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Thinking About and Voting on Swiss Foreign Policy: Does Affective and Cognitive Involvement Play A Role?

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Abstract

In this article we propose a political psychology model of how people make use of political information. Using survey data, we apply this model to the case of three referendums on European policy held in Switzerland between 1992 and 2001. We analyse how public opinion was formed in these ballots, focusing on the use of 'heuristics' among different groups of voters. In general, it appears that *affective* involvement toward the ballot issues increases the use of all types of heuristics considered in this study, whether relatively 'simple' (trust in government, general attitude toward EU membership) or more 'complex' (ideology). By contrast, *cognitive* involvement (i.e. background knowledge of issues) fosters the use of ideological heuristics only. In addition, some huge differences between the three ballots are pointed out and explained in terms of how intensively different categories of actors took part in the referendum campaigns. We also address a number of questions that were left unanswered in the analysis of results, and try to take steps toward understanding the puzzles arising from our empirical model.

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1. Introduction

There is a sizeable literature that addresses the question of what factors influence people's political opinions and in turn, their voting behaviour. In this article we propose a political psychology model of how people make use of political information. Using survey data, we apply this model to the case of three referendums on European policy held in Switzerland between 1992 and 2001. We analyse how public opinion was formed in these ballots, focusing on the use of 'heuristics' among different groups of voters.

Our model originates in three strands of research. The first consists of 'information-processing models' developed by social and cognitive psychologists (e.g. McGuire 1985); these models argue for a 'hierarchy of effects', whereby a communication has to take several steps to finally eventuate in opinions and behaviour. Second, we draw on the distinction between 'low' and 'high' roads to persuasion suggested by the 'Elaboration Likelihood Model' (Petty and Cacioppo 1986) and the 'Heuristic-Systematic Model' (Chaiken 1987). Our third source of inspiration comes from studies of human memory stressing its associative structure (e.g. Anderson 1983). We shall favour a synergistic approach to these three fields of theorizing. In doing this our theoretical model will focus most deeply on mechanisms that can be apprehended by traditional social sciences methods — though unmeasurable psychological processes cannot easily be overlooked without divorcing theory from empirical evidence, and will therefore be taken into consideration. However we shall design an operational model that can be put to test using the survey data at our disposal. This will imply a refocusing of attention on the *yielding* mechanism (i.e. accepting or refusing persuasive messages delivered during referendum campaigns), the measurement of which is better provided by our survey data than is any other mechanism in the original model.

The second section of the article introduces the relevant literature on our subject, and explains which theoretical concepts we pull together into a new model. Then follows a descriptive section with information about our cases: three referendum votes about the EU that occurred in Switzerland between 1992 and 2001. The data, operational design, and measurements we use are outlined in the same section. The results of the analysis are presented in the fourth section. Next, section five contains a discussion of the results in light of the theoretical expectations conveyed by our model. Finally the article closes with a brief, summarizing conclusion.

2. The model

The purpose of the model developed and tested in this paper is to build a theoretical framework for explaining the underpinnings of political opinions and behaviours. As a model, it shall focus on a limited set of variables whose importance has been stressed and supported by three theories, or 'families' of theories.

The first theory was developed in the wake of the Yale group's studies (e.g. Hovland *et al*. 1949) by social psychologists working on '**information-processing models**' (e.g. McGuire 1969). It was later elaborated by political psychologists (e.g. Zaller 1992) and marketing and communication researchers (e.g. Rice and Atkin 1994; Weilbacher 2001). Information-processing models (or 'hierarchy-of-effects models') argue that information has to take several steps, or 'mediators', to finally eventuate in behaviour. To do so, mere exposure to a message must be followed by effective reception of it (requiring attention, interest, and comprehension), yielding to it (or 'attitude change'), retention in memory, recall, and finally behaviour in accordance with recalled attitudes. The realization of each mediator is conditional on the fulfilment of the preceding one. Consequently extensive efforts to persuade voters can be ruined by the failure to overcome a single step, because a campaign "is like a chain. It cannot be stronger than its weakest link" (Alcalay and Bell 2000: 18). Besides, a series of individual and message-related variables intervene at each step to determine whether a mechanism is successfully achieved. To simplify the reception step depends on political awareness, while the yielding step depends on awareness *and* predispositions (Zaller 1992). The attitude change mechanism is then determined by an interaction between awareness and predispositions: aware citizens are more likely to receive a message and to accept it than are less aware citi-

zens, but only to the extent that the message is compatible with their predispositions. To the extent that the message is *not* compatible, aware citizens are actually less likely to accept it than less aware citizens, who are less able to recognize and establish links between political ideas or facts (e.g. Converse 1964; Lau and Erber 1985; Judd and Downing 1990) and are less critical about political communications altogether.

The second theory was prefigured by research on the mechanism of 'cognitive responses' (e.g. Greenwald 1968) and by studies manipulating the 'depth of processing' during exposure to information (e.g. Craik and Tulving 1975). This strand of research showed that *involvement* in the communication process is important for the successful learning of message content or for the permanence of attitude changes brought about by the message. These findings were then formalized in the '**Elaboration Likelihood Model**' (*ELM*) by Petty and Cacioppo (1986), and in the '**Heuristic-Systematic Model**' (*HSM*) by Chaiken (1987). With slight differences these models emphasize that attitudes can be modified as a function of distinct 'routes to persuasion' (see also Eagly and Chaiken 1993: chap. 7; Petty and Priester 1994). In the 'central'/'systematic' way, the recipient pays attention to the quality of arguments used in the communication, and generates thoughts about it leading her to accept or refuse the arguments. The eventual changes in attitudes are relatively enduring, resistant to subsequent persuasive attempts, and predictive of behaviour. In contrast when a 'peripheral'/'heuristic' route is taken, the recipient is not really attentive to the quality of the arguments, but rather focuses on 'shortcuts' displayed by peripheral aspects of the communication or of the reception context (sheer number of arguments, credibility of source, affective cues, etc.). In this case the created attitude changes are relatively temporary, susceptible to counter-persuasion, and unpredictive of behaviour. Following *ELM* and *HSM*, which route is eventually taken depends on the cognitive capacities of an individual, as well as on her involvement in the communication or 'motivation to systematically process information' (Chaiken 1987: 8) — less able, less 'motivated' individuals lean toward the use of 'heuristics'.

The third category of theories deals with the role of memory in political judgment, and more particularly with 'activation' and 'retrieval' processes. According to these theories, very much depends on which elements happen to be salient in a person's mind at the time she makes a judgment. Salient constructs are most easily remembered or serve as 'retrieval cues' to search for less 'accessible' beliefs. Thus salient schemata, attitudes, or situational factors are consid-

ered to bias the recall of stored information (e.g. Conover and Feldman 1984; Schacter 1996). Such biases occur because of the assumed **associative structure of human memory** (e.g. Anderson 1983; Carlston 1994), in which knowledge or feeling units ('nodes') are interwoven by a series of semantic, conceptual, logical, contextual, analogical, or temporal relations ('links'). Given this reticular, network-like structure, the activation of mental constructs "spread[s] along the associative pathways to other semantically related thoughts" (Jo and Berkowitz 1994: 46). Besides, each episode of such 'spreading activation' has the 'Socratic effect' (McGuire 1960) of reinforcing utilized pathways, while neglected links and memories continue to lie dormant and decay over time (Baddeley 1999: chap. 6). As a consequence, beliefs that happen to possess numerous, strong, and fluid links with top-of-the-head constructs have a higher likelihood of being recalled than less accessible elements. Now political 'experts' possess more schemata or other knowledge structures to interpret and encode new information, are more exposed to political messages, and thus have more opportunities to activate their beliefs than have political 'novices'. Therefore, experts are expected to absorb *and* recall campaign information in a more consistent (or 'consistently biased') manner, and to bring this information to bear more strongly on political judgments made at some later time. In other words political awareness heightens the dependency of judgments on memory (e.g. Lodge and Hamill 1986).

We think that a *synergistic* approach to the strands of theorizing just reviewed is most fruitful.[1] To begin with, the information-processing perspective provides a general framework with high analytical merits for tracking the whole process of opinion formation, suggesting the operation of specific sets of variables at each mediator. Some information-processing models are also very helpful in that they specify the interactive effect of variables involved in the 'yielding' mechanism — above all the 'awareness × predispositions' effect emphasized by Zaller (1992). As for the *ELM*/*HSM* perspective, it provides a *motivational* dimension to information processing which is absent from most cognitive accounts of opinion formation. This perspective sheds light on why in the first place different people pick up different kinds of information from the same message; then depending on motivational states, it explains how information is processed and with what results for the infrastructure of attitudes. Finally, research on the structure of memory allows us to better delineate the retention, activation, and

[1] Integration might be more profitable than the more frequent attitude of opposition and dismissal. For instance, Mendelsohn (1996), and Goidel and colleagues (1997), have suggested how to unify Zaller's *RAS* model and priming theories.

retrieval steps in the process. For instance it is true that retention and activation both have to do with memory; but retention concerns the *representational* features of encoded memories (nodes), while activation concerns the *relational* features of interdependent constructs (links). Thus retrieving a construct is not only a question of having internalised it in the past — of having it 'available somewhere' in long-term memory — but also a matter of keeping it related to present top-of-the-head considerations through recurring utilization and associative thinking.[2]

In developing our model, we shall focus on a limited set of *individual-level* variables, and will neglect message-related or medium-related variables. The reason for this omission is pragmatic, since it stems from the impossibility of measuring the information to which citizens were actually exposed during referendum campaigns. However, individual-level variables related to the exposure and reception steps of the model — like the number of media used during the campaign, or the time of voting decision — will serve as proxies for the amount of information potentially absorbed by the citizens attending the debates. Figure 2.1 gives an overview of the causal chain of the *theoretical* model, indicating the variables associated with each step.

Figure 2.1: The theoretical model

COMM. ⇨	EXPOS. ⇨	RECEPT. ⇨	**YIELD.** ⇨	RETENT. ⇨	ACTIV. ⇨	RETRVL. ⇨	OPINION
measured variables:	MEDIA	AWARE, TIMEDEC	**INVO × AWARE × DIFFIC × HEURIST**	AWARE	MEDIA, AWARE, TIMEDEC	AWARE × IDEOLOGY	INVO × AWARE × DIFFIC × HEURIST
other postulated variables or mechanisms:	predispositions (selective exposure)	INVO, predispositions	learning of cognitive responses, quality of arguments	schematicity, structure of pre-existing beliefs	INVO, predispositions	response context, form and order of questions, salient constructs	resp. effects (e.g., social desirability), salient constructs

Note: HEURIST comprises the three variables IDEOLOGY, TRUSTGOV and EUACC (see below).

