aspect as a main argument to defend their positions (Korpi & Palme, 1998; Manza, 1995; Van Parijs, 2004; White, 2010). Although it could also be seen within the need satisfaction category, I decided to use it as a category of its own to separate the voluntary aspect of charity from the right to need satisfaction (Raymond et al., 2009). Hence, helping the poor represents the third core value in the discourse about UBI.<sup>20</sup>

## b) Interests

Individuals do not only consider their fundamental values for a welfare program choice; they also are driven by self-interest (Konow, 2001). For Arts and Gelissen (2001), self-interest even seems to be the most important individual factor that influences solidarity and justice principles. Interests can be seen as a kind of rational choice and represent the thoughts of a Homo Oeconomicus who seeks his or her own advantage (Grant, 2008; Hirschman, 1997). This must not always be seen in a negative view: Self-interest is unassailable as a legitimate goal of human conduct since it is tied to the material necessities of self-preservation (Grant, 2008). The subjective well-being is not only advantageous for an individual, but also for the functioning of a group, since there is a positive, circular relation between the former and the latter (Deutsch, 1975).

For the AHP hierarchy, I subdivided self-interests in three general motives that are inspired by Liebig and Sauer (2013): (1) subjective well-being, (2) solid environmental conditions, and (3) loss aversion.

#### **Subjective Well-being**

In the Social Production Function (SPF) theory, well-being is the central goal of human activity (Ormel et al., 1999). The Social Production Function is a hierarchical model that draws on economic as well as on psychological theories and sees humans as "active agents

 $<sup>^{20}</sup>$  Due to a programming error, helping the poor was not included in the final comparisons of the alternatives with regard to the aspects. Although this aspect was included in the hierarchy presented in the introduction sheet (Appendix 1) and in the comparisons of the different aspects in the AHP treatment, it can be expected that the results will be marginally biased because the participants spent less time thinking about helping the poor than about other aspects.

who rationally choose cost-effective ways to produce well-being, given that the rational considerations of cost-benefit are limited by available information" (Ormel et al., 1999, pp. 66-67). The overall psychological well-being is a function of physical well-being and social well-being, whereby these two universal goals are accomplished through five main instrumental goals: Stimulation, comfort, status, behavioural confirmation and affection (Ormel et al., 1999). Physical well-being is attained by comfort and stimulation. Social well-being (social appreciation/acknowledgement), on the other side, is attained by status, positive affect, and behavioural confirmation (Liebig & Sauer, 2013; Ormel et al., 1999).

## Solid Environmental Conditions / Security

Solid environmental conditions are necessary for the Social Production Function and ensure expectancy stability and the security of individuals' investments (Liebig & Sauer, 2013).

### Loss Aversion

Individual goals are often only attainable by cooperation with others; this, however, entails the risk that the own cooperativeness is exploited by others (Liebig & Sauer, 2013).

## Step 3 & 4: Pairwise Comparison Matrices & Global Evaluation

After the hierarchy is constructed, all its elements are compared in pairs with respect to their upper levels by the participants (see Stage 3 in Appendix 3). Numbers between two (slight importance) and 9 (extreme importance) are assigned to the criterion that is considered more important in the pairwise comparison, and its reciprocals are assigned to the less important one. If both aspects are equally important, every aspect is quantified by the number 1. The results of these pairwise comparisons are entered in multiple matrices that can be merged to get an overall preference rank of the alternatives in a fourth step. This last step is not conducted in this thesis. Use the data of the experiment can, however, at a later point in time for further analysis.

## 4.3 Central Variables

In the following, the central variables of the experiment will be explained.

#### **Discourse Quality**

To measure the discourse quality, a modified version of the Discourse Quality Index (DQI)

of Steiner et al. (2004) is used. In the original DQI, every uttered speech unit is analysed. However, to stay within a manageable scope only the perceived discourse quality is ascertained as it is proposed by Steiner et al. (2004).<sup>21</sup> The six components of the DQI are asked with the help of 13 differently directed questions that are answered in a random order. Stage 14 (Appendix 3) shows the wording of the questions in the experiment. Hereby, respondents have to rate the quality of the deliberation by evaluating statements in Likert fashion on a 4-point endorsement scale; these statements mostly rely on Caluwaerts and Reuchamps (2014) who applied a perception based macro-analytic approach of the DQI on two deliberative experiments in Belgium.

The advantage of a perception based DQI is its possibility to test authenticity with it. While an external evaluation of truthfulness is hardly feasible and would very likely contain a systematic measurement error (Steenbergen et al., 2003; Steiner et al., 2004), the perception based DQI offers a possibility to face this problem (Bächtiger et al., 2010a). The disadvantage of a perception based DQI, however, lies in the biasedness of self-reports and peerreports as well as in the insufficiency of memories and social desirability factors (Hutzinger, 2014). However, according to Black et al. (2011) and Caluwaerts and Reuchamps (2014), the perception based DQI might be more important than the actual DQI.

#### **Preference Transformation**

To examine preference transformation, three different measures are used. Firstly, a simple attitude change measure calculates the difference between the participants' pre- and post-answers to the simple question whether they want to implement the UBI or stay with the CI. The value 1 is applied to changes from a CI preference to a UBI preference, the value zero to no attitude changes, and the value -1 to changes from a UBI preference to a CI preference.

Additionally, two measures of attitude polarization are used that were proposed by McHoskey (1995) and later applied by Wojcieszak (2011). The first measure is accessed by a self-reported opinion polarization index. Respondents are asked to compare their current attitude toward the UBI with the attitude they had at the start of the experiment. Answers can be given on a 9-point scale ranging from "much more in favour of the unconditional basic income" (see Stage 13 in

<sup>&</sup>lt;sup>21</sup> Bächtiger et al. (2010a) used a perception based component of the DQI to understand attitude change but they only used the justification-component for their investigation.

#### Appendix 3).

The second measure of attitude polarization is directly assessed by evaluating the differences between the strength of the individuals' pre- and the post-attitudes (see Stage 2 and Stage 13 in Appendix 3). This measure relies mainly on the binary index of direct attitude change of McHoskey (1995) and Wojcieszak (2011). McHoskey (1995)<sup>22</sup> calculated a binary index of direct attitude change by assigning 1 to everyone whose posterior opinion was more extreme than his or her initial position and assigning 0 to everyone who did not change their opinion and to everyone who changed their opinion toward the opposite direction. Wojcieszak (2011) additionally assigned 1 to everybody with pre- and post-test scores at the extreme ends of the scale. In this thesis, the binary index is extended into a tripartite index by assigning -1 to everyone whose posterior opinion. The same classification is constructed for the self-reported opinion polarization index.

## The Mediating Role of Ambivalence

According to Priester and Petty (1996), there are two approaches to assess ambivalence. The objective approach combines the positive and negative reactions that individuals hold in mind when they are thinking about an attitude object. The subjective approach, on the other hand, directly asks individuals about their feelings of conflict about the attitude object.<sup>23</sup> This study uses an objective measure of ambivalence.

There are diverse ways to capture ambivalence by an objective approach;<sup>24</sup> this study uses an ambivalence measure that is inspired by the formula proposed by Thompson and Zanna (1995).<sup>25</sup> In their study, respondents had to concentrate only on their positive thoughts, respectively only at their negative thoughts about an issue at different points in time during the experiment.<sup>26</sup> Their measure of the degree of ambivalence (Formula 1) consisted of two parts: In the first part, the similarity between the positive (P) and negative (N) components

<sup>&</sup>lt;sup>22</sup> McHoskey (1995) borrowed it from Tesser (1978).

<sup>&</sup>lt;sup>23</sup> It can be assumed that these two approaches correlate only moderately with each other (Priester & Petty, 1996; Thompson & Zanna, 1995).

<sup>&</sup>lt;sup>24</sup> For an examination of the diverse ambivalence computations see Thompson et al. (1995)

<sup>&</sup>lt;sup>25</sup> Thompson and Zanna (1995) based their ambivalence measure on the ambivalence procedure that was invented by Scott (1966) and later used by Kaplan (1972).

<sup>&</sup>lt;sup>26</sup> Thompson and Zanna (1995):,,Accordingly, respondents concentrated only on the positive (or negative) aspects of each issue and indicated how favorable (or unfavorable) they evaluated each policy, how satisfied (or unsatisfied) they felt toward each policy, and how beneficial (or harmful) they believed each policy to be" (p. 267).

was calculated by subtracting their absolute difference from 4 (id est, 4- |P-N|). In the second part, the intensity of the components was calculated by averaging the positive and negative reactions (id est, P+N)/2).

$$Ambivalence = [4 - |P - N|] + \frac{P + N}{2}$$

#### Formula 1

Thompson and Zanna (1995) rescaled this formula by subtracting 4 from the formula, with the result that the "not at all positive" and "not at all negative" mix obtained an ambivalence score of 1.

$$Ambivalence = \frac{P+N}{2} - |P-N|$$

#### Formula 2

However, since in political decisions ambivalence cannot only exist toward a new policy but also toward the established one, this present study uses an extended Version of Thompson and Zannas (1995) index that is proposed by Basinger and Lavine (2005). Individuals are asked to evaluate how positively and how negatively they think about the UBI and the CI on 4-point scales that ranged from "not negative at all" to "extremely negative" and "not positive at all" to "extremely positive". With these answers, a comparative index according to Basinger and Lavine (2005) is created. <sup>27</sup> This index involves the positive reactions to the UBI ( $P_{UC}$ ), the positive reactions to the CI ( $P_C$ ), the negative reactions to the UBI ( $N_{UC}$ ), as well as the negative reactions to the CI ( $N_C$ ). The average of the positive reactions to the UBI and the negative reactions to CI is defined by D:

$$D = \frac{P_{UC} + N_C}{2}$$

Formula 3

The average of the negative reactions to the UBI and the positive reactions to the CI is defined by R:

<sup>&</sup>lt;sup>27</sup> Basinger and Lavine (2005) did not use scales to measure ambivalence but asked the individuals to tell all positive and negative aspects that are in their mind. However, as this would imply that also the control-group thinks about the topic to some extend systematically I had to use scales to measure ambivalence.

$$R = \frac{P_C + N_{UC}}{2}$$

Formula 4

With D and R, an overall ambivalence index (Formula 5) according to Basinger and Lavine (2005) is created that measures the overall ambivalences of the individuals toward both options:

$$Ambivalence_{comparative} = \frac{D+R}{2} - |D-R|$$

Formula 5

The indices of Formula 2 (Thompson & Zanna, 1995) and Formula 5 (Basinger & Lavine, 2005) range from a value of -0.5 (no ambivalence) to 4 (complete ambivalence). For my analyses, these indices are recoded to range from 0 (no ambivalence) to 1 (complete ambivalence).

#### The Moderating Variable Knowledge

The knowledge about the current Austrian welfare system is tested with the help of five questions (see Stage 16 in Appendix 3). Four of the five questions are coded with 0 (wrong answer) or 1 (right answer). One question is a multiple-choice question and is coded with a value between 0 and 1 that depends on the relative amount of right ticks. With the answers to the five questions, a knowledge index is calculated that ranges between 0 (no right answer) and 5 (every question is answered rightly).

A similar measure of the knowledge about the UBI is not possible because the UBI is not yet applied in any state nor there is one conception of the UBI that is universally accepted. Thus, a perceived knowledge measure that is inspired by Pomerantz et al. (1995) is used. Individuals are asked how informed they feel about the UBI. They can answer on a scale that ranges between 1 (not informed at all) and 7 (very informed). Both knowledge variables are recoded to range from 0 (low knowledge) to 1 (high knowledge).

#### The Moderating Variable Commitment

According to Pomerantz et al. (1995), attitude commitment is considered as a factor that

loads on the attitude attributes certainty and extremity. Therefore, in this study an index is constructed that consists of these two components. The first component contains two attitude certainty indicators that are answered on 4-point scales (see Stage 2 in Appendix 3). These items are inspired by Petrocelli et al. (2007), who claimed that attitude certainty is composed of the two factors attitude correctness and attitude clarity.

The second component consists of a 13 point scale of attitude extremity that was inspired by Pomerantz et al. (1995) and ranges from -6 (very much against UBI) to +6 (very much for UBI). This scale is constructed with the help of two different questions (see Stage 2 in Appendix 3). Firstly, respondents are asked whether they favour or oppose the UBI and then they have to indicate relatively to their former answer on a 6-point scale how much positive or negative they think about the UBI.