[2] Let us add that forming an opinion does not in all cases require an access to *semantic*, *explicit* memory. It might also rest on *implicit* (i.e. 'non-declarative') or *non-semantic* memory systems — be it in the form of affective 'on-line tallies' suggested by some social and political psychologists (e.g. Lodge *et al*. 1995) or in the form of episodic, perceptual, or emotional memory systems argued for by neuro-physiologists (e.g. Squire and Kandel 1999; LeDoux 2002).

The variables in the Figure are distinguished according to their inclusion or exclusion from the *operational* model used in this paper. Unfortunately some mechanisms could not be appropriately operationalized, because some key measures were not available in our empirical material. Therefore the model tested below must be considered as a reduction and simplification of a more encompassing theoretical model. Further, as pointed out in the introduction, our operational model will focus most intensely on the *yielding* step, whereas the variables assumed to mediate other mechanisms will mainly serve as *controls* for the acceptation or refusal of campaign information. Finally, note that the terms 'awareness' and 'knowledge' will be used *interchangeably* in this paper.

The general frame of the model echoes the information-processing models' claim of discrete mechanisms linked in a sequence. The occurrence of each mechanism is determined by a number of variables, whose role has been further investigated by different theories, and which now deserve more careful examination.

1. Exposure

To begin with, we expect the sheer number of different media used in the campaign (hereafter **MEDIA**) to regulate the exposure step. All other things equal, this measure is likely to be covariant with the amount of information intake. Of course we are aware of other factors playing a role in the exposure mechanism. For example, *selective exposure* may depend on predispositions toward the source or content of information (e.g. Freedman and Sears 1965). However because we possess no precise measure of which type of information citizens were exposed to, we will leave this factor aside for the purpose of the present simplified model.

2. Reception

With regard to the reception step, which sums up *attention* to, *interest* in, and *comprehension* of a communication, the model emphasizes the impact of two variables. First, knowledge of the ballot issues (hereafter **AWARENESS**) should facilitate the effective understanding of the arguments used in the campaign message (see Gunter 1987: 121-2; Seels *et al*. 2004: 264-7). Second, the moment when the voting decision was taken (**TIMEDEC**) is deemed to moderate the attention step. This is because early and late decisions are usually predictive of less intensive use of campaign information than decisions made *during* a campaign (e.g. O'Keefe 1975;

Chaffee and Rimal 1996; but see Fournier *et al*. forthcoming). In other words, 'campaign deciders' are expected to pay greater attention to campaign messages, whereas 'early deciders' and 'late deciders' should fail to attend to much of this information. On the other hand, for reasons of theoretical parsimony, we do not address the role of predispositions and affective involvement in the ballot issues in stimulating attention and interest in the referendum campaigns.

3. Yielding

The yielding mediator has attracted considerable attention from 'attitude' researchers, and a high number of variables have been suggested to intervene in the mechanism. Again for the sake of parsimony and for reasons of limited data availability, we will focus on a tiny fraction of all factors that have been noted in the literature. To do so we integrate claims of the *RAS* (*Receive-Accept-Sample*) model (Zaller 1992) into the general perspective of the *ELM* (Petty and Cacioppo 1986). First, we consider that the degree of affective involvement in the campaign (**INVOLVEMENT**) enables us to distinguish between 'central' and 'peripheral' processing of the campaign information. For those citizens who are captivated by the meaning and importance of the ballot, the quality and ideological content of arguments should matter more than for relatively detached citizens. Therefore we expect involved voters to scrutinize the arguments, and to bring their political predispositions to bear on this examination. However, according to the *RAS*, they might do so only as far as they possess sufficient knowledge of the ballot issues (**AWARENESS**). In fact contextual knowledge is necessary for people to perceive how different ideas are connected (e.g. 'this claim speaks to this issue') and to illuminate the clash or compatibility between the campaign arguments and their own predispositions (Converse 1964). On the other hand, uninvolved voters should be more prone to taking arguments at face value, or even disregard arguments in favour of more peripheral aspects of the political communications they receive (e.g. length of message, credibility of source, affective cues, etc.).

Peripheral cues should be used more frequently by uninvolved voters *and* by involved voters who find it too difficult to arrive at judgments about the campaign arguments. As we suggested, cognitive helplessness stems in part from a lack of background knowledge, but it might also derive from more subjective, self-evaluative, and chronic attributes. For instance,

psychological constructs like the 'need for cognition' (e.g. Cacioppo *et al*. 1984; Areni *et al*. 2000) and the 'need for cognitive closure' (e.g. Kruglanski 1996; Klein and Webster 2000) aim at showing how a subjective deficit in cognitive resources affects the processing of new information. In brief, people who do not enjoy effortful thinking and/or who prefer *any* firm answer to a question rather than ambiguity are hypothesized to incline toward peripheral processing and the use of cues. In this regard, we will use the respondents' self-reported difficulty or easiness to take their voting decision (**DIFFICULTY**) as a proxy for their overall subjective ability to take positions on the campaign arguments. Although it is not quite clear whether this variable measures the antecedents or the consequences of 'cognitive self-confidence',[3] we expect citizens who report difficulty in making their decision to be more inclined to base their judgments on peripheral cues than more competent voters.

All in all, this combination of *RAS* and *ELM* predictions views yielding as either the result of relating *persuasive* messages to long-term political values by means of *contextual* knowledge, or as the result of taking *cues* from the campaign messages to reach cursory and effortless judgments. Furthermore, we argue that voters low in involvement, awareness, or subjective competence lean toward a peripheral mode of processing. Meanwhile the question remains of how to capture the operation of peripheral cues themselves. Since we know virtually nothing about the information received by respondents, it is actually impossible to operationalize cues as features of the messages (e.g. length, number of arguments) or of the reception context. Rather we assert that voters use some of their *own* beliefs as shortcuts to evaluate the arguments. Under conditions of ambiguity people often engage in 'theory-driven' processing, making inferences and deducing their position on specific issues from more general affective/cognitive orientations (e.g. Peffley and Hurwitz 1985; Lupia 1994; Anderson 1998; Tetlock 1999). Three such heuristics will be considered here: (1) the voters' general political orientation (political values, partisan preferences, or ideological positions, hereafter **IDEOLOGY**); (2) their degree of trust in the government (**TRUSTGOV**; see Hetherington 1998;

[3] Voters reporting a 'hard' voting decision might have felt difficulty because they did *not* content themselves with simple cues, and had a hard time examining the arguments, or felt ambivalent (or otherwise because they received no information altogether). Conversely, voters who report an 'effortless' decision may have felt at ease because they *did* use heuristics and were relieved from a more uncomfortable search for evidence. In other words, easiness and difficulty to take a decision might be a *consequence* of using or not using heuristics, rather than being pre-existing psychological states prompting the use or ignorance of cues. Nevertheless we think that, more often than not, respondents answer to the 'difficulty' question according to a *general* feeling of competence or incompetence toward direct democratic politics and politics more widely, and not from a careful recall of the (un)easiness to decide on a particular ballot (see Section 3.3 for evidence supporting this point).

Popkin and Dimock 2000); and (3) their general position on the question of EU accession (**EUACC**). We assume that *message cues* — such as the partisan leaning of the message source, its perceived endorsement of the government's policies and interests, or a satirical illustration suggesting its position on the question of EU accession — activate *internal heuristics*, which then help voters to interpret and evaluate campaign arguments.

We posit that citizens who have a hard time coming to terms with the campaign arguments will rely on enduring and crystallized beliefs about the national and international context as proxies for more concrete issue positions, in order to accept or resist ambiguous information.[4] Moreover, the three mentioned heuristics probably do not require the same amount of pre-existing knowledge in order to be efficiently applied to the evaluation of campaign information. We would expect that using general political orientations is more demanding than using trust in government or diffuse support for the EU, notably because many partisan and ideological cues are difficult to perceive or to infer. In other words, IDEOLOGY should be situated closer to the 'high' end of the peripheral-central continuum and accordingly, should be used more extensively by involved and aware citizens. Conversely, TRUSTGOV and EUACC are probably situated closer to the 'low' end of the continuum, and should be used more frequently by people engaged in peripheral processing. Unfortunately the data at our disposal does not permit us to measure how genuine 'central' processing unfolds.[5] This undesirably reduces the distinction between central and peripheral 'routers' to a matter of how intensely voters use different kinds of their *own heuristics*. How exactly voters pick up *message cues* to activate their long-term heuristics — not to mention how they process the campaign *arguments* — will not be directly addressed in this paper.

Let us sum up our expectations regarding the distinction of 'central' and 'peripheral' routes to persuasion. First, we predict 'ideological' heuristics to mediate yielding (or resistance) to

[4] For instance, facing the 'dubious' argument that 'the Bilateral Agreements with the EU will only profit politicans and big business', an overloaded voter might resort to her sentiment of mistrust toward the government and/or her feeling of antipathy toward a 'bureaucratic' and 'capitalist' EU, to conclude that such an argument is in all probability 'true'. By contrast, an involved or self-purportedly competent citizen should be more willing to examine the argument in its own right and may remain unmoved by its perceived bad 'quality', or she may take into account her background knowledge of the message source to conclude that it is incompatible with her political values.

[5] Thus we shall ignore mechanisms which indisputably play a role in the yielding mediator. The quality of arguments, or the learning of 'cognitive responses' generated when confronting persuasive arguments (which some specialists consider as even more crucial for attitude change than the arguments themselves; e.g. Wright 1980), are well beyond the reach of our survey data, and will not be taken into account in our simplified model.

political messages more strongly among involved, aware and subjectively competent voters than among less concerned voters. Conversely we expect the 'trust' and 'EU' heuristics to exert more influence on the acceptance or refusal of campaign arguments among uninvolved, unaware and subjectively incompetent voters. Besides since involvement, awareness, subjective competence and the type of heuristics probably contribute *non-additively* to determining the mode of processing, we postulate four-way interactions between these variables.

4. Retention

Once an argument has been accepted (or otherwise internalised[6]), it becomes encoded in long-term memory. However encoding does not amount to simply 'writing' a piece of information on some mnemonic 'white sheet'. The role of pre-existing memories in interpreting, integrating, and giving structural form to new engrams is crucial, though easily overlooked (Ottati and Wyer 1990; Schacter 1996). For instance depending on the number, connectedness, and centrality of pre-existing beliefs, as well as on the mode of acquisition (central vs. peripheral) of the new belief, this last will be given a more or less central place in the constellation of beliefs (or 'attitude') about the object (Marquis 2002: 371-9). Likewise, schemata may play an important role in mapping and encoding new information (e.g. Conover and Feldman 1984). However, such claims about the internal structure of memory cannot be captured by the available survey evidence. Therefore we shall resort to our measure of specific knowledge about ballot issues (**AWARENESS**) and hypothesize that knowledgeable voters tend to be more 'schematic', and possess larger stores of pre-existing beliefs that facilitate the anchoring of new memories. In other words, cognition development tends to follow a cumulative pattern, as the 'growing gap' hypothesis suggests (e.g. Tichenor *et al*. 1970), and thus knowledge should promote the long-term retention of acquired information (e.g. Price and Zaller 1993; but see Wood and Lynch 2002, for a counterexample from marketing research).