## 4.4 Control Variables

In this study, I do not control for socioeconomic variables. The main reason for this decision is that there is not enough data to add further independent variables. However, the omission of control variables is only a minor problem in this study, as these variables might only have little impact on the results. Some Feminists claim that there is a gender inequality in deliberation styles (Mansbridge, 1983, 1998; Mansbridge et al., 2010; Sanders, 1997; Young, 2001). Even in anonymous chat rooms these gender inequalities might hold since women and men differ in their argumentative speaking styles. However, other factors like migration background, work status, and educational level that shape women's participation and experience in deliberation might mitigate or exacerbate their discrimination: "Women with higher status may be better positioned or primed to engage in rational, non-emotive deliberative discourse, in part, because they have had to do so to achieve their success" (Hickerson & Gastil, 2008, p. 286). Since the subjects of this study are all university students, I only expect a marginal – if any – gender effect. In addition, the influence of migration status and mother tongue should be minimal because only students with high language proficiency were allowed to participate in the study. Likewise, as the participants are all students, they should all have similar socioeconomic backgrounds and thus will not show enough variation to control for an influence of these variables on their deliberative skills.

## 4.5 Implementation

Three sessions were run on the days 20/04/15, 8/6/15, and 29/6/15. Recruitment was

organised by Facebook advertisements, advertisements in student job websites and face-toface recruitment in front of the University. Most participants were recruited through student job websites; this method was implemented after the other methods failed to recruit enough participants. In total, 18 individuals participated in the experimental sessions. Additionally, four subjects had to be rejected because there were not enough people to form additional groups. Due to technical problems, one session that consisted of three people had to be removed from the dataset; thus, only the data of 15 individuals is considered in the analyses.

The experimental sessions were held in the Department of Economic Sociology at the University of Vienna. The treatment groups conducted the experiment simultaneously in two separate rooms. In each room, tables were arranged in a circle and thus the participants were able to see each other during the experiment. The rooms differed in size and lighting conditions. These differences were not part of the treatment and rather pragmatic; however, it can be expected that these conditions confound the outcome to a small degree.

After reading the instructions that were printed on paper, the respondents had to complete the experiment on netbooks that were prepared by the experimenter before the arrival of the participants. The sessions lasted approximately 60 minutes in the AHP treatment and 45 minutes in the control treatment. The subjects were paid seven euro for their participation, six euro for staying in the chat room and when a consensus could be reached a bonus of two euro was paid to each group member. The funds were provided by the Institute of Economic Sociology at the University Vienna, headed by Professor Bernhard Kittel.

## **5** Results

In this chapter, the results of two experimental sessions are presented. The analyses are based on 15 units on an individual level that are nested in five units on a group-level. Due to the small number of subjects, no statistical tests could be performed. For the same reason, no multivariate analyses were conducted; hence, the roles of the mediating variable ambivalence and the moderating variables knowledge and attitude commitment could only be assessed vaguely by examining their bivariate relationships with the concerning variables.

## 5.1 Respondents

The participants do not constitute a representative sample of the Viennese student population. The experimental subjects will be described in the following section. This in-formation is crucial, as these details must be kept in mind when interpreting the results.

The study consisted mainly of women. Ten subjects were female, and five subjects were male. The individuals were 24 to 39 years of age with a median age of 25.

Most individuals were studying Business Administration or Management. Although advertisements were mainly posted in Business Administration related forums and although the advertisements emphasized that the study requires only students of Business Administrations, two subjects did not attend a business-related course of study. The subjects studied in a range of 3 to 14 semesters, whereby this distribution was negatively skewed (skewness = -0.65). Nine participants worked alongside their studies and seven participants had a monthly income of less than 800 Euro.

The participants' assessment of the economic situation was prevalently positive. Eleven individuals evaluated the economic situation in Austria positively, and only four evaluated it negatively. The economic situation in the EU, as well as their own economic situation, was judged positively by nine subjects and negatively by six subjects.

Nearly all participants regarded themselves as interested in politics; only one person indicated low interest in political questions. The subjects perceived themselves as politically more left than right (skewness: 0.28). This leftish orientation and the relatively positive evaluation of the economic situation might explain why ten individuals preferred the UBI at the beginning of the experiment. At the end of the experiment, only two groups voted against the UBI – one group in the AHP treatment and one group in the control treatment.

# 5.2 The Influence of Systematic Processing on Discourse Quality

The intent of this thesis was to scrutinize whether systematic processing can improve the quality of a discourse. Since discourse quality can only be measured at a group level, analyses were conducted with only five observations that contained the mean values of the discourse groups. Table 1 shows the mean perceived discourse qualities (DQI) of the AHP and the NO AHP groups. In a range of possible values between 0 (no deliberative quality) and 1 (ideal deliberation), both treatments showed relatively high DQI values. Yet, the AHP groups had a nine percent higher DQI than the control groups. This might not appear as a substantial difference; however, the potential improvement was very restricted by the high baseline quality of 0.79. On that account, it is remarkable that even with this high baseline the discourse quality could still be increased by the AHP treatment.

Table 1: Mean DQI, by Treatment

Values can range from 0 (no deliberative c	juality) and	1 (ideal	deliberation)
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	Count	Mean DQI
AHP	3	0.86
No AHP	2	0.79
Difference		2.83

As deliberation is not a one-dimensional phenomenon, it was necessary to examine every component of it separately. Table 2 shows the mean values of each DQI-component. In a range of possible values between 0 (the aspect did not exist in the discourse) and 1 (the aspect was fully available in the discourse), the AHP groups showed higher discursive qualities in every category than the control groups. The highest differences were observed regarding participation and constructivity, and as expected, truthfulness and common good orientation could only be minimally improved; yet, the lowest difference was observed regarding respect, which is surprising since respect levels were predicted to boost after systematic processing. This discrepancy might be explained by the high baseline levels of respect; since respect showed the highest baseline value of all DQI components, there was little potential for it to improve. Conversely, constructivity and participation showed relatively low baseline values and had more potential to be enhanced by systematic processing than other categories. These results suggest that although the AHP improves every aspect of the DQI, it does not improve every aspect to the same extent; while the different sizes of effects can partially be explained theoretically, it also seems that the magnitude of the improvement depends to a great part on the height of the baseline values.

		Means	
	AHP	No AHP	Difference
Participation	0.93	0.78	0.15
Truthfulness	0.89	0.83	0.06
Justification: Level	0.88	0.83	0.04
Justification: Common Good Orientation	0.83	0.78	0.06
Respect	0.89	0.86	0.03
Constructivity	0.76	0.64	0.12

 Table 2: Influence of Systematic Processing on the Components of the DQI

 Values can range from 0 (the aspect did not exist in the discourse) and 1 (the aspect was fully available in the discourse).

## Ambivalence

The main assumption of this study was that systematic processing improves the discourse quality by raising the individuals' ambivalence levels. As only bivariate analyses could be conducted, this assumption was tested firstly by examining whether the AHP treatment that showed higher DQI levels in the experiment also showed higher ambivalence levels. Additionally, I examined the relationship between ambivalence and discourse quality by comparing the mean discourse qualities of groups with low ambivalence levels with those of groups with high ambivalence levels.

Table 3 shows the combined ambivalence index as well as the ambivalence levels regarding the UBI and the CI. Individuals reported higher ambivalence levels in the AHP treatment than in the control treatment. As the AHP groups also showed higher discourse qualities, ambivalence could indeed play a mediating role in the relationship between systematic processing and discourse quality.

Ambivalence values can range from 0 (no ambivalence) to 1 (complete ambivalence).					
	Count	Ambivalence	Ambivalence UBI	Ambivalence CI	
AHP	9	0.70	0.61	0.74	
No AHP	6	0.65	0.50	0.63	
Difference		0.06	0.11	0.11	

 Table 3: Overall Ambivalence and Ambivalence Regarding the UBI and the CI

 Ambivalence values can range from 0 (no ambivalence) to 1 (complete ambivalence).

The relationship between ambivalence and discourse quality could only be examined by comparing the mean discourse qualities of groups with low ambivalence levels with the mean discourse qualities of groups with high ambivalence levels. Groups with mean ambivalence levels below the median had lower discourse qualities (DQI mean= 0.81, n= 2) than groups with mean ambivalence levels above the median (DQI mean= 0.85, n= 3), suggesting a positive, but minor, influence of high ambivalence levels on discourse quality. Figure 2

depicts the mean qualities for each discourse component separately. It shows that the extent of truthfulness and common good orientation did not substantially differ between the ambivalence groups. However, groups with high ambivalence levels showed considerably higher levels of constructivity and moderately higher participation levels, justification levels and respect levels. Taking these results into account, it can be expected that high ambivalence levels cause slightly higher discourse qualities. This effect is mostly influenced by higher constructivity levels but also by higher participation levels, justification levels and respect levels.



**Figure 2:** Group Ambivalence Levels and Mean Discourse Qualities for Each Category Values can range from 0 (no deliberative quality) and 1 (ideal deliberation).

On a first glance, the discussed data seem to support my hypothesis that systematic processing improves the discourse quality by raising the individuals' ambivalence levels. However, due to the restricted possibilities to test this hypothesis and due to the negligible differences of the discourse qualities, this interpretation is very vague and has to be considered carefully.

# 5.3 The Influence of Systematic Processing on Attitude Change and Attitude Moderation

The second guiding hypothesis concerns the promised outcome of a deliberative process, preference transformation. The question was whether individuals who systematically process the issue-relevant aspects prior to a discourse are more likely to change their minds or at least show less attitude polarization than individuals who enter a discourse without preparation. The first support for this hypothesis is found in the analysis of the election results. All groups were able to reach a consensual decision. This would not have been possible if not five individuals had been willing to vote against their initial attitudes. However, as this could only be the result of strategic voting and not a result of attitude change, I answer this question by firstly providing an overview on the substantial attitude changes that occurred between a pro and a contra attitude, then going into more detail and examining the changes in attitude strengths. Unlike the analyses before, all following analyses are conducted on an individual level, disregarding the multilevel structure of the data.

Table 4 shows the distribution of the pro and contra opinions prior and after the discussion, supplemented by the number of attitude changes. Neither before nor after the discussion had any individual stated to have no preference. By the start of the experiment, ten subjects declared their support for the UBI; when the discourse ended, only eight participants stated their affection to the UBI. In sum, four participants changed their attitudes after the discourse. There was a substantial difference in the amount of attitude changes between the two treatment groups: Individuals in the AHP treatment were nearly two times more likely to indicate a different position after the discussion than individuals in the No AHP treatment. Hence, it can be expected that systematic processing relaxes prior opinions and thus raises the likelihood of a reconsideration of initial attitudes.

Further investigations showed that all attitude changes were directed toward a group election consensus; however, the group consensus was not primarily a result of the initial group majorities, id est the majorities of initial attitudes. Table 5 demonstrates that 50 percent of all attitude changes were directed against the initial majorities, which signifies that in one group of the AHP treatment one individual who was in the minority was able to convince others to change their minds and vote against their initial attitudes. Although this only happened in one group, it can be seen as a first indicator that systematic processing supports one of the most promising aspects of deliberation: That arguments have a bigger impact on a group

#### decision than initial majorities.

			Count	%
AHP	<b>Prior Opinion</b>	Pro UBI	6	67
		<b>Contra UBI</b>	3	33
	<b>Post Opinion</b>	Pro UBI	5	56
		<b>Contra UBI</b>	4	44
	Attitude Change	Pro -> Contra	2	22
		No Change	6	67
		Contra -> Pro	1	11
No AHP	<b>Prior Opinion</b>	Pro UBI	4	67
		<b>Contra UBI</b>	2	33
	<b>Post Opinion</b>	Pro UBI	3	50
		<b>Contra UBI</b>	3	50
	Attitude Change	Pro -> Contra	1	17
		No Change	5	83
		Contra -> Pro	0	0

Table 4: Prior Opinions, Post Opinions, and Attitude Changes

Table 5: Attitude Change to Prior Minorities / Majorities

	Treatment			
		AHP	No AHP	Total
Attitude Change to Prior Minority	Count	2	0	2
	%	22%	0%	13%
No Attitude Change	Count	6	5	11
	%	67%	83%	73%
Attitude Change to Prior Majority	Count	1	1	2
	%	11%	17%	13%
Total	Count	9	6	15
	%	100%	100%	100%

Although it was not part of the main hypotheses, it was assumed that the higher likelihood of attitude change in the AHP treatment is partially mediated by a higher discourse quality (that is caused by higher ambivalence levels). Due to the small number of observations, the role of deliberative quality cannot be examined. However, the data suggest that there might be a mediating effect of discourse quality. Individuals with no attitude change were more likely to be found in groups with relatively low group DQIs (mean DQI= 0.81, n= 11) and individuals who changed their attitudes were more likely to be found in groups with relatively lows, n=4). Thus, there might be an indirect link between systematic processing and attitude change after a discourse quality and attitude

change might only be a spurious one if systematic processing equally influenced both variables. To answer this question, further studies should implement a third treatment without a chat-stage. Due to the restricted possibilities for analyses, I did not further examine the relationship of the attitude transformation variables with discourse quality.