[6] A piece of information can be internalised by other processes than mere yielding (see below our '*additional issues*').

5. Activation

Activation is a peculiarly overlooked mechanism in most political science accounts of opinion formation and attitude change. By contrast psychological theories of 'priming effects' have depicted how processes of 'spreading activation' strengthen the integration of mental constructs (e.g. Wyer and Srull 1989: chap. 6; Fiske and Taylor 1991: chap. 7-8). In a nutshell, paths to frequently or recently accessed beliefs are more fluid, making those beliefs more likely to be recalled at some later point in time. Activation processes are sometimes triggered endogenously or 'randomly' — for instance by associative thinking or inferential mechanisms following exposure to a real-life situation reminiscent of a campaign statement. But more often than not, mental impulses result from contact with mediated information: a politician appears on television, reactivating some accessible beliefs about him; or an argument about EU accession is read in a newspaper, recalling to mind similar or related arguments that were previously stored. Thus quite the same variables involved in the exposure and reception steps should also apply to the activation step — that is the number of media used to form opinions (**MEDIA**), the time of voting decision (**TIME-DEC**), and the level of specific knowledge (**AWARENESS**). On the other hand, although research has shown the role of other variables (like predispositions or involvement) in priming pre-existing beliefs (e.g. Iyengar and Kinder 1987; de Vreese 2004), theoretical parsimony again calls for restricting the model to the most important set of variables.[7]

6. Retrieval

The retrieval of evaluations about different aspects of an issue is contingent on previously activated and presently salient ideas that pop to mind at the time of the interview (e.g. Iyengar 1990). It may also depend on considerations to which survey questions more or less covertly attract the attention of respondents.[8] Alternatively a similarity between the encoding context and the response context can facilitate remembering — for example, the present mood of a person can serve as a retrieval cue to recover emotionally congruent information (e.g. Bower 1991; Clore *et al*. 1994). Unfortunately, however important these mechanisms may be, they go well beyond the survey data on which our analysis will rest. Instead we shall focus on the

[7] In addition it is often unclear from this research whether variables like predispositions intervene *directly* at the acti-vation step or *indirectly*, by mediating one of the preceding stages of the process (e.g. reception, yielding).

[8] See the literature on polls' 'framing effects' (e.g. Schuman and Presser 1981; Zaller and Feldman 1992). In comparison, the retrieval of the *voting decision* is not a big matter. Since the Vox surveys are carried out in the two weeks following a ballot, the probability of voters forgetting their decision is rather low.

role of specific knowledge of ballot issues (**AWARENESS**). Tendencially, knowledge facilitates recall (e.g. Fiske *et al*. 1990) and heightens the dependency of judgments on memory (e.g. Lodge and Hamill 1986).[9] The more aware a respondent, the more she will bring previously accepted and activated arguments to bear on her evaluations of the ballot. This may be a consequence of the better organization and greater accessibility of beliefs in the long-term memory of knowledgeable citizens. This may also reflect a relatively unbiased retrieval of information on the part of experts, whereas novices more frequently 'construct' a recollection on the spot (Schreiber 1999). Otherwise as suggested by 'biased retrieval models', novices may search their memory for beliefs that exhibit congruence with previous judgments delivered in the course of the interview; or they may resort to immediately accessible judgments made earlier about the same object as a form of 'anchoring heuristic' (Hastie and Park 1986; Lodge *et al*. 1995; Chapman and Johnson 2002).

In short it may be argued that experts tend to 'bias at encoding', most notably by 'stereotyping' and 'schematizing' information, while novices are more prone to 'bias at retrieval', by grounding their judgments in impressions and cues having little to do with learned information (Marquis 2002: 326-7). Technically speaking, this pattern should reflect in a better fit of the model for knowledgeable respondents than for relatively unaware respondents, because the causal chain of mechanisms is critically disrupted in the case of the latter. Further, because *partisan* or *ideological* schemata probably play an important role at encoding — for example to interpret information, fill in missing data and make inferences (e.g. Hamill *et al*. 1985; Lodge and McGraw 1991) — these schemata might be expected to make ideological features of the encoded information particularly accessible to the retrieval strategies of knowledgeable voters. In fact, 'clustering of recall' along affective lines is especially conspicuous among sophisticated individuals, suggesting better memory organization on their part (McGraw and Pinney 1990). Hence we hypothesize that quite the same knowledge-predispositions interaction (**AWARENESS × IDEOLOGY**) supposed to operate at the yielding step is also prominently involved in the retrieval process.

[9] Some studies have uncovered a reverse relationship between general political sophistication and judgments-memory dependency (e.g. McGraw and Pinney 1990); however *specific* knowledge may well heighten this dependency.

7. Opinionation

In the final step, since we shall deal with survey data, our model must take into consideration the process by which voters produce survey responses on the basis of what they were able to retrieve from memory — or on other grounds, if the retrieval step was either heavily biased or short-circuited. Such a process is by no means self-evident, as complex models focusing on the 'survey response' have shown. For example, Tourangeau and his colleagues have sketched no less than '13 cognitive processes that people may use to respond to a survey item' (2000: 14). Broadly speaking, these processes can be subsumed under larger 'components', which the authors termed 'comprehension', 'retrieval', 'judgment', and 'response'. To be sure, generating an answer to a poll question requires *comprehension* of that question in the first place, both in terms of understanding and interpreting what it implies (Tourangeau *et al*. 2000: chap. 2). The necessity of comprehension for issuing 'valid' and 'meaningful' answers (i.e. exclusive of refusals to answer, DKs, or random responses) points once again to the role of general and specific knowledge (**AWARENESS**) in enhancing the predictability of the opinion formation process.[10]

Further, while the 'retrieval' and 'judgment' components identified by Tourangeau and co-workers are basically accounted for by the preceding steps in our model, their last 'response' stage — 'mapping judgments onto response categories' and 'editing responses' — requires some elaboration. First, people often 'edit' their answers, mainly through censoring or misreporting their true feelings on a topic.[11] Second, there is abundant literature on 'response effects' (e.g. Strack 1994; Krosnick 1999) showing how the nature of the response alternatives offered to a survey question can modify the interviewees' perception of what an appropriate answer should be. In this respect, Krosnick and Alwin (1987) have singled out the moderating role of cognitive sophistication in the tendency to 'satisfice' or 'optimize' in answering closed-ended survey questions with a large number of response categories. Cognitively sophisticated respondents are less prone to choose the first 'acceptable' option in

[10] For instance, in line with the Bilateral Agreements between Switzerland and the EU, an argument invoking concepts of 'accompanying measures' and 'wage dumping' was submitted for evaluation to survey respondents ('The accompanying measures are enough to avoid wage dumping'). Unless respondents knew what the concepts mean, it is doubtful that they were able to provide meaningful opinions on this record, even though they might have a 'real' attitude about it.

[11] For instance, they may yield to 'social desirability', that is the desire to avoid endorsing socially stigmatized behaviours and attitudes (e.g. Sniderman and Carmines 1997; Berinsky 2002); unfortunately the detection of such biases goes beyond our empirical data.

a list (i.e. satisfice), because they are less reluctant to engage in (or even enjoy) processing all the options before making a choice (i.e. optimise). Then response categories appearing early in a list are favoured over later ones by 'satisficing' respondents, thereby causing a 'primacy effect'. Some specialists have argued that this effect may show up with questions containing as few as two response options (see Tourangeau *et al*. 2000: 253).

Although sophistication may inhibit satisificing only with *visual* presentations of items,[12] we shall restate the argument to give it wider applicability and bring it into better agreement with the model and situation presented thus far. On the whole, as far as cognitive sophistication correlates with specific knowledge (AWARENESS), we would expect knowledgeable respondents to be less susceptible to order effects and to give more reliable replies. Next, we argue that the survey experience itself is not equally involving for all respondents, because voters differ in the importance they assign to the ballot issues. Involved voters probably engage in deeper thinking about *any* kind of question, to the extent that they are (or feel) able to do so, and are less susceptible to response effects (e.g. Bishop 1990). Such respondents are expected to *optimise* their answers, that is, to listen carefully to the response options offered, and to select the option that best matches the considerations retrieved from memory. By contrast, uninvolved and/or subjectively overloaded respondents may be led to satisfice, either (1) by answering at the lowest psychological cost, for example by selecting the first 'satisfactory' option, or (2) by using accessible shortcuts to arrive at a 'safe' (if not optimal) response without completing costly mnemonic searches. While the outcome of the first strategy can be conceptualised as a lowered reliability of surveys answers and a poorer fit of the overall model for uninvolved voters, the second, heuristic, strategy will be considered as analogous to the peripheral processing of arguments at the yielding step. In other words, we argue that 'satisficing' voters are primed by their general affective orientation toward national and supranational policy-making, which they use to interpret and answer 'ambiguous' questions about issue positions. Thereby, we posit an interaction of the form **INVOLVEMENT × AWARENESS × DIFFICULTY × HEURISTIC**.

[12] For *oral* presentations, a 'recency effect' is expected from unsophisticated respondents, because they tend to forget earlier response options and focus disproportionately on later ones (Krosnick and Alwin 1987).

8. Behaviour

Though not shown in Figure 2.1, behaviour is conceived as a partial outcome of the causal chain presented thus far. In fact it is quite common to view behaviours, and especially voting, as best predicted by proximate causes such as opinions, perceptions, preferences, and other psychological variables — the 'funnel of causality' perspective (e.g. Campbell *et al*. 1960: 24-32; Miller and Shanks 1996; but see van Deth 1986). However since behaviours are not directly measured by survey methods, but rather inferred from self-reports, in our model they are given quite the same status as opinions. As sketched above, opinionation itself is a form of behaviour; it is largely a constructive process, not a mere 'revealing' of pre-existing and ready-to-tell attitudes (see Zaller and Feldman 1992). Because of this 'on-the-spot construction' of opinions and behaviours by some respondents (e.g. concealing a vote for a far right party, or misreporting a socially unacceptable attitude), reported behaviours do not 'automatically' derive from the fulfilment of the preceding steps in the global process. Focusing more particularly on vote decisions, even encompassing measures of opinions about various aspects of the ballots do not exhaust the possible sources of voting. Nor can instant (and often superficial) opinions account for all the information that is processed during a referendum campaign.