Until now, only substantial attitudes changes between pro and contra UBI attitudes were investigated. However, attitudes can also vary in their strengths. Thus, the question arose whether attitude polarization is rather seen in groups without systematic processing than in groups with systematic processing. Table 6 illustrates the self-reported changes in attitude polarizations for the AHP and the No AHP treatment. Individuals were asked to compare their attitudes after the discourse with their attitudes prior to the discourse on a 9-point scale. This table shows whether they indicated a change in the opposite direction or a strengthening of their initial position, id est whether they indicated attitude moderation or attitude polarization. In the AHP treatment, four individuals moderated their attitudes whilst only three individuals polarized theirs. In the No AHP treatment, in contrast, three individuals polarized their attitudes whilst only one moderated his or hers. Thus, the AHP groups showed a 2.5 times higher proportion of individuals who relieved their prior opinions than the control groups, and individuals in the control groups showed a 1.5 times higher probability of attitude polarization than in individuals in the AHP groups. This moderate correlation (Cramer's V=0.289) serves as a strong advice to assume that systematic processing can reduce attitude polarization after a discourse.

		Treatment		
		AHP	No AHP	Total
Attitude Moderation	Count	4	1	5
	%	44%	17%	33%
No Change in Attitude Strength	Count	2	2	4
	%	22%	33%	27%
Attitude Polarization	Count	3	3	6
	%	33%	50%	40%
Total	Count	9	6	15
	%	100%	100%	100%

Table 6:	Self-Repo	orted Attitu	de Polariz	ation Index

As discussed above, Table 6 shows the self-reported changes in attitude polarization. Table 7 shows the distribution of the same tripartite index; however, this index is grounded on the differences between the strengths of the initial attitudes and the strengths of the posterior attitudes. In the AHP treatment, five individuals moderated their attitudes after the discourse

and only four individuals polarized it. In the No AHP treatment, on the other hand, only one individual moderated his or her attitude whilst five individuals polarized it. Thus, the likelihood to polarize one's attitude was nearly two times higher in the No AHP treatment than in the AHP treatment. Table 7 shows the same pattern as Table 6, however with more subjects showing attitude polarization and with a slightly stronger relationship (Cramer's V= 0.39). This difference might suggest that the participants possessed biased perceptions of their attitude strength changes. However, this difference could also be a result of a measurement error. In the first experimental session, the initial attitudes were measured differently than the posterior attitudes; thus, I had to use percentage differences rather than absolute differences to measure the directly assessed attitude polarization index; as a consequence, this index might be biased.

		Treatment		Tatal
		AHP	NO AHP	Totai
Attitude moderation	Count	5	1	6
	%	56%	17%	40%
No Change in Attitude Strength	Count	0	0	0
	%	0%	0%	0%
Attitude polarization	Count	4	5	9
	%	44%	83%	60%
Total	Count	9	6	15
	%	100%	100%	100%

Table 7: Directly Assessed Attitude Polarization Index

Nonetheless, the analyses of the influence of systematic processing on attitude change and attitude moderation after a discourse suggest that the manipulation of the fundamental psychological processes was able to relax the subjects' opinions and make them more susceptible to counterattitudinal messages. This is of great advantage for deliberation, as an ideal discourse requires that individuals carefully listen to each other and revise their opinions if necessary.

#### Ambivalence

It was assumed that the effect of systematic processing on the likelihood of attitude transformation, i.e. attitude change and attitude moderation, is partially mediated by higher ambivalence levels. To test this assumption, only bivariate analyses between ambivalence and the attitude change and attitude moderation measures could be conducted. These analyses show that individuals who changed their attitudes after the discourse had lower ambivalence levels (mean ambivalence level= 0.64, n = 4) when they entered the discourse than individuals who did not change their minds after the discourse (mean ambivalence level= 0.69, n =11). This contradicts my major assumption of ambivalence being a mediator between systematic processing and attitude change. However, as only four individuals indicated to have changed their attitudes, more observations need to be made to make valid assumptions about this relationship.

According to the directly assessed tripartite attitude polarization index, individuals who moderated their attitudes showed higher ambivalence levels (mean ambivalence level = 0.69, n = 6) than individuals who polarized their initial opinions (mean ambivalence level= 0.67, n = 9). Albeit this effect is diminutive, it supports my hypothesis that ambivalence raises the likelihood of attitude moderation. Contrary to this finding, the self-reported attitude polarization index showed lower ambivalence levels for individuals who moderated their initial attitudes (mean ambivalence level= 0.68, n= 5) than for individuals who polarized their opinions (mean ambivalence level= 0.79, n=6). Interestingly, individuals who stated that they did not change their opinion at all had the lowest level of ambivalence (mean ambivalence level= 0.52, n=4). This could be an indicator that individuals who are ambivalent prior to a discussion use the incoming information to both strengthen their initial opinions as well as to reduce them. My hypothesis of ambivalence fostering attitude moderation, however, cannot be supported by the data.

## 5.4 Knowledge

To evaluate each aspect of a decision, individuals must have the necessary information to do so. If this knowledge is not available, individuals are forced to use the same heuristic for each category and are thus prone to attitude polarization. Therefore, knowledge was assumed to be one important moderating variable that can reverse the effect of systematic processing on ambivalence (Barker & Hansen, 2005; Lavine et al., 2000; Millar & Tesser, 1986; Rudolph & Popp, 2007; Shaffer & Tesser, 1990; Tesser & Leone, 1977; Tetlock, 1989).

Figure 3 demonstrates the influence of the individuals' knowledge about the current social security system on their ambivalence levels. It shows a positive relationship in the AHP treatment and a negative relationship in the No AHP treatment, indicating that systematic processing only causes knowledgeable individuals to develop higher levels of ambivalence. For individuals with less knowledge, systematic processing more likely reduces ambivalence levels. This finding reproduces prior observations by Linville (1982) and Barker and Hansen

(2005), who report that systematic processing can only be conducted by individuals who are knowledgeable enough to evaluate the relevant criteria without using simple heuristics.



**Figure 3: Influence of Knowledge about the Current Social Security System on Ambivalence** Ambivalence values can range from 0 (no ambivalence) to 5 (complete ambivalence). Knowledge values can range from 0 (no correct answer) to 5 (all questions were answered correctly).

Because the knowledge questions were specific to the Austrian social security system, some participants complained after the experiment that the questions were too difficult to be answered by foreigners. As we can see in Figure 4, this is somehow true as the highest knowledge score was only achieved by an Austrian. However, also the worst rating was achieved by an Austrian. In the mean, Austrian and Non-Austrian students did not differ substantially in their knowledge about the Austrian social security system. Nevertheless, this critique must be held in mind when examining the moderating influence of knowledge.

Additional to their knowledge about the Austrian social security system, individuals were asked to evaluate their knowledge about the UBI (Figure 5). Their perceived knowledge negatively affected the individuals' ambivalence levels in each treatment; however, this relationship was not very pronounced in the AHP treatment. The figure demonstrates that

Figure 4: Knowledge Distribution, by Citizenship



**Figure 5: Influence of Perceived Knowledge about the UBI on Ambivalence** Ambivalence values can range from 0 (no ambivalence) to 1 (complete ambivalence). Perceived knowledge can range from 0 (low knowledge) to 1 (high knowledge).



not only the actual knowledge about the CI in Austria but also the perceived knowledge

about the UBI moderated the influence of systematic processing on ambivalence: The AHP treatment only caused higher ambivalence levels when individuals perceived their knowledge as relatively high. For individuals with low perceived knowledge of the UBI, the AHP treatment even caused reduced ambivalence levels.

## 5.5 Attitude Commitment

The second moderating variable that is thought to influence whether systematic processing can increase ambivalence and thus enhance deliberative processes is attitude commitment. It is one aspect of attitude strength and is thus closely connected to ambivalence (Agrawal & Maheswaran; Rudolph & Popp, 2007). It was expected that, if individuals are very committed to their prior attitudes, they will evaluate every aspect of the AHP tool in favour of these initial opinions. Figure 6 shows that albeit a substantial negative influence of attitude commitment on ambivalence exists (the higher the attitude commitment, the lower the ambivalence level), the extent of the individuals' attitude commitment did not change the influence of the AHP treatment on the individuals' ambivalence levels. At each level of attitude commitment, individuals were more ambivalent in the AHP treatment than in the No AHP treatment. Thus, attitude commitment did not moderate the relationship between systematic processing and ambivalence; it rather seems to play a major role as a predictor of ambivalence in general.

## 5.6 Summary of the Results

The examination of the data supports my first guiding hypothesis that assumes that systematic processing raises the discourse quality of a deliberative group decision process. Groups in the AHP treatment showed higher DQI levels than groups who entered the discourse without systematic processing. The mediating role of ambivalence could only be inferred indirectly. I observed both higher ambivalence levels and higher discourse quality levels in the AHP treatment than in the No AHP treatment. Additionally, groups with high mean ambivalence levels showed also higher discourse qualities than groups with low mean ambivalence levels. Thus, I assume that ambivalence plays a mediating role in the effect of systematic processing on discourse quality.

Systematic processing also seems to raise the probability of attitude change and attitude

#### Figure 6: Influence of Attitude Commitment on Ambivalence

Ambivalence values can range from 0 (no ambivalence) to 1 (complete ambivalence). Commitment values can ranges from 0 (low commitment) to 1 (high commitment).



moderation after a discourse. Individuals in the AHP treatment were more likely to change their attitudes or at least moderate them. However, it is not clear whether ambivalence was the mediating factor in these relationships. Individuals in the AHP treatment showed higher ambivalence levels as well as higher chances of attitude change and attitude moderation. Yet, the bivariate relationships of ambivalence with attitude change and attitude moderation did not show a coherent picture. Albeit the directly assessed attitude polarization index seemed to support my mediator hypothesis – individuals who moderated their attitudes had higher ambivalence levels than individuals who polarized their initial attitudes -, this result might be biased because of a measurement error. The two other attitude transformation measures both contradict the mediator hypothesis. Contrary to my assumptions, individuals who changed their minds after the discourse had lower ambivalence levels than individuals who did not change them. Additionally, individuals who stated that they moderated their initial attitudes also had lower ambivalence levels than individuals who polarized them. Interestingly, individuals who stated that they did not change their attitude strength had the lowest ambivalence values. These findings could be an indicator that individuals who are ambivalent prior to a discussion use the incoming information to both strengthen their initial

attitudes and change their initial attitudes. However, this finding, as well as the mediator hypothesis, has to be examined more elaborately in further examinations.

I assumed that knowledge and attitude commitment would moderate the influence of systematic processing on ambivalence and consequently the influence of systematic processing on discourse quality. The bivariate analyses of the interaction of knowledge with ambivalence support this assumption. Individuals with low knowledge about the CI in Austria and low perceived knowledge about the UBI showed lower ambivalence levels, instead of higher ambivalence levels, after the AHP. This suggests that low knowledgeable individuals are more likely to process every category of the AHP heuristically and thus have lower ambivalence levels than individuals with high knowledge. Attitude commitment, on the other side, did not change the effect of systematic processing on ambivalence.

# 6 Summary and Conclusion

In this thesis, I examined whether prior systematic processing can improve deliberative group decision processes and whether it can raise the probability that its participants change their attitudes or at least moderate them in the course of the discourse. I based my study on Barker and Hansen (2005), who observed that systematic processing reduces preference strength, preference consistency, vote predictability and vote intention of knowledgeable voters – whereby these effects were mostly reversed for unknowledgeable voters. The authors suggested that systematic processing induces a higher belief complexity, a concept similar to ambivalence that results more likely in perplexity than clarity. Due to these paralysing effects, it can be inferred that systematic processing has severe consequences for mere aggregative forms of democratic decision making.

However, I assumed that for deliberative group decision making processes the caused ambivalence might be of advantage as it raises the extent of further systematic processing (Krosnick et al., 1993; Maio et al., 1996; Wood et al., 1985), causes attitude moderation (Krosnick & Abelson, 1992; Krosnick et al., 1993; Linville, 1982; Linville & Jones, 1980; Visser et al., 2006) and raises the likelihood of individuals to be persuaded by stronger arguments (Eagly & Chaiken, 1995; Hodson et al., 2001; Krosnick et al., 1993; Maio et al., 1996). Due to these mechanisms, systematic processing was expected to increase the quality of a discourse and the likelihood that its participants change their minds or at least moderate them thereafter. However, it was thought that systematic processing does not always result in higher ambivalence levels. Low knowledge and high attitude commitment were both considered to hinder successful systematic processing by suggesting the same heuristic for every issue relevant aspect (Barker & Hansen, 2005; Lavine et al., 2000; Shaffer & Tesser, 1990); hence, I inferred that the attitudes of unknowledgeable and high committed individuals would rather polarize than moderate after AHP.

To test my hypotheses, I designed a computer laboratory experiment in which individuals had to decide within groups of three whether to implement the UBI or to maintain the CI. Its results mostly support my hypotheses. AHP could raise the ambivalence levels of the participants, raise the discourse qualities, and raise the likelihood to moderate and change the individuals' attitudes after the discourse. Whether systematic processing resulted in higher ambivalence relied on the knowledge of the participants. For individuals with low knowledge about the CI and low perceived knowledge about the UBI, systematic processing

did not foster ambivalence but reduced it. Attitude commitment, on the other hand, did not influence the effect of systematic processing on ambivalence. Nonetheless, it was an important variable in the prediction of ambivalence. A scrutiny of the role of ambivalence, however, yielded ambiguous results. As predicted, ambivalence seemed to partially mediate the influence of systematic processing on discourse quality. However, high ambivalence was more likely to cause attitude polarization instead of moderation. Simultaneously, high ambivalence also hindered attitude changes throughout the discourse. Thus, my assumption that ambivalence mediates the influence of systematic processing on attitude transformation after a discourse is not supported by the data.

Several limitations to my study have to be considered when interpreting these results. Like in all laboratory experiments, the external validity of this study is very low. External validity suffers especially from the artificial nature of the laboratory settings that reduces the generalizability of the results to different situations, as well as from the restricted and biased nature of the sample that reduces its generalizability to different populations (McDermott, 2011). In general, there is only weak evidence of cross-situational consistency of behaviour - not only in experiments (Levitt & List, 2007). However, some drawbacks are especially endogenous to lab experiments since these experiments mostly do not resemble real world settings (Levitt & List, 2007). Additionally, the absence of anonymity might influence the behaviour of the subjects. Although anonymity is promised to the participants, they often know that it is relatively easy for an experimenter to link the identity of a subject with its choices (Levitt & List, 2007). In my special setting, it is also not difficult for the subjects to identify their group members and being identified by them. The "Hawthorne effect" might play a crucial role at this point as surveillance can change the behaviour of the observed participants (McDermott, 2011). As a result, individuals are thus more pro-social and show more cooperative behaviour in experimental laboratory settings than in natural environments (Levitt & List, 2007). However, since deliberative settings are per se never anonymous, this fact does not impose a major threat to the generalizability of my findings to different situations. The most important impediment to the generalizability to different situations might be that the decision situation differs considerably from decision situations in real life. The group decision is just a hypothetical one, and it is quite improbable that any group in real life must reach a consensus decision on a redistributive question within 30 minutes.

The generalizability of my results to different populations is constrained by the small sample size and the restricted sample population. Like in most laboratory experiments, subjects self-

selected into the experiment (Levitt & List, 2007). Since individuals who apply to experiments seem to be more cooperative than those who do not want to participate (Levitt & List, 2007), there might be a self-selection bias toward more cooperative behaviour. Additionally, the sample only contained students. As individuals with higher educational background are more inclined to deliberate (Sanders, 1997; Young, 2000, 2001), the effect of systematic processing should also be examined within other populations. Nevertheless, as a start of the examination of this problem it was important to keep the sample as homogenous as possible to reduce the influence of educational levels and other confounding variables.

The drawbacks in external validity are the trade-off for high internal validity (Kanitsar & Kittel, 2015). Due to their artificiality, experiments are able to find significant effects of a stimulus by isolating extraneous factors; thus, they can provide unequivocal causal evidence (Campbell, 1988; Iyengar, 2011; McDermott, 2011). After this causal effect is identified, subsequent tests with numerous variations can identify the conditions under which an effect takes place to raise external validity (McDermott, 2011).

Internal validity is intrinsically tied to experimental realism (McDermott, 2011) that I tried to enhance by choosing a discourse topic that promises high psychological engagement. As all groups intensively used all 30 minutes of the chat to discuss the decision, there is no reason to assume that there was not enough engagement with the topic. The psychological engagement with the AHP treatment on the other side was lower than I expected. On average, the subjects only spent 9.5 minutes in the treatment, meaning that the average time spent on each question was less than 17 seconds. A variation of the AHP treatment that forces the individuals to think prolonged about the aspects could hence cause diverging outcomes.

To achieve high internal validity, it is also important to isolate the causal effects from intervening influences. However, like Barker and Hansen (2005), I assume that it is likely that some participants in the control treatment had already engaged in systematic processing about the UBI before they entered the experiment. If so, the real effects of systematic processing on discourse quality, attitude change and attitude moderation may be underestimated. Furthermore, the context of the experiment cannot be completely controlled by the experimenter (Levitt & List, 2007): How I promoted my experiment, how the experimenters communicated with the respondents, how the experimenters looked like, how the atmosphere of the rooms was constructed, how the subjects interacted before the start of the experiment – all these factors might influence the internal validity of my experiment. Nonetheless, as treatment assignment is conducted randomly, these influences except the difference in room constitution should be evenly distributed in both treatments after further sessions with more participants.

Despite these limitations, this master's thesis is an important input for the current literature about deliberation. Deliberation promises advantages for individuals as for political communities (Karpowitz & Mansbridge, 2005). However, maladjusted deliberation can result in severe outcomes like the amplification of social conflicts (Karpowitz & Mansbridge, 2005; Mansbridge, 1983; Mendelberg & Oleske, 2000), and it is therefore necessary to investigate the requirements for successful deliberation to avoid these. The understanding of the cognitive processes of the discourse participants is one of the key factors in this undertaking. Although more observations are needed to make significant statements, this study suggests that prior systematic processing can improve a deliberative process and can motivate individuals to reconsider their prior attitudes. Additionally, it indicates that systematic processing can be induced with the help of AHP. Thus, this tool could be used prior to deliberative encounters to enhance their discursive qualities, improve their promised outcomes, and prevent major social conflicts.

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Bitte sprechen Sie nicht mit den anderen Teilnehmerinnen und Teilnehmern!

Sehr geehrte Teilnehmer und Teilnehmerinnen!

2014 gab es in ganz Europa eine Volksinitiative über die Einführung eines <u>bedingungslosen</u> <u>Grundeinkommens.</u> Das Grundeinkommen sollte universell, individuell, bedingungslos und hoch genug sein, um eine gesellschaftliche Teilhabe aller Personen zu gewährleisten.

Es gibt verschiedene Vorstellungen, wie dieses Grundeinkommen umgesetzt werden sollte, aber meist handelt es sich um die Forderung nach einem steuerfreien Einkommen, welches jeder Person, egal wie jung oder alt, reich oder arm, aktiv oder untätig, zusteht – und das ohne Bedürftigkeitsprüfung. Wie hoch das Grundeinkommen sein soll, ist oft unklar, jedoch wird gefordert, dass es so hoch sein sollte, dass die materielle Existenz und die gesellschaftliche Teilhabe auch ohne Erwerbsarbeit gesichert sind.

Das Grundeinkommen ist eine Möglichkeit, wie in einem Wohlfahrtsstaat (=Sozialstaat) Einkommen und Vermögenswerte umverteilt werden können. Im derzeitig in Österreich herrschenden Modell gibt es eine <u>leistungsorientierte Sozialhilfe</u>, was bedeutet, dass staatliche Beihilfen anhand bisheriger Arbeitsleistungen berechnet werden und arbeitsfähigen Personen nur dann ausbezahlt werden, wenn eine Bereitschaft, Arbeit anzunehmen, besteht.

Diese Studie bezieht sich auf die Debatte, ob ein bedingungsloses Grundeinkommen eingeführt werden sollte oder nicht. Ihre Ergebnisse sollen veröffentlicht werden und könnten somit in die Debatte einfließen.

#### Die Aufgabe:

In dieser Studie interessieren wir uns für Entscheidungen in Gruppen. Deswegen werden wir Sie im Folgenden bitten, mit 2 anderen Teilnehmern und Teilnehmerinnen in einem Computerchat darüber zu diskutieren, ob das bedingungslose Grundeinkommen eingeführt werden sollte oder nicht eingeführt werden sollte. Im Anschluss wird anhand des Mehrheitswahlrechts darüber abgestimmt.

Wichtig: Konzentrieren Sie sich hierbei auf den Aspekt der Bedingungslosigkeit.

Bedingungslosigkeit bedeutet, dass die Auszahlung des Grundeinkommens von keinen Bedingungen abhängig sein darf. <u>Vor allem, dass keine Verpflichtung eine bezahlte oder unbe-</u> zahlte Arbeit anzunehmen bestehen darf.

Vor und nach der Gruppendiskussion werden wir Sie bitten, Fragen zu diesem Thema zu beantworten. Wenn Sie eine Frage nicht eindeutig beantworten können, kreuzen Sie an, was nach Ihrem Gefühl am ehesten passt. Nehmen Sie sich ausreichend Zeit dafür. Da Sie auf Ihre Mitspieler und Mitspielerinnen warten müssen, können Sie die Dauer der Untersuchung nicht beeinflussen. Je nachdem, wie schnell Ihre Gruppe ist, wird die Studie 1,5 bis 2 Stunden dauern.

#### Die verschiedenen Aspekte des Wohlfahrtsstaates vergleichen

Wenn man über Wohlfahrtsstaaten und ihre vielfältigen Ausprägungen nachdenkt, kann man verschiedene Gesichtspunkte in Betracht ziehen. Ein großer Teil dieser Studie besteht daraus, jeweils zwei verschiedene Aspekte miteinander zu vergleichen. Hierbei sollen Sie angeben, welcher Aspekt Ihnen in Bezug auf die jeweilige Fragestellung wichtiger ist – und wie viel Ihnen dieser Aspekt wichtiger ist.

Es wird insgesamt 33 Vergleiche geben. In der Abbildung auf Seite 3 sehen Sie, wie diese Vergleiche aussehen werden:

Der erste Bereich gibt Ihnen einen Überblick über bereits durchgeführte Gegenüberstellungen.

Im zweiten Bereich des Bildschirms befindet sich die Fragestellung, in Bezug derer Sie die Aspekte vergleichen müssen. Die Fragestellung ändert sich im Laufe der Zeit.

Im dritten Bereich befinden sich die Antwortmöglichkeiten. Die jeweiligen Zahlen bedeuten, wie sehr Ihnen ein Aspekt - im Hinblick auf die betreffende Fragestellung - wichtiger erscheint als der andere. Wenn Ihnen der linke Aspekt wichtiger erscheint, geben Sie bitte eine der Zahlen links vom Gleichzeichen ein. Wenn Ihnen der rechte Aspekt wichtiger erscheint, geben Sie eine der Zahlen rechts vom Gleichzeichen ein. Wenn Ihnen beide Aspekte gleich wichtig erscheinen, geben Sie das Gleichzeichen ein. Die Zahlen stellen die Stärke der relativen Wichtigkeit dar. Über den Zahlen können Sie die Bedeutung der Zahlen ablesen. 9 bedeutet beispielsweise, dass Ihnen ein Aspekt sehr viel wichtiger ist, als ein anderer.

Im vierten Bereich sehen Sie die Erklärungen zu den jeweiligen Aspekten. Diese Erklärungen finden Sie auch in den Seiten 5 und 6 aufgelistet, damit Sie diese bei Bedarf nachschlagen können. Beachten Sie, dass diese Erklärungen sehr verkürzt sind. Des Weiteren hängen

Seite2/6



#### Ihr Verdienst

Die Höhe Ihrer Auszahlung ist von den Entscheidungen abhängig, welche Sie gemeinsam mit Ihrer Gruppe fällen.

- Sie bekommen f
  ür diese Studie eine Show-Up Fee in der H
  öhe von 7 Euro ausbezahlt.
- Die Gruppendiskussion im Chat dauert längstens 30 Minuten. Sie können den Chat bereits vor Ablauf der Zeit abbrechen, wenn sich alle Gruppenmitglieder dazu bereit erklären. Für jede Minute, die Sie jedoch im Chat verbringen, bekommen Sie 20 Cent. Dies ergibt für eine 30-minütige Diskussion 6 Euro.
- Sollten Sie mit Ihrer Gruppe eine einstimmige Entscheidung treffen, bekommt jedes Gruppenmitglied zusätzlich 2 Euro ausbezahlt.

Insgesamt können Sie somit bis zu 15 Euro verdienen.

Seite3/6

#### Anonymität

All Ihre Eingaben werden anonymisiert. Ihre Gruppenmitglieder erfahren nur, was Sie unter Ihrem Pseudonym im Chat-Room äußern und ob sie den Chat-Room (nicht) verlassen wollen.

### Offene Fragen?

Wenn Sie Fragen haben, heben Sie bitte Ihre Hand. Die Studienleiterin wird zu Ihnen kommen, und Ihnen die Frage beantworten. Für die wissenschaftliche Auswertbarkeit der Daten ist es von Bedeutung, dass Sie außerhalb des Chat-Rooms nicht mit Ihren Gruppenmitgliedern kommunizieren!