Additional issues

In conclusion, we wish to stress three additional features of our theoretical model. First, although some of the mechanisms differentiated by the model are difficult to distinguish empirically, they are *conceptually distinct*. Thus studies using recall as a measure of reception or yielding are misleading, because recalled information is never identical to received information unless encoding and retrieval processes are free from any bias — a very implausible assumption (see Mackie and Asuncion 1990). Likewise comprehension is distinct from retention or retrieval, allowing "the possibility of remembering things we do not understand and of understanding things we cannot later remember" (Gunter 1987: 324).

Second, it should be emphasized that the assumed distinctiveness of mechanisms does *not* imply their strict *sequentiality*. This means that under some circumstances, some steps can be skipped, and that backwards processes can occur. For instance, the 'mere exposure' hypothesis asserts that simple and brief encounters with unknown stimuli can unconsciously

increase liking for them, suggesting that belief change can occur without genuine reception being completed (e.g. Zajonc 1968). Or the 'distraction hypothesis' claims that diverting attention from a message might actually enhance persuasion under some circumstances (e.g. Roser 1990); besides, depending on circumstances, the attention-comprehension sequence can go forwards as well as backwards (e.g. Bickham *et al*. 2001). It has even been argued that yielding is *not* an absolute prerequisite for the retention of information. Epistemic logic maintains that there are only two fundamental 'attitudes toward information', namely ignorance and acceptation, and that denying a piece of information amounts to accepting its negation — not to forestalling internalisation altogether (see Gärdenfors 1988: 48). Similarly, communication researchers have long realized that information which a person once dismissed (for example, because the source was judged untrustworthy) can still be retained and may even get accepted with the passage of time, as the person forgets the reasons of her initial negative response (e.g. Hovland and Weiss 1951; but see Greenwald *et al*. 1986). However, as a rule, processes involving the whole range of mechanisms underlined by the model tend to elicit more enduring changes in belief and attitude systems.

Finally, let us remind that the process depicted by our model is *situational*, and always refers to a particular message or issue. Moreover different aspects of a single message can undergo separate treatment. For instance, arguments can be processed independently from cognitive or affective cues. As suggested by the *ELM*, 'central' and 'peripheral' routes to persuasion compose a continuum, not necessarily alternative paths, and different coping mechanisms can proceed in parallel. Of course, discriminating between such autonomous processes is hardly feasible with non-experimental methods and data.

3. Operationalization

This chapter focuses on the operationalization of our model, and will unfold in three parts. First, we shall describe the empirical situation and survey data at hand. Second, we shall present how the empirical model was designed. Third, we shall describe the measurements used to operationalize our concepts.

3.1. Empirical cases and data

This article uses data from three votes about European integration that took place between 1992 and 2001 in Switzerland, in order to put our model to test. The first vote, in December 1992, referred to whether or not Switzerland should be a part of the European Economic Area, a label used to denote a range of non-EU Western countries such as Norway, Sweden, Finland, Iceland and Austria which sought a more regularised relationship with the EU without becoming members (or without *yet* having become members, in the cases of Sweden, Finland and Austria, which joined the EU in 1995). The EEA provided full access to the common market without granting the EEA countries a place at the EU's decision-making table. The Swiss government supported the bid for Switzerland to become part of the EEA, and the result of the referendum was a 'no' (the vote was almost 50-50 per cent, but a majority of cantons had 'no' results). The second vote, in May 2000, was about the 'Bilateral Agreements' concluded between Switzerland and the EU. These agreements contained seven dossiers: research collaboration, public procurement, technical barriers to trade, agricultural policy, civil aviation, land transport through the Alps, and the free movement of people. Again the Swiss government supported a 'yes' decision, and this time it got its way (67 per cent 'yes'; 33 per cent 'no').[13] The third vote, in March 2001, asked whether the Swiss people wanted the government to reactivate the Swiss EU membership application that had been lodged in 1992, and suspended shortly thereafter, after the EEA referendum debacle. The government did not support this initiative, which — like most other initiatives — failed at the urns (23 per cent 'yes'; 77 per cent 'no'; all cantons 'no').

To get a flavour of the three campaigns we collected information about campaign advertisements in six major Swiss newspapers during a four-week period before each vote. This data reveals some striking differences between the ballots.[14] In 1992, the EEA vote triggered a heated referendum campaign; however the opponents of the ballot proposal prevailed over its supporters in terms of number of ads and arguments. Besides, political parties were divided and completely eclipsed by the massive involvement of non-establishment groups like ad hoc committees, civic groups, or individual opinion leaders. In 2000, the advertisement

[13] A huge majority of cantons (21 against 2) voted 'yes'; however, the project did not require the double majority of people and cantons, and the clear majority of the people was enough to secure the government's victory.

[14] For a full account of data collection, see Marquis (2002: chap. 5). Besides, a more detailed account of the actors and of the evolution of the campaigns on the EEA, Bilateral Agreements, and 'Yes to Europe' initiative can be found in a twin paper based on the same data (Marquis, forthcoming).

campaign was much less intense, but more balanced between opponents and supporters of the Bilateral Agreements. Political parties were more united in their endorsement of the agreements than they had been a few years before toward the EEA, but they were hardly more active and again faced a considerable challenge from 'outsiders'. Finally in 2001, the 'Yes to Europe' initiative received little support outside some (mainly left-wing) circles, and the dominance of EU opponents was tremendous. This time however, political parties managed to make their voice heard — although not as easily as they usually do in other political domains (see Marquis 2002: chap. 6).

How did Swiss citizens make sense of information they received during these campaigns? Did they process campaign messages in ways consistent with our theoretical model? To answer this question, we relied on secondary survey data. As Swiss citizens can vote on one or more issues about once every quarter, a survey is routinely carried out in the two weeks following the votes. These so-called 'Vox surveys' (quota-sampled to reflect linguistic regions, gender, professions, dwelling place, and age groups) contain many more or less standardized questions. We used survey items referring to the vote issues in question, estimating people's level of interest in the issues and their knowledge about them, as well as what sources of information people have used to make their voting decision, at what point in time they made up their minds about how to vote, whether they found the vote decision easy or hard, what political party they support, their level of trust in government, and so on. There are also questions that ask about people's voting decision, about their attitudes toward various aspects of the ballot or different arguments used in the campaign, as well as about their general attitude towards the EU. We used the Vox surveys pertaining to the three EU-related votes in 1992, 2000, and 2001, taking advantage of the high degree of cross-temporal comparability that comes from using virtually identical measurements.

3.2. Operational design: refocusing on the yielding step

After rescaling, recoding, and other common data management procedures (see section 3.3), our variables were expected to measure *some* of our theoretical concepts. As a matter of fact, the available measures fail to tap all the mechanisms distinguished by our model. For instance, as previously indicated, the retrieval, encoding, and opinionation steps are theoretically grounded in intraneous (psychological and physiological) mechanisms that

traditional survey methods fall short of recording. Given this unavoidable inadequacy of our data, we gave up the task of testing the whole model, and instead *focused on the yielding step*. Among all mediators the acceptance vs. refusal of information is probably the 'easiest' to assess and constitutes a stage not too remote from the outcome of the causal chain — the survey responses. In other words we believe that our empirical data is better suited to account for the yielding mechanism than for any other mediator, and that the consequences of yielding are not critically diluted by the effect of whatever mechanisms and influences might occur later on. In a follow-up study using experimental data, we will hopefully carry out a more stringent and comprehensive test of the overall theoretical model.

For the present study, our assumption is that referendum campaigns provide voters with abundant factual information and many persuasive arguments about which decision to take on the ballots. As we have shown in the preceding section, this flow of information is not unidirectional, but rather two-sided, and will most likely push voters in both directions, toward and away from accepting the ballot object. Then, the apparent magnitude of 'yielding effects' as revealed by survey responses depends on how successful the campaign arguments were at moving voters from their initial positions, but also on how successful *we* are at measuring the effect of countervailing forces that might cancel each other at the aggregate or even individual level (see Zaller 1996). To maximize our chances of detecting such changes in attitudes, we will draw on respondents' opinions about *specific* aspects of the vote question. If a campaign succeeds in shifting attitudes on a particular dimension of the ballot (e.g. whether the EEA does or does not affect Swiss neutrality), then only a specific measure tapping this dimension might reveal the effect. By contrast, focusing only on the voting decision might prevent us from recording particular shifts; at the same time, the voting decision may originate in considerations that are not addressed by a limited number of specific questions. Therefore we will use the voting decision and an index of opinions about different topics as complementary dependent measures of how the campaigns influenced voters. The nature of these dependent variables allows for the use of rather simple statistical tools, namely OLS and logistic regression.[15]

[15] We gave up using more sophisticated methods (such as SEM) because of the poor quality of data and the low measurement level of variables (especially the vote and decision-making difficulty, which are binary).

As suggested by our theoretical model, we are interested in exploring differences between voters who have a relatively high level of involvement in, and knowledge of the vote, and voters who lack such affective and cognitive engagement. Throughout the analysis, we divided the samples into voters who found the issue at hand important to them personally, and voters who did not. Next we further divided both groups into 'unaware' and 'aware' voters, yielding *four subgroups:* (1) uninvolved-unaware; (2) uninvolved-aware; (3) involved-unaware; (4) involved-aware. Then the postulated four-way interactions between involvement, awareness, subjective competence, and the type of heuristics, were tested by using an interaction term between these last two variables in each of the four subgroups, and by observing whether and which inter-group differences in the magnitude of effects arise. To the extent that involved and aware voters really embark on a more 'systematic' road to persuasion, they are expected to exhibit relatively strong effects of the DIFFICULTY×IDEOLOGY interaction, and weaker effects of the DIFFICULTY×TRUSTGOV and DIFFICULTY×EUACC interactions. Conversely, uninvolved and unaware voters should manifest weaker DIFFICULTY×IDEOLOGY than DIFFICULTY×TRUSTGOV and DIFFICULTY×EUACC effects.

This pattern might be accentuated by the assumed intervention of the same variables at the retrieval and opinionation steps (see Figure 2.1). However in a larger sense, variables posited to play a role in other mechanisms than yielding will be considered as controls in the present study. Supposing that the campaigns on the three ballots did have an effect on voters, but that this effect was *not* mediated by yielding mechanisms, we might expect media exposure and time of voting decision to foster shifts in opinions and/or in the voting decision by 'mere exposure' and 'mere reception' effects. On the other hand, weak or non-significant effects of such variables would tend to mean that yielding (and probably subsequent steps as well) is necessary to give way to large-scale persuasion. It remains to be said that, in any case, campaign effects can only be inferred from a significant impact of variables in our model — there was no way to measure the actual reception of campaign information by our respondents.