Nachdem Sie die Anweisungen gelesen haben, drücken Sie bitte auf OK.

Seite4/6

### Überblick über die Aspekte

Bitte aufgedeckt lassen!

- Persönliche Werte: Ihre persönlichen Vorstellungen von Verteilungsgerechtigkeit, Freiheit und Unterstützung von Hilfsbedürftigen.
  - 1.1. **Verteilungsgerechtigkeit:** Gerechte Verteilung des gesellschaftlichen Wohlstandes. Es gibt vier verschiedene Prinzipien von Verteilungsgerechtigkeit:
    - a. Beitragsprinzip: Verteilung entsprechend der individuellen Beiträge.
    - b. <u>Gleichheitsprinzip</u>: Gleiche Erträge für alle Gesellschaftsmitglieder.
    - c. <u>Bedarfsprinzip</u>: Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).
    - d. <u>Anrechtsprinzip</u>: Verteilung entsprechend der zugeschriebenen oder erworbenen Statusmerkmale wie Geschlecht, Ausbildungsabschluss, Beruf oder Herkunft.
  - 1.2. **Freiheit**: Die Abwesenheit von Zwängen und/oder die Möglichkeit zur Selbstverwirklichung. Es gibt zwei verschiedene Vorstellungen von Freiheit:
    - <u>Negative Freiheit:</u> Die Abwesenheit von Zwängen oder Hindernissen, die einem Individuum von anderen auferlegt werden. – "Freiheit von etwas".
    - <u>Positive Freiheit:</u> Die Freiheit zur Selbstverwirklichung. Kontrolle über das eigene Leben zu übernehmen und die eigenen Ziele verfolgen zu können. – "Freiheit zu etwas".
  - 1.3. Unterstützung von Hilfsbedürftigen: Hilfe für Personen, die sich nicht selbst helfen können.



2.1. Subjektives Wohlbefinden: Zufriedenheit mit dem eigenen Leben.

- <u>Körperliches Wohlbefinden:</u> Die Sicherstellung des eigenen körperlichen Wohlergehens durch Aktivität und Komfort.
  - Aktivität: Körperliche und mentale Aktivitäten, welche Begeisterung, Spannung und Neugierde produzieren – wie zum Beispiel Sport und Arbeit.
  - Komfort: Körperliche, als auch psychologische Zustände, welche sich durch eine Abwesenheit von Hunger, Durst, Schmerz, Erschöpfung und dergleichen auszeichnen.
- <u>Soziale Anerkennung</u>: Die soziale Wertschätzung der eigenen Person, die anhand von Status, Verhaltensbestätigung und positiven Gefühlen erlebt wird.
  - Status: Der relative Rang der in der Gesellschaft erlangten Position.
  - Positive Gefühle: Die positiven und angenehmen Gefühle, die in engen sozialen Beziehungen erlebt werden. Quellen hierfür sind zum Beispiel Liebe, Freundschaft & emotionale Unterstützung.
  - Verhaltensbestätigung: Die positive Bestätigung von anderen Personen, dass die eigenen Handlungen richtig sind.
- 2.2. Vermeidung von Ausbeutung: Vermeidung von Verlusten aus der mangelnden Kooperationsbereitschaft anderer.
- 2.3. **Sicherheit:** Stabile Rahmenbedingungen, um Investitionssicherheit und Erwartungsstabilität zu gewährleisten.

Seite6/6

### Appendix 2 Instructions No AHP

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Nachdem Sie die Anweisungen gelesen haben, drücken Sie bitte auf OK.

Seite2/2

# Appendix 3 Documentation of the Experiment

## Stage 1 Introduction



## Stage 2 Attitude toward UBI

First question (Filter question):

E	Es gibt Meinungen für und gegen die Einführung des bedingungslosen Grundeinkommens. Wie sehen Sie das? Sind Sie dafür oder dagegen?	
	ОК	

Second question (if subject supports UBI):

\_\_\_\_\_

Bitte geben Sie an, wie stark Sie dafür sind: Schwach dafür	
ОК	

Second question (if subject opposes UBI):

Bitte geben Sie an, wie stark Sie dagegen sind:	
OK	

# Third question:

Wie sicher sind Sie sich Ihrer Meinung bezüglich der Einführung des bedingungslosen Grundeinkommens?	<ul> <li>○ Voll und ganz sicher</li> <li>○ Eher sicher</li> <li>○ Eher nicht sicher</li> </ul>
Grundeinkommens?	<ul> <li>C Eher sicher</li> <li>C Eher nicht sicher</li> <li>C Überhaupt nicht sicher</li> </ul>

## Fourth question:

Wie sicher sind Sie sich, dass Ihre Einstellung bezüglich der Einführung des bedingungslosen Grundeinkommens die richtige Einstellung ist?	<ul> <li>○ Voll und ganz sicher</li> <li>○ Eher sicher</li> </ul>
	C Eher nicht sicher C Überhaupt nicht sicher
ок	

# Stage 3 AHP

Questions appear in a randomised order.

Sie starten nun mit den Vergleichen.
Auf den Seiten 5 und 6 der Angabe finden Sie alle Erklärungen der Aspekte nochmals aufgelistet.
ок

Vergleich	1 von 32
	Welches der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?
	[=] = "gleich wichtige" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Bestätigen
Erklärung	der Begriffe prinzip: Verteilung entsprechend der individuellen Beiträge.
Gleichhei	itsprinzip: Gleiche Erträge für alle Gesellschaftsmitglieder.

If no decision is made after two minutes, the following pop-up window reminds the respondent to make his/her decision.

Vergleich 1 vo	on 32
	Welches der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?
	[=] = "gleich wichtige" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Gleichheitsprinzip Bitte treffen Sie eine Entscheidung! OK leichheitsprinzip
	Bestätigen
-Erklärung der	Regriffe
Beitragsprinz	zip: Verteilung entsprechend der individuellen Beiträge.
Gleichheitspr	rinzip: Gleiche Erträge für alle Gesellschaftsmitglieder.

	Welches der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?	
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"	
	Bedarfsprinzip         98765432=23456789         Beitragsprinzip	
	Bestätigen	
Erklärung d	der Begriffe	
Beitragsp	rinzip: Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern). rinzip: Verteilung entsprechend der individuellen Beiträge.	

Welches der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?         [=] = "gleich wichtig"       [3] = "etwas wichtiger"       [5] = "wesentlich wichtiger"       [9] = "sehr viel wichtiger"         [] Gleichheitsprinzip       [9] 8 7 6 5 4 3 2 = 2 3 4 5 6 7 8 9       Bedarfsprinzip         Bestätigen         Erklärung der Begriffe         Gleichheitsprinzip: Gleiche Erträge für alle Gesellschaftsmitglieder.         Bedarfsprinzip: Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).	Vergleich 3 v	i von 32	
[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"          Gleichheitsprinzip       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Bedarfsprinzip         Bestätigen         Erklärung der Begriffe         Gleichheitsprinzip: Gleiche Erträge für alle Gesellschaftsmitglieder.         Bedarfsprinzip:       Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).		Welches der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?	
Gleichheitsprinzip       98765432=23456789       Bedarfsprinzip         Bestätigen         Erklärung der Begriffe         Gleichheitsprinzip:       Gleiche Erträge für alle Gesellschaftsmitglieder.         Bedarfsprinzip:       Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).		[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"	
Erklärung der Begriffe Gleichheitsprinzip: Gleiche Erträge für alle Gesellschaftsmitglieder. Bedarfsprinzip: Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).		Gleichheitsprinzip	
Erklärung der Begriffe Gleichheitsprinzip: Gleiche Erträge für alle Gesellschaftsmitglieder. Bedarfsprinzip: Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).		Bestätigen	
Gleichheitsprinzip: Gleiche Erträge für alle Gesellschaftsmitglieder. Bedarfsprinzip: Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).	Erklärung de	ler Begriffe	
	Gleichheits Bedarfspri	t <b>sprinzip:</b> Gleiche Erträge für alle Gesellschaftsmitglieder. f <b>inzip:</b> Verteilung entsprechend des individuellen Bedarfs (z.B. mehr Einkommen für Eltern).	

Vergleich 4	4 von 32
	Welches der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Bedarfsprinzip 98765432=23456789 Anrechtsprinzip
	Bestätigen
Erklärung d	der Begriffe
Anrechtsp Beruf oder	prinzip: verteilung entsprechend der zugeschriebenen oder erworbenen Statusmerkmale wie Geschlecht, Ausbildungsabschluss prinzip: Verteilung entsprechend der zugeschriebenen oder erworbenen Statusmerkmale wie Geschlecht, Ausbildungsabschluss er Herkunft.

Vergleich 5 v	on 32		
	Welches der beiden Prinzipien ist Ihnen wich Wohlstandes? Wie	tiger in Bezug auf eine gerechte Verteilung des gesellschaftlicher sehr ist Ihnen dieses Prinzip wichtiger?	ı
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5	] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"	
	Gleichheitsprinzip 987654	32=23456789 Anrechtsprinzip	
		Bestätigen	
Erklärung de	Begriffe		
Gleichheits	prinzip: Gleiche Erträge für alle Gesellschaftsm	nitglieder.	
Anrechtspr Beruf oder H	i <b>nzip:</b> Verteilung entsprechend der zugeschriebe lerkunft.	enen oder erworbenen Statusmerkmale wie Geschlecht, Ausbildu	ungsabschluss,

Vergleich 6 von 32	
Welc	hes der beiden Prinzipien ist Ihnen wichtiger in Bezug auf eine gerechte Verteilung des gesellschaftlichen Wohlstandes? Wie sehr ist Ihnen dieses Prinzip wichtiger?
[=] =	"gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
Beitrag	sprinzip 98765432=23456789 Anrechtsprinzip
	Bestätigen
Erklärung der Begriffe	
Beitragsprinzip: Ve Anrechtsprinzip: Ve Beruf oder Herkunft.	rteilung entsprechend der individuellen Beiträge. erteilung entsprechend der zugeschriebenen oder erworbenen Statusmerkmale wie Geschlecht, Ausbildungsabschluss,

	Welcher dieser Freiheitsaspekte ist Ihnen wichtiger? Wie sehr ist Ihnen dieser Aspekt wichtiger?
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Negative Freiheit         98765432=23456789         Positive Freiheit
	Bestätigen
Erklärung d	ler Begriffe
Negative F etwas.	Freiheit: Die Abwesenheit von Zwängen oder Hindernissen, die einem Individuum von anderen auferlegt werden Freiheit von
Positive F	reiheit: Die Freiheit zur Selbstverwirklichung. Selbstverwirklichung bedeutet Kontrolle über das eigene Leben zu übernehmen und n Ziele verfolgen zu können – Freiheit zu etwas

Vergleich 8 von 3	2
	Welcher dieser Werte ist Ihnen bei einer moralischen Betrachtung des Themas wichtiger? Wie sehr ist Ihnen dieser Wert wichtiger?
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
Ve ge	erteilungs- erechtigkeit 98765432=23456789 Freiheit
	Bestätigen
Erklärung der Beg	griffe
Verteilungsger	echtigkeit: Gerechte Verteilung des gesellschaftlichen Wohlstandes.
Freiheit: Die Ab	owesenheit von Zwängen und/oder die Möglichkeit zur Selbstverwirklichung.

0	2
0	3

Vergleich 9	von 32					
	Welcher dieser Werte is	t Ihnen bei eine	r moralischen Betrachtu dieser Wert wichtige	ng des Themas wichtig r?	er? Wie sehr ist Ihnen	
	[=] = "gleich wichtig" [3] =	"etwas wichtiger"	[5] = "wesentlich wichtige	" [7] = "viel wichtiger"	[9] = "sehr viel wichtiger"	
	Verteilungs- gerechtigkeit	8 7 6 5	4 3 2 = 2 3	4 5 6 7 8 9	Unterstützung von Hilfsbedürftigen	
			Bestätigen			
Erklärung de	er Begriffe					
Verteilung	sgerechtigkeit: Gerechte Ve	rteilung des ge	sellschaftlichen Wohlsta	ndes.		
Unterstutz	ung von Hilfsbedurftigen: I	nite fur Persone	en, die sich nicht seidst	ieiten konnen.		

	Welcher dieser We	e ist Ihnen bei einer moralischen Betrachtung des Themas dieser Wert wichtiger?	s wichtiger? Wie sehr ist Ihnen
	[=] = "gleich wichtig"	[3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger"	chtiger" [9] = "sehr viel wichtiger"
	Freiheit	9 8 7 6 5 4 3 2 = 2 3 4 5 6 7	9 Unterstützung von Hilfsbedürftigen
		Bestätigen	
Erklärung de	er Begriffe	en und/adar die Mästick/eitzus Calkatvasuistickuns	
Unterstütz	ung von Hilfsbedürftig	n: Hilfe für Personen, die sich nicht selbst helfen können.	

	Welcher dieser Aspe	kte ist Ihnen wichtiger in Bezug auf Ihr körperliches Wohlbefinden? Wie sehr ist Ihnen dieser Aspekt wichtiger?
	[=] = "gleich wichtig"	[3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Komfort	98765432=23456789 Aktivität
		Bestätigen
Erklärung d	er Begriffe	
Komfort: und dergle	Körperliche, als auch ps ichen auszeichnen.	ychologische Zustände, welche sich durch eine Abwesenheit von Hunger, Durst, Schmerz, Erschöpfung

Vergleich 12 von 32	
Welch	ner dieser Aspekte ist Ihnen wichtiger in Hinblick auf soziale Anerkennung? Wie sehr ist Ihnen dieser Aspekt wichtiger?
[=]	= "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
Positiv	<i>v</i> e Gefühle 98765432=23456789 Verhaltens- bestätigung
	Bestätigen
Erklärung der Begriffe	2
Positive Gefühle: I Beispiel Liebe, Freu	Die positiven und angenehmen Gefühle, die in engen sozialen Beziehungen erlebt werden. Quellen hierfür sind zum indschaft & emotionale Unterstützung.
Verhaltensbestätig	gung: Die positive Bestätigung von relevanten Personen, dass die eigenen Handlungen richtig sind.

Vergleich 13 vo	on 32	
	Welcher dieser Aspel	te ist Ihnen wichtiger in Hinblick auf soziale Anerkennung? Wie sehr ist Ihnen dieser Aspekt wichtiger?
	[=] = "gleich wichtig"	[3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Status	9 8 7 6 5 4 3 2 = 2 3 4 5 6 7 8 9 Positive Gefühle
		Bestätigen
Erklärung der E	Begriffe	
Status: Der r Positive Gefi Beispiel Liebe	elative Rang der in de ü <b>hle:</b> Die positiven und e, Freundschaft & emo	r Gesellschaft erlangten Position. d angenehmen Gefühle, die in engen sozialen Beziehungen erlebt werden. Quellen hierfür sind zum otionale Unterstützung.

Vergleich 14 von 32	
Welcher	r dieser Aspekte ist Ihnen wichtiger in Hinblick auf soziale Anerkennung? Wie sehr ist Ihnen dieser Aspekt wichtiger?
[=] =	"gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
Status	98765432=23456789 Verhaltens- bestätigung
	Bestätigen
Erklärung der Begriffe	Pana dar in dar Gesellschaft arlangten Bosition
Verhaltensbestätigu	ng: Die positive Bestätigung von relevanten Personen, dass die eigenen Handlungen richtig sind.

Vergleich 1	5 von 32					
	Welcher dieser Aspe	kte ist Ihnen wichtige	r im Hinblick auf Ihr eig Aspekt wichtiger?	enes Wohlbefinden?	Wie sehr ist Ihnen dieser	
	[=] = "gleich wichtig"	[3] = "etwas wichtiger"	[5] = "wesentlich wichtige	r" [7] = "viel wichtiger"	[9] = "sehr viel wichtiger"	
	Körperliches Wohlbefinden	98765	4 3 2 = 2 3	4 5 6 7 8	9 Soziale Anerkennung	1
			Bestätigen			
Erklärung d	er Begriffe					
Körperlich	nes Wohlbefinden: Die S	Sicherstellung des eig	enen körperlichen Woh	lergehens durch Akti	vität und Komfort.	sitivon
Gefühlen e	rlebt wird.	wentschatzung der e	iyenen Ferson, de anr	anu von Status, Verr	iaitenspestatigung und po	Siuvell

Vergleich 16 v	on 32
	Welcher dieser Aspekte ist Ihnen wichtiger in Hinblick auf Ihr eigenes Interesse? Wie sehr ist Ihnen dieser Aspekt wichtiger?
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
[	Vermeidung von Ausbeutung 98765432=23456789 Sicherheit
	Bestätigen
Erklärung der l	Begriffe
Vermeidung	von Ausbeutung: Vermeidung von Verlusten aus der mangelnden Kooperationsbereitschaft anderer.
Sicherneit: S	itabile Nammenbeungungen um investitionssicherheit und Erwartungsstabilität zu gewährleisten.

	Welcher dieser Aspekte ist Ihnen wichtiger in Hinblick auf Ihr eigenes Interesse? Wie sehr ist Ihnen dieser Aspekt wichtiger?
	[=] = "gleich wichtig" [3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"
	Vermeidung von Ausbeutung 98765432=23456789 Wohlbefinden
	Bestätigen
Erklärung d	ler Begriffe
Vermeidu	ng von Ausbeutung: Vermeidung von Verlusten aus der mangelnden Kooperationsbereitschaft anderer.
Subjektive Wohlbefind	<b>₂s Wohlbefinden:</b> Zufriedenheit mit dem eigenen Leben. Das subjektive Wohlbefinden setzt sich aus dem physischen den und sozialer Anerkennung zusammen.

Vergleich 1	8 von 32		
	Welcher dieser As	spekte ist Ihnen wichtiger in Hinblick auf Ihr eigenes Interesse? Wie sehr ist Ihnen dieser Aspekt wichtiger?	
	[=] = "gleich wichtig"	[3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wichtiger"	
	Sicherheit	98765432=23456789 Wohlbefinden	
		Bestätigen	
Erklärung de	er Begriffe	ungen um Investitionssicherheit und Enwartungsstabilität zu gewährleisten	
Subjektive Wohlbefind	es Wohlbefinden: Zufrie len und sozialer Anerken	denheit mit dem eigenen Leben. Das subjektive Wohlbefinden setzt sich aus dem physischen nung zusammen.	

Vergleich 19	9 von 32		
	Welcher dieser Aspo eingeführt werder	kte ist Ihnen wichtiger in Hinblick auf die Frage, ob das bedingungslose Grundeink sollte oder nicht eingeführt werden sollte? Wie sehr ist Ihnen dieser Aspekt wichtig	ommen ger?
	[=] = "gleich wichtig"	[3] = "etwas wichtiger" [5] = "wesentlich wichtiger" [7] = "viel wichtiger" [9] = "sehr viel wic	htiger"
	Persönliche Werte	98765432=23456789 Eigeninteress	se
		Bestätigen	
-Erklärung de	er Begriffe		
Persönlich	e Werte: Ihre persönlich	en Vorstellungen von Verteilungsgerechtigkeit, Freiheit und Unterstützung von Hilfsl	oedürftigen.
Eigeninter	esse: Ihr persönlicher V	rteil/Nutzen.	

itte vergleichen Sie nun die Alternativen bezüglich der z	zuvor besprochenen Aspekte!
ur Erinnerung:	
n dieser Studie geht es darum, dass Sie sich zwischen zwei	Wohlfahrtsstaatsmodellen entscheiden müssen. In
em Modell, welches derzeit in Österreich vorliegt, sind die b	isherigen Arbeitsleistungen und die zukünftige
ereitschaft, eine Arbeit anzunehmen, für die Auszahlung eine	er finanziellen Erwerbslosen-Unterstützung vom
taat ausschlaggebend. Dieses Modell wird im Folgenden <u>lei</u>	stungsorientierte Sozialhilfe genannt. Im Modell
es <u>bedingungslosen G</u> rundeinkommens wird hingegen gefo	ordert, dass finanzielle Unterstützungen auch ohne
ereitschaft, eine Erwerbsarbeit anzunehmen, ausbezahlt we	rden soll.
chtung!	
ie Begriffserklärungen beziehen sich nun nicht mehr auf die z	zwei Alternativen, sondern auf den Aspekt in der
ragestellung!	

	Welches der Modelle ist besser geeignet um das Beitragsprinzip zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses         9         8         7         6         5         4         3         2         =         2         3         4         5         6         7         8         9         Leistungsorientierte           Grundeinkommen         9         8         7         6         5         4         3         2         =         2         3         4         5         6         7         8         9         Leistungsorientierte
	Bestätigen
Erklärung de	
Beitragspri	inzip: Alle Personen sollten entsprechend ihrer Anstrengungen belohnt werden.

Vergleich 21 von 32	
	Weiches der Modelle ist besser geeignet um das Gielchneitsprinzip zu gewahrleisten?
[=] = "	gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
Bedingung Grundeink	sloses ommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
Erklärung des Aspekts	
Gleichheitsprinzip: Gle	iche Ertrage für alle Gesellschaftsmitglieder.

Vergleich 22 v	on 32
	Welches der Modelle ist besser geeignet um Ihren Status zu sichern oder zu verbessern?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses Grundeinkommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
Erklärung des	Aspekts
Status: Der i hochbewerte	elative Rang der in der Gesellschaft erlangten Position, welcher sich hauptsächlich über die Kontrolle von knappen und ten Ressourcen ergibt.

	Welches der Modelle ist besser geeignet um Verhaltensbestätigungen zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Grundeinkommen       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Sozialhilfe
	Bestätigen
klärung de	s Aspekts
rhaltenst	estätigung: Die positive Bestätigung von relevanten Personen, dass die eigenen Handlungen "richtig" sind.

Welche	es der Modelle ist be	esser geeignet um <b>Sic</b>	<b>herheit</b> zu gewährleiste	en?	
[=] = "gleich geeignet"	[3] = "etwas geeigneter"	[5] = "wesentlich geeig geeigneter"	neter" [7] = "viel geeignel	ter" [9] = "sehr viel	
ngungsloses 1deinkommen	87654	3 2 = 2 3	4 5 6 7 8 9	Leistungsorientierte Sozialhilfe	
		Bestätigen			
kts e Rahmenbedingunge	n um Investitionssich	erheit und Erwartungs	stabilität zu gewährleis	ten.	
di un	ekts	ekts	(=) = "gleich geeignet"       [3] = "etwas geeigneter"       [5] = "wesentlich geeig geeigneter"         dingungsloses undeinkommen       9       8       7       6       5       4       2       2       3         Bestätigen       Bestätigen       Bestätigen       Bestätigen       Bestätigen       Bestätigen	(=) = "gleich geeignet"       (3) = "etwas geeigneter"       (5) = "wesentlich geeigneter"       (7) = "viel geeigneter"         dingungsloses       9       8       7       6       5       4       3       2       2       3       4       5       6       7       8       9         Bestätigen       Bestätigen         ekts       ile Rahmenbedingungen um Investitionssicherheit und Erwartungsstabilität zu gewährleis	(=) = "gleich geeignet"       (3) = "etwas geeigneter"       (5) = "wesentlich geeigneter"       (7) = "viel geeigneter"       (9) = "sehr viel geeigneter"         dingungsloses undeinkommen       98765432=23456789       Leistungsorientierte Sozialhilfe         Bestätigen       Bestätigen         ekts       ille Rahmenbedingungen um Investitionssicherheit und Erwartungsstabilität zu gewährleisten.

/elches der Modelle ist besser geeignet um das Anrechtsprinzip zu gewährleisten?	
geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"	
en 98765432=23456789 Leistungsorientierte Sozialhilfe	
Bestätigen	
ung von Gütern oder Lasten sollte an das Vorliegen bestimmter zugeschriebener oder erworbener	
cht, Ausbildungsabschluss, Beruf oder Herkunft gebunden sein.	

	Welches der Modelle ist besser geeignet um Ihre Ausbeutung zu vermeiden?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses Grundeinkommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
Erklärung de	es Aspekts

Welches der Modelle ist besser geeignet um Aktivität zu fördern?         [=] = "gleich geeigneter"       [3] = "etwas geeigneter"       [7] = "viel geeigneter"       [9] = "sehr viel geeigneter"         Bedingungsloses       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Bedingungsloses       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte Sozialhilfe         Bestätigen       Bestätigen       Bestätigen       1
Welches der Modelle ist besser geeignet um Aktivität zu fördern?         [=] = "gleich geeignet"       [3] = "etwas geeigneter"       [5] = "wesentlich geeigneter"       [7] = "viel geeigneter"       [9] = "sehr viel geeigneter"         Bedingungsloses       [9] 8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Bedingungsloses       [9] 8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Sozialhilfe       Sozialhilfe         Bestätigen
Welches der Modelle ist besser geeignet um Aktivität zu fördern?         [=] = "gleich geeignet"       [3] = "etwas geeigneter"       [5] = "wesentlich geeigneter"       [7] = "viel geeigneter"       [9] = "sehr viel geeigneter"         Bedingungsloses       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Bedingungsloses       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Sozialhilfe       Bestätigen
[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter" Bedingungsloses Grundeinkommen 98765432 = 23456789 Leistungsorientierte Sozialhilfe Bestätigen
Bedingungsloses       98765432=23456789       Leistungsorientierte         Grundeinkommen       Bestätigen
Bestätigen
Aktivität: Körperliche und mentale Aktivitäten, welche Begeisterung, Spannung und Neugierde produzieren - wie zum Beispiel Sport und Arbeit.