3.3. Measurement

Only voters were taken into account in this study (i.e. respondents reporting to have voted, and who provided a straightforward voting decision; excluded are non-responses and people

who declared to have voted blank), in part because a whole range of useful questions were not posed to non-participants.[16] More detail about the construction of variables can be found in the Appendix.

Dependent variables

Our first dependent variable, **POSITION**, is an ordinal scale that measures people's general opinion on a vote issue, namely the European Economic Area treaty (EEA), the Bilateral Agreements (BA), and the initiative 'Yes to Europe' (YtE). POSITION ranges from –1 to 1 (it does not take on only integer values, having over 50 categories). The more negative one's score on this variable, the more negative one's general view of the ballot proposal and vice versa for positive values; a score of 0 denotes indifference or ambivalence. The second dependent variable, **VOTE**, is a binary variable recording whether people voted 'yes' (1) or 'no' (0).

Independent variables

The same set of variables was used to predict the two dependent variables. The independent variables may be classified in two categories. The first category consists of the two variables that were used to split our sample into four subgroups. **INVOLVEMENT** was created from a question asking respondents how personally important a vote issue was to them. 65 percent of voters in the total sample are classified as 'involved'. **AWARENESS** was made from a standardized index of background knowledge about the vote issues. About 63 percent of voters in the total sample are classified as 'aware' or 'knowledgeable' — remember that the terms 'awareness' and 'knowledge' are used interchangeably in this paper.

The second category of independent variables consists of interaction terms between difficulty in taking a voting decision and the three types of heuristics. **DIFFICULTY** is a variable indicating whether a voter found her vote decision rather 'hard' or rather 'easy' to take.[17]

[16] As a consequence, the number of cases drops — considerably for the BA and YtE votes — and we had to weight cases to guarantee comparable bases for the three ballots. *Ns* in the forthcoming analyses are always comprised between 929 and 936 cases.

[17] Independent analyses (not reported here, but available upon request to the authors) tend to support the assumption that the DIFFICULTY variable measures a rather chronic sense of competence, since the *general* difficulty to take a decision on referendums correlates strongly with the *particular* difficulty to take a decision.

IDEOLOGY is made up of five categories: left (about 26 percent of voters), center (32 percent), right (18 percent), far right (13 percent), and voters without clear ideological position (11 percent). The 'moderate right' vs. 'far right' distinction is warranted because far right parties and citizens often take a distinct position from that of the moderate right, namely a more anti-European stance (see Bützer and Marquis 2002). The IDEOLOGY measure was then recoded into five dummy variables: LEFT, CENTER, RIGHT, FAR RIGHT, and NO POSITION. **TRUSTGOV** is taken directly from a question asking whether respondents rather trust the federal government (about 52 percent of voters), rather mistrust it (35 percent), or cannot take position (13 percent). The variable was then recoded into three dummies: TRUST, MISTRUST, and TRNEUTRAL. Finally, **EUACC** was created from questions addressing the issue of Switzerland's eventual accession to the European Union. After standardization of the original items, EUACC consists of three categories: 'pro-EU' (about 39 percent of voters), 'anti-EU' (53 percent), and 'neutral' positions (8 percent). Three dummies were created on this basis: PRO-EU, ANTI-EU, and EUNEUTRAL.

Next we combined DIFFICULTY with each dummy constructed from the original 'heuristics' variables, thus yielding 22 new dummy variables — 10 for IDEOLOGY, 6 for TRUSTGOV and 6 for EUACC. For instance, dummies relating to the trust in government comprise HARD×MISTRUST, HARD×TRNEUTRAL, HARD×TRUST, EASY×MISTRUST, EASY×TRNEUTRAL, and EASY×TRUST. Left-wing voters, voters neutral toward the government, and voters neutral toward EU accession were then taken as reference categories for the remaining variables issued from IDEOLOGY, TRUSTGOV, and EUACC, respectively.[18] For example, a significant positive effect on the vote of the HARD×CENTRE variable would mean that possessing centrist values *and* finding one's decision hard to take elicits a higher probability to vote 'yes' on the issue at hand than average left-wingers.

Besides, we included this variable in the analysis of POSITION, because we assumed that the difficulty to take a *voting decision* echoes the difficulty to take a *position on arguments*. Results supporting this view were also obtained.

[18] For IDEOLOGY, left voters were chosen to serve as reference (instead of NO POSITION, for example) because this group has *a priori* the most predictable behaviour, thus facilitating the interpretation of results. Accordingly, EASY×LEFT and HARD×LEFT groups were merged and used as the reference category for the 8 remaining ideological measures. Likewise, for both 'trust in government' and 'EU accession' heuristics, EASY×NEUTRAL and HARD×NEUTRAL were merged to serve as the reference category.

Control variables

Three further variables were constructed to control for the influence of exposure and reception steps in the model. **MEDIA** measures how many different forms of media voters used to get information about the vote issue, and is used as an indicator of how exposed someone was to the campaign. MEDIA ranges from 0 to 12, with an average of 5.1 among voters. **CAMPAIGN** and **LATE**, together with the reference category EARLY, are dummy variables indicating when voters made their voting decision: early (before the campaign got really started), during the campaign, or quite late. About 53 percent of voters are classified as 'early deciders', 34 percent as 'campaign deciders', and 13 percent as 'late deciders'.

3.4. Hypotheses

We are now in position to make more explicit predictions about the effect of each type of heuristics. Beginning with the **DIFFICULTY×IDEOLOGY** variables, it is a matter of fact that the left is usually the most pro-European camp of the Swiss political spectrum, and the one that most favours an opening of the country (Brunner and Sciarini 2002); by contrast, there has always been some resistance to the government's projects from centre or right movements and citizens. This leads us to expect that, as involvement, awareness or subjective competence increase, a polarization in voting behaviours and opinions will take place between left citizens and members of other ideological groups — above all between left and far right sympathizers, with voters of other orientations standing somewhere in the middle. As their affective and cognitive engagement rises, left-wingers should lean more toward the use of 'ideological' heuristics. Accordingly, they should be more likely to vote 'yes' and to express positive opinions about the campaign arguments. Furthermore since left citizens constitute the reference category in the analysis, regression coefficients for the remaining groups should be all the more sizeable — and consistently negative — as the conditions for using ideological heuristics are better fulfilled.

The predictions regarding the **DIFFICULTY×TRUSTGOV** variables run exactly in the opposite direction. The global expectation is that these heuristics should matter more for relatively unconcerned citizens, who satisfy themselves with a peripheral processing of the campaign messages. Trust in government is expected to bolster the acceptation of the EEA and BA projects, which the government endorsed, but to fuel the resistance against the YtE initiative

— since the Federal Council took position *against* opening immediate negotiations with the EU. Overall, mistrust should have the reverse effect: citizens who have no faith in the government are likelier to dismiss its voting recommendation and the arguments backing its position. Hence provided that the 'neutral' reference category probably has the least effect on opinions and votes, coefficients for trusting and mistrusting voters should be oppositely signed. Furthermore the polarization between the two groups of voters is expected to be highest among the least concerned citizens. Likewise the **DIFFICULTY×EUACC** measures should follow a clearer polarization pattern among the uninvolved, the unaware and the 'hard-deciders' — EU friends and foes should diverge most in their opinions when the conditions for peripheral processing are met. This is because voters who see an issue as unimportant and obscure are likelier to rely on an *a priori* attitude toward the question of EU accession. By contrast, this heuristic is expected to play a lesser role for voters to whom the vote issue is personally significant, familiar, or easy to decide on. Of course, we also assume that individuals who are positive toward EU accession will take a more positive stance toward the ballots than individuals who are negative about the EU.

4. Empirical analysis

The empirical analysis contains two parts. The first concerns *opinion formation* regarding the campaign arguments relating to each of the three votes — the European Economic Area, the Bilateral Agreements, and 'Yes to Europe'. In this regard, we expect to find differences between voters who were relatively concerned by the issues and voters who remained mostly unaffected. The second part of the analysis focuses on *voting behaviour*; in this regard, too, we compare voters who did, and who did not, feel that an issue mattered to them personally.

4.1. Predicting issue opinions

Using POSITION as the dependent variable, the largest differences in terms of heuristics use are expected to occur between 'uninvolved/uninformed/hard-deciders' and 'involved/informed/easy-deciders'. While the latter should rely more extensively on the ideological heuristic, the former group is expected to rely on trust in government and attitudes toward EU accession as heuristics; the other groups are expected to make intermediate use of all types of heuristics.

Some technical remarks about the analysis of POSITION. We kept the analyses separate for the three votes, so as to be able to observe the behaviour of key variables under particular circumstances. To compare the different groups of voters we are interested in, we also ran separate analyses for each of them. Hence because the evidence is quite voluminous, we need a systematic way to structure the presentation and interpretation of the results. To this end, we first rely on the number and the proportion of significant coefficients for each type of heuristic with respect to each of the groups of voters we focus on. Of course one should exercise caution in interpreting these coefficients, because some of them are based on few cases. However, our confidence in the results is enhanced by the fact that virtually all coefficients run in the expected direction. In a second step of the analysis the models' statistical fits are considered.

Overview of results

Painting with a broad brush, our main results about how Swiss citizens processed campaign arguments are as follows. First of all, the use of heuristics increases the more cognitively (one's level of knowledge about an issue) and affectively (one's level of involvement) voters engage with the campaign issues. Cognitively engaged voters tend to use ideological heuristics, whereas affectively engaged voters tend to use all three types of heuristics. In contrast, subjective competence plays a relatively minor role, except in increasing the use of the EU heuristic. Second, our prediction regarding the impact of knowledge, that it increases the use of 'complex' heuristics (i.e. ideological heuristics) and decreases the use of 'simple' ones (e.g. trust in government and EU attitudes) is met by the results. The influence of involvement and subjective competence nevertheless runs counter to our assumption about them. Third, our prediction that knowledge, involvement and subjective competence have effects that 'go in the same direction' with respect to heuristics use — i.e. more knowledge, more involvement and higher subjective competence were all expected to increase the use of heuristics — was not met. As will become clear, the reason why this is so is at least partially related to the differences between the votes. Fourth, the heuristics variables explain more variance in opinions than do the three moderator variables or the control variables, but taking that into account, moderators brings a real improvement in the explanatory power of our model. Fifth, there are notable, and sometimes huge, differences between the three cases we study regarding the behaviour of knowledge, involvement and subjective competence. The biggest differences consistently occur between on the one hand the EEA and BA votes, and

on the other hand the YtE initiative. This emphasises the importance of the context, especially the quality of the campaign in terms of how 'loud and clear' its messages were. For example, the use of ideological heuristics may clearly be assumed to be affected by the availability and clarity of partisan cues. Occasionally these five main summary results were closely interlinked, making it impossible to present them in a strict one-by-one sequence below.