Vergleich 28	s von 32
	Welches der Modelle ist besser geeignet um das Bedarfsprinzip zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses Grundeinkommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
Erklärung de	is Aspekts
Bedarispin	

	Welches der Modelle ist besser geeignet um positive Freiheit zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses Grundeinkommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
rklärung de	e Asnakts

	Welches der Modelle ist besser geeignet um Komfort zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses Grundeinkommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
Erklärung d	as Aspekts
Comfort: K Durst, Schr	.omfort bezieht sich sowohl auf körperliche als auch psychologische Zustände, welche sich durch eine Abwesenheit von Hunger nerz, Erschöpfung und dergleichen auszeichnen.

	Welches der Modelle ist besser geeignet um <b>positive Gefühle</b> zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Grundeinkommen       9       8       7       6       5       4       3       2       =       2       3       4       5       6       7       8       9       Leistungsorientierte         Sozialhilfe
	Bestätigen
Erklärung de	es Aspekts - fühle. Die nacitiere und ennenskeure Osfühle, die is annen sosielen Basiekungen odektuurden. Ousller kiefünsied zum
Beispiel Lie	be, Freundschaft & emotionale Unterstützung.

Vergleich 3	2 von 32
	Welches der Modelle ist besser geeignet um negative Freiheit zu gewährleisten?
	[=] = "gleich geeignet" [3] = "etwas geeigneter" [5] = "wesentlich geeigneter" [7] = "viel geeigneter" [9] = "sehr viel geeigneter"
	Bedingungsloses Grundeinkommen 98765432=23456789 Leistungsorientierte Sozialhilfe
	Bestätigen
Erklärung d	es Aspekts Terihaitu Dia Abusaanhait van 700 maan adar Hindaraisaan die einem Individuum van anderen sufadart wurden. "Ersihait van
etwas".	

# Stage 4 Ambivalence

Questions appear in a randomised order.

Betrachten Sie bitte nur die positiven Seiten des bedingungslosen Grundeinkommens und ignorieren Sie die negativen Seiten: Wie beurteilen Sie die positiven Aspekte des bedingungslosen Grundeinkommen?	<ul> <li>Eher nicht positiv</li> <li>Eher positiv</li> <li>Sehr positiv</li> <li>Es gibt keine positiven Seiten</li> </ul>
	ок

	Betrachten Sie bitte nur die negativen Seiten des bedingungslosen Grundeinkommens und ignorieren Sie die positiven Seiten: Wie beurteilen Sie die negativen Aspekte des bedingungslosen Grundeinkommen.	<ul> <li>⊂ Eher nicht negativ</li> <li>⊂ Eher negativ</li> <li>⊂ Sehr negativ</li> <li>⊂ Es gibt keine negativen Se</li> </ul>	iten
--	---	--	------

Betrachten Sie bitte nur die negativen Seiten des derzeitigen Sozialversicherungssystems und ignorieren Sie die positiven Seiten: Wie beurteilen Sie die negativen Aspekte des derzeigen Systems?	<ul> <li>C Eher nicht negativ</li> <li>C Eher negativ</li> <li>C Sehr negativ</li> <li>C Es gibt keine negativen Seiten</li> </ul>



# Stage 5 Chat Rules

Sie haben nun die Möglichkeit, sich in einem Computerchat innerhalb von 30 Minuten auf eine g bedingungslosen Grundeinkommen zu einigen. Sollten Sie in der anschließenden Abstimmung e	emeinsame Position zum
bedingungslosen Grundeinkommen zu einigen. Sollten Sie in der anschließenden Abstimmung e	
Entratedura empiritary television Circuitary Kongana Denvision 2 European Denvis entrational	ine einstimmige
Entscheidung erreichen, bekommen Sie einen Konsens-Bonus von 2 Euro pro Person ausbezar	nlt.
Der Chat kann vorzeitig abgebrochen werden, wenn alle Gruppenmitglieder den entsprechende	en [Chat verlassen]-Button
klicken. Für jede Minute, die Sie im Chat bleiben, bekommen Sie zusätzlich 20 Cent ausbezahlt	dies sind für 30 Minuten 6
Euro).	
Bitte halten Sie sich an folgende Verhaltensregeln:	
1.) Begründen Sie Ihre Kommentare.	
2.) Nehmen Sie sich genügend Zeit, die Kommentare der anderen Teilnehmenden zu lesen und	darüber nachzudenken. Es
steht Ihnen frei, auf die Kommentare der anderen Teilnehmenden zu antworten.	

## Stage 6 Waiting for the Chat



### Stage 7 Chat

	Verbleibende Zeit: 30 Minuten	Bezahlte Zeit: 00 Minuten
Sie haben nun 30 abgestimmt.	Vlinuten Zeit, um über das bedingungslose Grundeinkommen	zu diskutieren. Am Ende der Diskussion wird über dessen Einführung
	Teilnehmende, die den Chat ver	lassen wollen: 0 von 3
		Chat verlasse
r Erinnerung:		
r Erinnerung: sind User 2. Um s Absenden wird r	Chatten zu können, klicken Sie in die blaue Zelle und sch nit dem Drücken der [Enter]-Taste durchgeführt.	ıreiben Sie eine Nachricht.

If the participant wants to leave the chat, the following pop-up window appears:

Sie haben nun 30 Minuten Zeit, um üt abgestimmt. # 1 User 2 : Ich bin User 2 und bin für # 2 User 1 : Ich bin User 1 und ich bin	er das bedingungslose Grundeinkomn das BGE! dagegen	nen zu diskutieren. Am Ende der Disku	ssion wird über dessen Einführung
	Bisher haben Sie im Chat 0.20 E Sind Sie sich sicher, dass Sie ● Chat verlassen ← Chat nicht verlassen	uro von insgesamt 6 Euro verdient. e den Chat verlassen wollen? OK	
r Erinnerung:			Chat verlasse
sind User 3. Um Chatten zu können is Absenden wird mit dem Drücken	<ol> <li>klicken Sie in die blaue Zelle und der [Enter]-Taste durchgeführt.</li> </ol>	schreiben Sie eine Nachricht.	

If the participant leaves the chat, the payment-clock stops to run. Additionally, the participant is not allowed to contribute to the chat anymore but can read the other participants entries.

	Bezahlte Zeit: 01 Minuten
Sie haben nun 30 Minuten Zeit, um über das bedingungslose Grundein abgestimmt. # 1 User 2 : Ich bin User 2 und bin für das BGE! # 2 User 1 : Ich bin User 1 und Ich bin dagegen User 3 will den Chat verlassen.	kommen zu diskutieren. Am Ende der Diskussion wird über dessen Einführung
Sie haben bekannt gegeben, dass Sie den Chat verlassen wollen, versenden. Damit Sie den Chat endgültig verlassen können, müsse verlassen. Teilnehmende, die den Chat verlassen wollen: 1 von 3	und dürfen somit keine Nachrichten mehr en auch Ihre Gruppenmitglieder den Chat <mark>Chat doch nicht verlas</mark>
Sie haben bekannt gegeben, dass Sie den Chat verlassen wollen, versenden. Damit Sie den Chat endgültig verlassen können, müsse verlassen. Teilnehmende, die den Chat verlassen wollen: 1 von 3 r Erinnerung:	und dürfen somit keine Nachrichten mehr en auch Ihre Gruppenmitglieder den Chat Chat doch nicht verlas
Sie haben bekannt gegeben, dass Sie den Chat verlassen wollen, versenden. Damit Sie den Chat endgültig verlassen können, müsse verlassen. <b>Teilnehmende, die den Chat verlassen wollen: 1 von 3</b> r Erinnerung: ∋ sind User 3. Um Chatten zu können, klicken Sie in die blaue Zelle s Absenden wird mit dem Drücken der [Enter]-Taste durchgeführt	und dürfen somit keine Nachrichten mehr en auch Ihre Gruppenmitglieder den Chat Chat doch nicht verlas und schreiben Sie eine Nachricht.

The participant can rescind his/her decision and return to the chat. Then, the following window appears, and the payment-clock continues to run.



### Stage 8 Chat Abort



## Stage 9 Election



Stage 10 Waiting for the Election Results



## Stage 11 Election Results

	Ergebnis der Abstimmung		
	Mitglieder in Ihrer Gruppe:	3	
	Stimmen für das bedingungslose Grundeinkommen:	0	
	Stimmen gegen das bedingungslose Grundeinkommen:	3	
Damit haben mehr Persor	nen gegen das Grundeinkommen gestimmt.		
Wäre dieses Ergebnis bir	ndend, würde dies bedeuten, dass das Grundeinkommen nicht e	ingeführt wird.	
Da Sie eine einstimmige I	Entscheidung getroffen haben, erhält jedes Gruppenmitlied als Ko	onsens-Bonus 2 Euro	zusätzlich.
			ок

Stage 12 Vote Satisfaction

Sind Sie mit dem Abstimmungsergebnis zufrieden oder unzufrieden? C Sehr unzufrieden C Eher unzufrieden C Teils zufrieden/Teils unzufrieden C Eher zufrieden C Sehr zufrieden		
OK	Sind Sie mit dem Abstimmungsergebnis zufrieden oder unzufrieden?	<ul> <li>Sehr unzufrieden</li> <li>Eher unzufrieden</li> <li>Teils zufrieden/ Teils unzufrieden</li> <li>Eher zufrieden</li> <li>Sehr zufrieden</li> </ul>
		ОК
## Stage 13 Attitude Polarization and Change

First question:

Bitte vergleichen Sie Ihre jetzige Meinung mit Ihrer Meinung zu Beginn des Experimentes: (Wenn sich Ihre Meinung nicht verändert hat, kreuzen Sie bitte den mittleren Kreis an)

Second question (Filter question):

Wie würden Sie nach der Diskussion ihre Meinung zum bedingungslosen Grundeinkommen beschreiben?	⊂ Dafür ⊂ Dagegen ⊂ Ich habe keine Meinung dazu
ок	

Third question (if subject supports UBI):

Bitte geben Sie an wie stark Sie dafür sind:	
Schwach dafür	
ОК	

Third question (if subject opposes UBI):

Bitte geben Sie an, wie stark Sie dagegen sind:	
Schwach dagegen	
OK	

## Stage 14 Discourse Quality Index (DQI)

Questions appear in a randomised order.

Wie stark stimmen Sie den folgenden Aussagen zu?	
Die Gruppendiskussion verlief im Großen und Ganzen respektvoll.      Stimme überhaupt nicht zu Stimme eher nicht zu Stimme eher zu Stimme voll und ganz zu	
ОК	

Wie stark stimmen Sie den folgenden Aussagen zu?	
Ich habe in der Diskussion nicht alle meine Argumente und Positionen dargelegt, da ich Angst hatte, von den anderen bloßgestellt zu werden.	<ul> <li>C Stimme überhaupt nicht zu</li> <li>C Stimme eher nicht zu</li> <li>C Stimme eher zu</li> <li>C Stimme voll und ganz zu</li> </ul>
ОК	

?
<ul> <li>Stimme überhaupt nicht zu</li> <li>Stimme eher nicht zu</li> <li>Stimme eher zu</li> <li>Stimme voll und ganz zu</li> </ul>

Wie stark stimmen Sie den folgenden Aussagen zu?		
Im Großen und Ganzen glaube ich, dass alle Personen während der Diskussion ihre wahre Meinung ausgedrückt haben. Stimme eher nicht zu Stimme eher zu Stimme voll und ganz zu	Wie stark stimmen Sie den folgenden Aussagen zu?	
ОК	Im Großen und Ganzen glaube ich, dass alle Personen während der Diskussion ihre wahre Meinung ausgedrückt haben.	<ul> <li>Stimme überhaupt nicht zu</li> <li>Stimme eher nicht zu</li> <li>Stimme eher zu</li> <li>Stimme voll und ganz zu</li> </ul>
	ОК	

Wie stark stimmen Sie den folgenden Aussagen zu?	
lch hatte während der Diskussion das Gefühl, meine wahren Ansichten verbergen zu müssen.	<ul> <li>C Stimme überhaupt nicht zu</li> <li>C Stimme eher nicht zu</li> <li>C Stimme eher zu</li> <li>C Stimme voll und ganz zu</li> </ul>
ок	

Wie stark stimmen Sie den folgenden Aussagen zu?		
Die meisten Gruppenmitglieder haben sich mehr um ihre eigenen Vorteile gekümmert als um das Allgemeinwohl.	<ul> <li>C Stimme überhaupt nicht zu</li> <li>C Stimme eher nicht zu</li> <li>C Stimme eher zu</li> <li>C Stimme voll und ganz zu</li> </ul>	
ОК		