1. The overall use of heuristics

According to our model, we expect cognitive and affective engagement to increase the use of the (relatively demanding) ideological heuristic, but *not* the use of the (more basic) 'trust in government' and 'EU attitude' heuristics. However, Table 4.1 shows that with respect to the total number of heuristics used to mould opinions, a high level of involvement is associated with the use of *all* types of heuristics — 'complex' or not. The proportion of significant coefficients rises from 38% to 50% for the ideological heuristic, from 29% to 42% for the trust in government heuristic, and from 40% to 70% for the EU heuristic, as we move from the uninvolved to the involved group of voters. A similar pattern obtains with respect to knowledge, although here only the proportion of significant ideological heuristic coefficients rises notably (from 33% to 54%); the corresponding figures for trust in government are from 33% to 38%, and there was even a decrease for the EU heuristic (from 60% to 50%). Turning to subjective competence, differences between 'easy deciders' and 'hard deciders' are for the most part only trivial; if anything, only the use of the 'trust' heuristic is in line with expectations. Indeed, voters with relatively high subjective competence tend to use the ideological and 'trust in government' heuristics less than their 'incompetent' counterparts, but the opposite pattern prevails for the use of the 'EU' heuristic (45% significant coefficients among 'hard-deciders', compared to 65% among 'easy-deciders').

Table 4.1: Predictive models of the global opinion scale (POSITION); OLS regression, unstandardized coefficients

Regression on POSITION	1992 (European Economic Area)				2000 (Bilateral Agreements)				2001 ('Yes to Europe')			
*Voters judging the issue **unimportant***	*Unaware voters*		*Aware voters*		*Unaware voters*		*Aware voters*		*Unaware voters*		*Aware voters*	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
CENTRE×EASY	.136	.121	–.142	.088	–.018	.136	.013	.142	–.064	.113	–.498***	.105
RIGHT×EASY	.466***	.163	–.247***	.080	.174	.137	.093	.169	–.082	.157	–.426***	.116
FAR RIGHT×EASY	.037	.161	–.364***	.115	–.377**	.176	–.124	.185	.065	.156	–.419***	.126
NO POSITION×EASY	–.305**	.142	–.054	.123	.138	.193	.460*	.243	–.213	.135	–.472***	.144
CENTRE×HARD	.030	.088	–.074	.066	–.222	.210	–.079	.150	–.128	.152	–.728***	.221
RIGHT×HARD	–.099	.119	.134*	.078	.122	.305	.220	.210	–.369*	.201	–.636**	.289
FAR RIGHT×HARD	.084	.105	–.033	.093	.389	.246	.241	.229	–.368*	.223	–.745**	.307
NO POSITION×HARD	–.278*	.143	.062	.081	–.036	.243	–.592	.369	–.180	.267	–.789***	.268
TRUST×EASY	.131	.126	.361***	.104	.270*	.153	.079	.132	–.146	.138	–.013	.136
MISTRUST×EASY	–.030	.135	.013	.118	–.162	.170	–.397***	.133	–.127	.151	.147	.144
TRUST×HARD	.288**	.117	–.048	.091	.439*	.230	.012	.162	.021	.143	.354	.220
MISTRUST×HARD	–.058	.116	–.271***	.092	.268	.316	–.269	.180	.058	.245	.380*	.222
ANTI EU×EASY	–.049	.135	–.395***	.100	–.107	.171	–.213	.166	–.209**	.105	–.120	.096
PRO EU×EASY	.521***	.150	–.035	.111	.355**	.174	.264*	.156	—		—	
ANTI EU×HARD	.148	.099	–.205***	.072	–.092	.218	–.228	.180	–.096	.128	–.228	.200
PRO EU×HARD	.407***	.118	.067	.086	.061	.243	.323*	.181	—		—	
MEDIA	–.036**	.014	.004	.010	–.007	.019	–.001	.020	.024	.018	.011	.018
CAMPAIGN	–.051	.059	.013	.044	.387***	.106	.067	.103	–.005	.082	–.073	.074
LATE	.015	.103	.158***	.061	.044	.111	.166	.108	–.156	.121	.098	.175
Constant	–.035	.137	.242**	.108	–.239	.253	.192	.208	–.139	.155	.121	.165
R^2 (N)	.440	(164)	.427	(286)	.519	(110)	.477	(127)	.162	(133)	.258	(130)

Note: ***: p<.01. **: p<.05. *: p<.10.

Table 4.1 (continued): Predictive models of the global opinion scale (POSITION); OLS regression, unstandardized coefficients

Regression on POSITION	1992 (European Economic Area)				2000 (Bilateral Agreements)				2001 ('Yes to Europe')			
*Voters judging the issue **important***	*Unaware voters*		*Aware voters*		*Unaware voters*		*Aware voters*		*Unaware voters*		*Aware voters*	
	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.	B	S.E.
CENTRE×EASY	–.041	.105	.063	.072	.008	.099	–.042	.053	–.445***	.090	–.230***	.071
RIGHT×EASY	.104	.136	–.031	.074	.049	.104	–.008	.062	–.302***	.106	–.329***	.084
FAR RIGHT×EASY	.105	.157	–.254***	.094	–.450***	.142	–.413***	.089	–.399***	.105	–.415***	.081
NO POSITION×EASY	.214	.148	–.064	.079	.237	.155	–.032	.104	–.132	.113	–.273**	.112
CENTRE×HARD	–.097	.090	–.147**	.071	–.371***	.138	–.218**	.107	–.234	.195	–.504***	.193
RIGHT×HARD	–.345***	.117	–.047	.075	–.206	.161	–.095	.121	–.580*	.311	–.496**	.221
FAR RIGHT×HARD	–.127	.139	–.308***	.109	–.407**	.206	–.318**	.143	–.193	.289	–.525	.396
NO POSITION×HARD	–.260*	.039	.016	.098	–.396**	.179	–.285*	.159	.212	.194	–.515**	.243
TRUST×EASY	.371***	.100	.295***	.080	.459***	.094	.201***	.076	–.227**	.090	.036	.079
MISTRUST×EASY	.057	.105	–.080	.084	–.049	.115	–.121	.084	–.165	.104	.057	.083
TRUST×HARD	.260**	.129	.008	.085	.189	.127	.344***	.097	–.202	.152	.135	.161
MISTRUST×HARD	.158	.126	–.357***	.082	–.287**	.144	–.256**	.122	–.164	.155	.131	.198
ANTI EU×EASY	–.351**	.137	–.540***	.091	–.404***	.101	–.218***	.078	–.330***	.070	–.411***	.057
PRO EU×EASY	.285**	.135	.028	.088	–.036	.104	.177**	.077	—		—	
ANTI EU×HARD	–.250**	.097	–.097	.086	.045	.169	–.249**	.110	–.611***	.162	–.141	.170
PRO EU×HARD	.317***	.103	.228**	.097	.588***	.181	.051	.118	—		—	
MEDIA	–.004	.011	.014	.009	.014	.012	.014*	.008	.028*	.015	–.008	.013
CAMPAIGN	.011	.063	.038	.042	–.095	.083	.070	.046	–.049	.070	.033	.060
LATE	.097	.093	.033	.074	–.039	.124	.004	.062	.030	.094	.141**	.065
Constant	.055	.135	.285***	.105	.136	.138	.212*	.109	.327***	.115	.244**	.105
R^2 (N)	.567	(156)	.563	(323)	.529	(203)	.421	(492)	.347	(249)	.257	(424)

Note: ***: p<.01. **: p<.05. *: p<.10.

In other words, the two mediating factors involvement and knowledge influence the use of all types of heuristics in similar ways: the total number of significant coefficients increases sharply from 13 to 25 when we move from 'uninvolved/uninformed' voters to 'involved/informed' ones (with mixed categories somewhat in between these figures). The use of the ideological heuristic contributes to this increase — in line with theoretical expectations — but so does the use of 'EU' and, to a lesser extent, the 'trust in government' heuristics, and that is contrary to expectations. In addition, there is some evidence that the interaction between involvement and subjective competence does not have the effect we expected. When comparing the involved and uninvolved groups of voters, we find that levels of involvement make a larger difference among people with low subjective competence (15 significant heuristic coefficients for uninvolved voters, and 25 for involved) than among people with high subjective competence (18 significant heuristic coefficients for uninvolved voters, and 23 for involved).

2. The ideological heuristic

A comparison of the use of different types of heuristics is made difficult by two factors. First, the three moderator variables (i.e. knowledge, involvement, and subjective competence) often yield opposite effects on the use of distinct heuristics; some of them square quite well with our theoretical predictions, while others do not. Second, there is a recurring difference in the pattern of results between the EEA vote and the BA vote on the one hand, and the YtE vote on the other hand. Therefore in the following sections we will mainly comment on the results obtained for the EEA and BA votes (though the percentages given always refer to the whole data), leaving the matter of explaining the peculiarities of the YtE for a subsequent section.

As regards the use of ideological heuristics, it is mediated primarily by involvement and — in the opposite direction — by subjective competence. The ideology heuristic is used most frequently by voters who combine high subjective competence with high involvement, and least by voters who combine high subjective competence with low involvement. In contrast, knowledge makes no difference to the use of this heuristic. However though affective involvement seems to matter more than cognitive involvement, it might be that the *relative importance* of complex (ideological) and simple (trust in government, EU) heuristics varies. For instance, the 'hydraulic pattern' observed for priming effects (see Rogers and Dearing

1988; Iyengar and Simon 1993; Miller and Krosnick 1996), might also apply here. The idea is that voters pay a finite amount of attention to a vote, and if the media focuses on one aspect of the vote, then voters will pay less attention to other issues. To test this we computed the relative proportions of significant coefficients which can be respectively assigned to the ideology, trust in government and EU heuristics.[19]

First, relatively speaking, involvement does not increase the use of ideological heuristics; if anything, it slightly decreases this use, from 55% among uninvolved to 50% among involved voters. Second, knowledge *does* reinforce the relative importance of ideology, as 44% of heuristics (16 out of 36) used by unaware voters and 58% of heuristics (26 out of 45) used by aware voters are of the ideological type. Third, 'hard-deciders' have a slight tendency to use ideological heuristics (55% of all heuristics used by these voters) more often than do 'easy-deciders' (49%).[20] Hence in *relative terms*, knowledge does prompt the use of ideological heuristics, while affective involvement and subjective competence do not.