Wie stark stimmen Sie den folgenden Aussagen z	zu?
Ich habe meine Argumente immer in Betracht auf das Allgemeinwohl begründet	<ul> <li>C Stimme überhaupt nicht zu</li> <li>C Stimme eher nicht zu</li> <li>C Stimme eher zu</li> <li>C Stimme voll und ganz zu</li> </ul>
ОК	

Wie stark stimmen Sie den folgenden Aussagen zu?	
Alle hatten während der Diskussion genügend Möglichkeiten, ihre Ansichten ausführlich auszudrücken.	<ul> <li>C Stimme überhaupt nicht zu</li> <li>C Stimme eher nicht zu</li> <li>C Stimme eher zu</li> <li>C Stimme voll und ganz zu</li> </ul>
ОК	

Wie stark stimmen Sie den folgenden Aussagen zu?		
Die anderen Gruppenmitglieder schienen unwillig, sich mit meinen Argumenten auseinander zu setzen. Stimme eher nicht zu Stimme eher zu Stimme voll und ganz zu	Wie stark stimmen Sie den folgenden Aussagen zu?	
ОК	Die anderen Gruppenmitglieder schienen unwillig, sich mit meinen Argumenten auseinander zu setzen.	<ul> <li>Stimme überhaupt nicht zu</li> <li>Stimme eher nicht zu</li> <li>Stimme eher zu</li> <li>Stimme voll und ganz zu</li> </ul>
	ОК	

Wie stark stimmen Sie den folgenden Aussagen zu?	
Die Gruppendiskussion hat mich dazu veranlasst, meine eigenen Annahmen kritisch zu überdenken.	<ul> <li>Stimme überhaupt nicht zu</li> <li>Stimme eher nicht zu</li> <li>Stimme eher zu</li> <li>Stimme voll und ganz zu</li> </ul>
ОК	

 Wie stark stimmen Sie den folgenden Aussagen	zu?	
Die Argumente meiner Gruppenmitglieder waren oft nicht nachvollziehbar.	<ul> <li>Stimme überhaupt nicht zu</li> <li>Stimme eher nicht zu</li> <li>Stimme eher zu</li> <li>Stimme voll und ganz zu</li> </ul>	
ок		

	Wie stark stimmen Sie den folgenden Aussagen zu?	
lch ha begrü	ibe meine Argumente während der Diskussion verständlich wiedergegeben und gut ndet.	<ul> <li>C Stimme überhaupt nicht zu</li> <li>C Stimme eher nicht zu</li> <li>C Stimme eher zu</li> <li>C Stimme voll und ganz zu</li> </ul>
	ок	

Wie stark stimmen Sie den folgenden Aus	sagen zu?
Die Diskussion war sachlich und auf das Problem fokussiert.	<ul> <li>Stimme überhaupt nicht zu</li> <li>Stimme eher nicht zu</li> <li>Stimme eher zu</li> <li>Stimme voll und ganz zu</li> </ul>
ОК	

Stage 15 Disagreement

Wie oft wurden während der Diskussion Argumente vorgetragen, denen Sie widersprechen?	
ОК	



## Stage 16 Knowledge

Questions appear in a randomised order.

<b>Ist folgende Aussage richtig?</b> "Bei Anspruch auf Arbeitslosengeld wird dieses für höchstens 20 Wochen ausbezahlt."	⊂ Ja ⊂ Nein ⊂ Weiß nicht	
ок		

Die bedarfsorientierte Mindestsicherung ersetzt seit 2010 die bis dahin in jedem Bundesland unterschiedlich geregelte Sozialhilfe.Wie viel steht einer anspruchsberechtigten, alleinstehenden Person 2015 an Mindestsicherung zu?	<ul> <li>€ 827,82 Euro</li> <li>€ 1021,34 Euro</li> <li>⊂ 541,85 Euro</li> <li>⊂ Weiß nicht</li> </ul>
ок	

<b>Ist folgende Aussage richtig?</b> "Bei Bezug von Arbeitslosengeld darf man keiner bezahlten Beschäftigung nachgehen."	ି Ja ି Nein ି Weiß nicht	
ОК		

Welcher Anteil an den gesamten Staatsausgaben wurde 2013 (letzter Stand) für soziale Sicherung (Arbeitslosengeld, Notstandshilfe, Bedarfsgeoprüfte Mindestsicherng,) aufgebracht?	<ul> <li>○ 20,1 %</li> <li>○ 41,9 %</li> <li>○ 60,4 %</li> <li>○ Weiß nicht</li> </ul>
ОК	

Welchen Versicherungsschutz haben Arbeitnehmer und Arbeitnehmerinnen, die über der Geringfügigkeitsgrenze beschäftigt sind?
(Mehrfachantworten sind möglich)
Krankenversicherung
☐ Arbeitslosenversicherung
OK

Wie gut fühlen Sie sich über die Diskussion um das bedingungslose Grundeinkommen informiert?	
Gar nicht informiert	
ок	

## Stage 17 Political Interests

First question:

Wie interessiert sind Sie im Allgemeinen an politischen Fragen? C Sehr interessiert Eher interessiert Wenig interessiert Nicht interessiert	Wie interessiert sind Sie im Allgemeinen an politischen Fragen? C Sehr interessiert C Eher interessiert C Wenig interessiert C Nicht interessiert	
ОК	ОК	

Second question:

Viele Leute verwen Wenn Sie an Ihre	den die Begriffe "links" und "rechts", wenn es darum geht, unterschiedliche politische Einstellungen zu kennzeichnen. e eigenen politischen Ansichten denken, wo würden Sie diese Ansichten auf dieser Skala einstufen?
	Links CCCCCCC Rechts
	ок

Third question:

Wie beurteilen Sie ganz allgemein die heutige wirtschaftliche Lage in Österreich?	<ul> <li>Gut</li> <li>Eher Gut</li> <li>Eher Schlecht</li> <li>Schlecht</li> <li>Kann ich nicht beurteilen</li> </ul>
ОК	

Fourth question:

Wie beurteilen Sie ganz allgemein die heutige wirtschaftliche Lage in der Europäischen Gut Union? Eher Gut Eher Schlecht Schlecht Kann ich nicht beurteilen			
ОК	Wie beurteilen Sie ganz allgemein die heutige wirtschaftliche Lage in der Europäischen Union?	<ul> <li>Gut</li> <li>Eher Gut</li> <li>Eher Schlecht</li> <li>Schlecht</li> <li>Kann ich nicht beurteilen</li> </ul>	
	ок		

Fifth question:

Wie beurteilen Sie Ihre heutige eigene wirtschaftliche Lage?	<ul> <li>Gut</li> <li>Eher Gut</li> <li>Eher Schlecht</li> <li>Schlecht</li> </ul>	
ок		

## Stage 18 Payoff

Ihr Verdienst in diesem	Experiment:	
Teilnahme am Experiment:	7.00€	
Bonus für Einstimmigkeit:	2.00 €	
Ihr Profit aus dem Chat	6.00€	
Ihr Verdienst:	15.00 €	
		ок

# Appendix 4 Questionaire

Bitte beantworten Sie abschließend noch ein paar Fragen:	
Was ist Ihr Geschlecht?	C Weiblich C Männlich
Wie alt sind Sie? (in Jahren)	
Im wievielten Semester sind Sie? (Inklusive abgeschlossene und abgebrochene Studien)	
Was ist Ihre Studienrichtung? (Bei Doppelstudien bitte beide Studienrichtungen eingeben)	
Sind Sie neben dem Studium erwerbstätig, und wenn ja, in welchem Stundenausmaß?	<ul> <li>nicht erwerbstätig</li> <li>bis zu 10 Stunden erwerbstätig</li> <li>10-20 Stunden erwerbstätig</li> <li>30-40 Stunden erwerbstätig</li> <li>über 40 Stunden erwerbstätig</li> </ul>
Was ist Ihr monatliches Netto-Einkommen? (Nach Abzug von Steuern und Sozialversicherungsbeiträgen; inklusive Beihilfen, Renten & Alimenten)	C unter 400 C 400 bis unter 800 C 800 bis unter 1200 C 1200 bis unter 1600 C 1600 bis unter 2200 C 2200 und mehr C kein Einkommen
Was ist Ihre Staatsangehörigkeit?	
Was ist Ihre Muttersprache?	
Wie ist Ihr Beziehungsstatus?	C Single C In einer Beziehung C Verheiratet C Geschieden C Anderes
Wie viele Personen leben außer Ihnen noch in Ihrem Haushalt?	
Wie viele Personen in diesem Raum kennen Sie bereits?	ОК

#### Abstract

Studies showed that in voting situations without prior collective deliberation, systematic processing of all decision relevant criteria can have harmful effects. These effects are due to increases in the voters' ambivalence levels that lead to intellectual paralysis instead of clarity. However, deliberative forms of decision making have different prerequisites compared to purely aggregative ones. This study examines whether systematic processing can improve the quality of a discourse by increasing its participants' ambivalence levels. Furthermore, it investigates whether systematic processing can raise the likelihood that individuals transform their attitudes in the course of the discourse. To achieve this, a computerised laboratory experiment was conducted. In this experiment, participants had to deliberate within a group of three whether to implement an Unconditional Basic Income (UBI) or keep the current Austrian social security system. Under the first treatment, the participants had to think systematically about all decision-relevant criteria with the help of an Analytic Hierarchy Process (AHP) tool before they entered the discourse. The second treatment did not allow participants to enter the discourse with systematic preparation. The data show that systematic processing may raise ambivalence levels, as well as improve the discourse quality. Moreover, it may raise the likelihood of attitude change or attitude moderation following a discourse. Prior Knowledge and attitude commitment seem to condition this positive influence as low political knowledge and high attitude commitment reversed the effect of AHP on ambivalence. Yet, it is not clear, whether ambivalence actually plays an important mediating role for the impact of systematic processing. Although it correlated positively with discourse quality, it showed a negative correlation with attitude transformation. However, as only 15 individuals participated in this experiment, these effects are not significant. More research remains to be done to evaluate systematic processing and its impact on deliberation. Nevertheless, the results of this study suggest that systematic processing can indeed have advantageous effects on deliberation.

#### Abstract

Bisherige Studien zeigten, dass sich systematisches Nachdenken über alle entscheidungsrelevanten Kriterien nachteilig auf rein aggregative Entscheidungsverfahren auswirken kann, da die durch Reflexion erhöhte Ambivalenz der WählerInnen eher zu intellektueller Paralyse statt zu Klarheit führt. Deliberative Entscheidungsverfahren haben jedoch andere Anforderungen als reine Präferenzaggregationen. Diese Studie untersucht, ob systematisches Nachdenken aufgrund der erhöhten Ambivalenz der reflektierenden TeilnehmerInnen die deliberative Qualität eines Diskurses verbessern kann. Des Weiteren erforscht die Studie, ob das vorherige systematische Nachdenken eher zu Präferenztransformationen der DiskursteilnehmerInnen im Laufe des Diskurses führt. Um diese Fragen zu beantworten, wurde ein Computerlaborexperiment durchgeführt. In diesem Experiment wurden die TeilnehmerInnen dazu aufgefordert, in Dreiergruppen darüber zu deliberieren, ob ein bedingungsloses Grundeinkommen in Österreich eingeführt oder ob das derzeitige Sozialversicherungssystem beibehalten werden sollte. In der ersten Versuchsanordnung mussten die Teilnehmenden vor dem Diskurs systematisch über alle entscheidungsrelevanten Kriterien mit der Hilfe eines Analytic Hierarchy Process (AHP) Verfahrens nachdenken. Die zweite Versuchsanordnung erlaubte den Teilnehmenden hingegen nicht sich systematisch auf den Diskurs vorzubereiten. Die Ergebnisse zeigten, dass systematisches Nachdenken sowohl die Ambivalenz der Individuen erhöhen, als auch die Diskursqualität verbessern kann. Des Weiteren konnte auch eine Steigerung der Wahrscheinlichkeit einer Einstellungsänderung und eine Verringerung der Einstellungsextremität beobachtet werden. Wissensstand und Einstellungs-Commitment scheinen diesen Einfluss zu moderieren, da geringes politisches Wissen und hohes Einstellungs-Commitment den positiven Einfluss von AHP auf Ambivalenz umkehrten. Es blieb allerdings unklar, ob Ambivalenz tatsächlich eine wichtige Rolle als Mediator für die Auswirkungen von systematischem Nachdenken spielt. Ambivalenz korrelierte zwar positiv mit Diskursqualität, zeigte aber eine negative Korrelation mit Einstellungsänderungen. Aufgrund der kleinen Stichprobe sind diese Effekte nicht signifikant. Allerdings kann diese Studie aber als Anstoß für weitere Studien dienen, um die Effekte von systematischem Nachdenken evaluieren zu können, denn es scheint, dass systematisches Nachdenken tatsächlich vorteilhafte Effekte für Deliberation haben kann.

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