This point is further supported by another analysis of how knowledge, involvement and subjective competence operate as moderators in the use of heuristics. We re-specified our model in a number of ways, allowing to better compare the ideological heuristic to the simpler ones. Results of this new analysis are shown in Table 4.2. Firstly, we included all voters in the analysis, regardless of their levels of knowledge, involvement, and subjective competence; therefore in contrast to the results presented above, their opinions were predicted with heuristics variables only. Next, by adding stepwise each of the three moderators (and finally the control variables MEDIA, CAMPAIGN, and LATE) we discerned whether and to what extent they improve our understanding of heuristics use. In addition, to better observe the impact of ideology, we computed each model including only this heuristic (in parentheses in Table 4.2), and contrasted it in each successive step to the model including all three heuristics types (main entries in the Table).

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[19] The exact proportions provided here and in the following paragraphs are not very meaningful, since there are twice as many ideology dummies as dummies of each other heuristics category. In other words the percentages for IDEOLOGY are of necessity higher than the corresponding figures for TRUSTGOV and EUACC. However our interest here is not a direct comparison between heuristics categories, but a comparison between *subgroups of voters*. Since the number of heuristics of each category does not vary from one subgroup to the next, the proportions of significant coefficients can be compared across subgroups.

[20] Finally, while INVOLVEMENT does not interact with AWARENESS, DIFFICULTY does interact with both variables: hard-deciders rely more on ideology than easy-deciders when they are relatively unaware or relatively involved, but cannot be distinguished from easy-deciders when aware or uninvolved.

Table 4.2: R^2 values for stepwise models

Model	EEA				BA				YtE			
0. Heuristics (only ideology)	.42 (.05)				.39 (.10)				.20 (.14)			
1. INVOLVEMENT (only ideology)	.33 (.04)		.48 (.06)		.34 (.02)		.42 (.15)		.12 (.09)		.24 (.15)	
2. AWARENESS (only ideology)	.34 (.07)	.39 (.08)	.51 (.02)	.52 (.12)	.30 (.06)	.39 (.02)	.48 (.17)	.39 (.13)	.08 (.06)	.20 (.17)	.30 (.21)	.24 (.15)
3. DIFFICULTY (only ideology)	.37 (.10)	.41 (.08)	.56 (.15)	.56 (.13)	.43 (.12)	.46 (.13)	.53 (.21)	.40 (.16)	.14 (.10)	.22 (.19)	.33 (.22)	.24 (.15)
4. Controls (only ideology)	.44 (.17)	.43 (.09)	.57 (.15)	.56 (.13)	.52 (.26)	.48 (.13)	.53 (.24)	.42 (.16)	.16 (.11)	.26 (.21)	.35 (.23)	.26 (.15)
Subgroups:	unaw.	aware	unaw.	aware	unaw.	aware	unaw.	aware	unaw.	aware	unaw.	aware
	uninvolved		involved		uninvolved		involved		uninvolved		involved	

N*ote:* All F-statistics were highly significant (p<.01), except in all models for 'uninvolved/unaware' voters in the YtE vote. Figures in parentheses are for ideology models; figures not in parentheses are for models including all three heuristics types.

Although many more conclusions can be drawn from the Table and will appear in sections to come, for now let us stress that the influence of ideology on opinions is substantial, but not overwhelming. Judging from step 3 in the table, ideological heuristics account for more than 10% of variance in opinions (and more than 25% of the *explained* variance) in the great majority of cases. Besides, all three moderators seem to improve the model; in particular adding involvement to the model allows a better prediction of opinions by ideological heuristics mainly among involved voters, while the introduction of awareness has a similar effect among knowledgeable voters. At the same time, differences across votes are difficult to overlook, since ideology seems to matter more for the YtE vote than for the two other votes. We shall return to this matter in the next section.

3. The 'trust in government' and 'EU' heuristics

As regards the 'trust in government' and 'EU' heuristics, our model claims that their greater simplicity (in comparison with ideology) makes them easier to use even for uninvolved, un-knowledgeable, and subjectively incompetent voters. However Table 4.1 shows that involvement tends to *increase* the use of these heuristics (especially of the EU heuristics), that subjective competence may actually *promote* the use of EU attitudes (but not of trust

attitudes), and that the role of awareness is quite indeterminate.[21] Now in terms of what percentage of all significant effects can be attributed to each heuristic type, by and large our model's expectations are once again not met. If anything, involvement and subjective competence enhance the use of 'EU' heuristics, while awareness — expectedly — decreases it (EU attitudes represent 33% of significant coefficients among unknowledgeable voters, as against 22% among knowledgeable voters).[22] With respect to the 'trust' heuristic, its most striking feature is how *unaffected* it is by the three moderators. In almost all subgroups of voters this heuristic accounts for 20%–23% of significant coefficients. Let us note however, that feelings of trust in the government prevail over feelings of *mis*trust among involved voters, while this distinction does not hold for uninvolved voters.

Overall then, it seems that cognitive and affective engagement tends to prop up the use of 'simple' heuristics rather than prevent this use. Contrary to our hypotheses, there is no clear suggestion of a difference between peripheral and central processing of the vote issues. However this finding does not imply that ideology and other types of heuristics are interchangeable as sources of opinion formation. On the contrary, evidence in Table 4.2 suggests that both 'simple' and 'complex' heuristics are important to explain variations in individual opinions. While ideology may well have been the primary cause of opinions about the YtE initiative, feelings of (mis)trust in the government and attitudes toward EU accession were actually more important than ideology for the formation of opinions about the two other ballots.

4. Importance of moderator variables

A comparison of coefficients between subsamples in Table 4.1 suggests that heuristics alone account for the greatest part of variance in opinions. However in Table 4.2, the successive inclusion of knowledge, involvement and subjective competence also systematically and significantly increases the models' explanatory power. In more detail, adding involvement to the analysis improves model performance for involved voters, but has the opposite effect for

[21] Knowledge *might* have its expected influence on opinions, as more knowledgeable voters are slightly less prone to using the 'EU' heuristic. But this finding was not very consistent across votes; for instance, the BA vote exhibits a reverse pattern — knowledgeable voters actually used *more* EU heuristics.

[22] The three moderators have an additive influence on heuristics use. For instance the relative share of EUACC variables rises to 43% among unaware, uninvolved 'easy-deciders', and it falls to 15% among involved, aware 'hard-deciders'.

uninvolved voters (this corresponds closely to the difference observed above in the number of significant coefficients for the two subgroups). Adding knowledge to the analysis has a similar effect, as it tends to improve the model mainly for knowledgeable voters (though there are two exceptions to this pattern, where the opposite occurs). Next, entering subjective competence improves the models further, but mainly among voters with a comparatively low level of knowledge. In addition, at this stage, models containing only the ideological heuristic show a greater improvement than models including all heuristics, suggesting that the specific role of subjective competence among unaware voters rests mainly upon ideological differences.

Although the overall contribution of moderators to the refinement of predictions is important to note, another feature of the three moderator variables is that they exert no monolithic influence on the use of heuristics. In this regard, knowledge, involvement and subjective competence often yield effects that run in opposite directions. In many situations and groups of voters however, three-way interactions between moderators show that knowledge and involvement tend to have an additive effect on heuristic use, for example by both enhancing the use of ideological heuristics, while the influence of subjective competence is non-additive and yields opposite effects on different subsamples of voters.

5. Importance of context

Taking into account the main effects and interaction effects between moderators in Table 4.1, there is a variety of ways in which the YtE ballot appeared radically different from the two other votes. First, explaining the *total number of heuristics* used by voters in the YtE ballot follows a different logic from that of other votes. A closer look at the data reveals that involvement and subjective competence pulled heuristics use in opposite directions in the EEA and the BA vote — subjective competence increasing heuristics use among uninvolved voters and actually reducing it among involved voters — while knowledge had no clear impact at all. The pattern is quite different for the YtE vote, where knowledge had a stronger mediating impact than involvement and subjective competence.[23]

[23] Only 'uninvolved/unaware' voters used few heuristics. In addition, the overall positive effect of INVOLVEMENT on heuristics use was once again counteracted by DIFFICULTY, but in a way opposite to that observed for the two preceding votes: subjective competence facilitated the use of heuristics among involved voters and slightly inhibited this use among uninvolved voters.

Second, turning to the *relative share* of all significant coefficients that can be assigned to each heuristic type, as before striking differences arise between the ballots. While the ideological heuristic accounts for about 40% of all significant coefficients for the EEA and the BA, this share increases to nearly 80% for the YtE case. Though this figure is not directly comparable with the previous ones, a very conservative adjustment shows that 60% of significant coefficients were of the ideological type in the YtE case.[24] The greater reliance on ideology for forming opinions about the YtE initiative is also documented in Table 4.2 (in particular step 3). More than two thirds of the explained variance in opinions can be accounted for by ideology with respect to YtE, as against less than one third for the two other cases, which mirrors the above observation that the ideology heuristic was more frequently significant for YtE than for the other two cases. We provide an explanation for this difference between ballots in the next section. As for the 'trust' heuristic, it accounts for about one quarter of all significant effects in the EEA/BA ballots, but for a mere 7% in the YtE initiative. Clearly (mis)trust in government had little to do with opinion formation there. Finally, though the use of the EU heuristic is difficult to compare across votes, a conservative adjustment shows that it accounts for one third of all effects for both the EEA/BA votes and the YtE initiative — though the attitude toward EU accession was much more relevant to the question posed by the initiative than it was to the two other votes.

Third, as concerns the *effect of moderator variables*, the YtE case once again exhibits a different pattern from the two other cases. For one thing, patterns of results for this vote square much better with our theoretical predictions, at least with respect to the role of issue knowledge. Indeed, knowledge is quite clearly the best predictor of ideological heuristics use, as the proportion of significant coefficients for these variables rise from 60% to 88% as we move from unaware to aware voters.[25] No such pattern is evident for the two other votes. Besides, moving from the second to the third stepwise model in Table 4.2 brings hardly any

[24] Because the two 'missing' PRO-EU dummies for the YtE vote reduce the total number of coefficients, there is a probable overestimation of the share of ideological heuristics. Our conservative correction consists in adding eight significant coefficients for EUACC (supposing that all PRO-EU dummies would have had an impact on opinions, had it been possible to keep them in the analysis). This leads to a new set of 35 significant coefficients, of which the 21 significant ideological heuristics represent 60%.

[25] In addition, it appears that the interaction between INVOLVEMENT and DIFFICULTY noted above for the total number of heuristics — whereby subjective competence seems to help make use of heuristics only when combined with issue involvement — is due almost entirely to the use of ideological heuristics. Besides, an interaction occurred between knowledge and subjective competence: 'easy-deciders' made a more extensive use of ideology to the extent that they had acquired some information about issues, while 'hard-deciders' exhibited a similar but much less marked pattern.

improvement to the explanatory capacity of ideology in the YtE case, whereas the improvement is substantial in the EEA and BA cases. In other words, involvement and knowledge, but not subjective competence, mediate the use of the ideology heuristic in the YtE case, while subjective competence is an important additional factor in the two other ballots. Conversely and in line with expectations, knowledge tends to decrease the use of simple 'EU' heuristics in the YtE ballot, but not in the other votes. Finally, a *common* pattern of results emerges for all three votes in Table 4.2, namely that the explanatory power of heuristics (the complex as well as the simpler ones) is largest among 'involved/unaware' voters. These are the people who seem to rely most on heuristics.

6. Direction and significance of effects

Regarding the direction of significant coefficients, only three (out of 81) run in an unexpected direction.[26] All three refer to the ideological heuristic with respect to uninvolved voters (two occur in the EEA vote and one in the BA). This points to the difficulty of using the ideological heuristic under some circumstances. According to our model, a lack of involvement is expected to hinder central processing and the use of 'complex' heuristics, thus impeding uninvolved voters' ability to bring their own (ideological) predispositions to bear on a given campaign argument. Moreover campaign information itself may lack clarity; this was certainly the case with the EEA and BA ballots. Centre and right-wing parties often sent out confused messages about their respective positions to the public, not least because they were internally divided (Marquis and Sciarini 1999). Therefore the three coefficients which run in an unexpected direction among uninvolved voters (i.e. RIGHT×EASY, RIGHT×HARD, NO POSITION×EASY) may well be the result of 'poor' information from parties and the information processing therefore being too difficult for uninvolved voters, leading to 'spontaneous' opinion formation among this group of voters.

Turning to the model fit statistics, R^2 statistics indicate that the amount of explained variance is typically in the 25–50 per cent range, sometimes higher (especially among involved voters) and on one occasion lower than that (among uninvolved/unaware voters in the YtE case). The YtE case is once more in stark contrast to the other two cases, as the average R^2 for the four

[26] Remind that for the YtE initiative the effect of TRUSTGOV is expected to run in the opposite direction from the two other votes, because government was *opposed* to the YtE.

subgroups of voters is .26, compared to .50 for the EEA and .49 for the BA. On average, models for involved voters account for some 7 per cent more variance than models for uninvolved voters, while models for aware voters surprisingly explain slightly less variance (about 3 per cent) than models for unaware voters. This is mainly because the 'involved/unaware' group consistently has the best model fit (though by a small margin in the EEA and BA cases).

4.2. Predicting voting behaviour

In the second part of the analysis we used the binary VOTE variable as dependent variable, and obtained largely the same results as we did in the analysis of opinion formation. In the analysis of voting behaviour, we continued to distinguish between more and less involved voters, more and less knowledgeable voters, and more and less subjectively competent ones. We have the same expectations about voting behaviour as we had about opinion formation in section 4.1. As a matter of fact, the relationship between our two dependent variables is extremely strong, so it seems warranted to conclude that opinion formation and voting decisions are analogue, probably resting on similar background factors such as heuristics use.[27]

The VOTE variable was regressed on the same set of independent variables as was used in the previous section (see Table 4.3). However, the nature of VOTE poses problems that we did not encounter with POSITION, hence some model modifications were necessary. In short, because VOTE is not normally distributed there were computational problems forcing us to exclude YtE from the analysis, and to leave out the two PRO-EU dummies for the EEA and BA votes.[28]

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[27] A bivariate logistic regression between the two variables yielded near-optimal goodness-of-fit coefficients, and pseudo-R^2 values ranging between .73 and .83 for the three votes.

[28] First, the data for the YtE initiative exhibit the problem of 'complete separation', that is, we are 'too successful' in predicting voting decisions by means of our heuristics variables (see Menard 1995: 67-71). In consequence, we obtain enormous regression coefficients (with huge standard errors), as is also the case with multicollinearity. To make things even worse, the very small number of citizens who voted 'yes' to the initiative 'eliminated' some bivariate relationships altogether, because there was no variation in the dependent variable for some subgroups of voters (e.g. all far right 'hard-deciders' voted 'no'). Therefore because there is no obvious method for solving this puzzle, we decided to give up estimating vote decisions on the YtE initiative. Second, the same problem was detected for the BA vote, though this time it affected only two variables, namely the two PRO-EU dummies. Virtually all voters who lean toward approving EU accession (i.e. 342 voters out of 344) accepted the Bilateral Agreements. On the other hand, voters who favour isolation from the EU were divided on the ballot question. Thus because the problem was concentrated on two specific variables, it was much easier to circumvent. We collapsed PRO-EU dummies with the 'neutral' category, creating a new reference category, and kept the two ANTI-EU dummies in the analysis.

Besides, we conducted a single analysis of the EEA and BA cases, in order to avoid certain methodological problems.[29]

First as in section 4.1, heuristics use increases as a function of cognitive and affective engagement. Higher levels of knowledge — that is, greater cognitive engagement — are associated with more extensive heuristics use than lower levels of knowledge (there were 12 significant coefficients among low-knowledge voters, and 18 among high-knowledge voters). Involvement — affective engagement — also fosters the use of heuristics (13 significant coefficients among uninvolved voters, 17 among involved ones). Again mirroring the analysis of opinion formation, these effects go in the same direction, which means that overall the smallest number of significant heuristics coefficients is to be found among 'unaware/uninvolved' voters, and the greatest number among 'aware/involved' ones. In contrast, subjective competence has no direct influence on heuristics use, but it interacts with both involvement and knowledge, in the sense that 'hard-deciders' use more heuristics if they are cognitively and affectively engaged in the ballot issues — yet another replication of previous results.

Looking at the different heuristics in relationship with the three moderator variables, it appears first that ideological heuristics' use increases with higher levels of involvement and knowledge, but decreases with higher levels of subjective competence. In relative terms of the share of all significant coefficients however, only affective involvement yields sizeable differences in the use of ideological heuristics.[30] Use of the 'trust' heuristic is much more frequent than was the case in the opinion formation analysis, and the results show that among the three moderators knowledge plays the key role (i.e. a high level of knowledge is associated with the use of this heuristic). Moreover it seems that *mis*trust in the government guides uninvolved voters' decisions, while feelings of trust have more influence on involved voters. The EU heuristic is difficult to examine here, because the number of indicators is reduced to

[29] Problems of 'near-complete separation' arose for the two votes, because several variables (especially when the number of respondents sharing a characteristic was low) allowed for a perfect or quasi-perfect prediction of the vote decision, leading to enormously high regression coefficients with inflated standard errors.

[30] The number of such heuristics used by involved voters is double that of uninvolved voters (8 against 4, or 47% of all significant heuristics effects against 31%). Because the YtE data is not part of the analysis, the previously noted role of AWARENESS in grounding opinions in ideology is no more apparent for the estimation of voting decisions.

the strict minimum and all coefficients indicate that vote decisions are influenced by anti-EU attitudes.[31]

Only 4 out of 30 coefficients ran in an unanticipated direction, and as in the opinion formation analysis they concern uninvolved voters. Once again, thus a lack of involvement in the ballot issues seems to entail a failure to 'match' one's personal ideological preferences with political behaviour.[32] Besides, comparing model fits for voter subgroups (pseudo-R^2, chi-square vs. –2LL), we find that the model fit is best for 'involved/unaware' voters, and worst for 'uninvolved/unaware' voters — this is quite similar to what we found regarding opinion formation.

In summary, our results about voting decisions replicate the basic finding of the opinion formation analysis that the sheer number of heuristics playing a role in the decision-making process increases as a function of affective and cognitive engagement in the ballot issue. In contrast to the opinion formation analysis though, voting decisions were influenced by the ideology heuristic to the extent that voters had a high level of involvement (rather than knowledge), whereas the effect of the trust in government heuristic was mediated by knowledge (rather than being unrelated to any of the three moderator variables). However, regardless of these nuances (which have much to do with the exclusion of the YtE case), our assumption that only ideological heuristics should be 'mobilized' by the three moderators is not met by our empirical evidence. Rather the main implication of our results is that affective and cognitive engagement foster the use of complex as well as simple heuristics when it comes to European policy.

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[31] However, a closer look at the *magnitude* of coefficients suggests that issue involvement and subjective competence somewhat promote the use of EU heuristics.

[32] Some categories of uninvolved voters inferred a somewhat 'surprising' decision from their ideological positions (in the case of uninformed centre and right 'easy-deciders', or informed right 'hard-deciders'); or uninvolved voters who were relatively informed but faced a hard decision made a disconcerting inference from their trust in government to refuse its negotiated agreements with the EU. Two out these four unexpected effects were already registered in our analysis of opinions (i.e. RIGHT×EASY and RIGHT×HARD). Besides, our interpretation that 'unexpected' effects flow from a lack of affective involvement entailing a lack of constraint among mental constructs is supported by a further analysis of the relationship between voting decisions and our global measure of opinions (POSITION). It turns out that, on average across the three ballots, some 10% more variance in voting decisions (according to Nagelkerke R^2) can be explained among involved voters than among uninvolved voters. In comparison, distinguishing between high and low awareness levels shows a mere 3% average improvement in the determination coefficient.

Table 4.3: Logistic regression models predicting voting decisions (VOTE); unstandardized coefficients; EEA and BA data only (YtE data excluded)

REGRESSION ON VOTE	*Voters judging the issue unimportant*						*Voters judging the issue important*					
	Unaware voters			*Aware voters*			*Unaware voters*			*Aware voters*		
	B	S.E.	Exp (B)	B	S.E.	Exp (B)	B	S.E.	Exp (B)	B	S.E.	Exp (B)
CENTRE×EASY	1.511**	.633	4.531	–.285	.625	.752	–.898	.692	.408	–.349	.383	.706
RIGHT×EASY	1.487**	.681	4.424	–.878	.628	.416	1.327	.818	3.768	–.477	.407	.621
FAR RIGHT×EASY	–.402	.805	.669	–1.954***	.717	.142	–1.663*	.855	.190	–3.122***	.619	.044
NO POSITION×EASY	–.757	.799	.469	.510	.994	1.666	–.171	.915	.843	–.753	.607	.471
CENTRE×HARD	–.552	.503	.576	–.583	.485	.558	–.821	.527	.440	–1.545***	.447	.213
RIGHT×HARD	–.643	.668	.526	1.050*	.566	2.859	–2.266***	.703	.104	–1.214**	.501	.297
FAR RIGHT×HARD	–.068	.619	.934	.142	.600	1.152	–1.198	.858	.302	–1.967***	.621	.140
NO POSITION×HARD	–.214	.756	.807	–.953	.690	.386	–1.395*	.744	.248	–1.143*	.646	.319
TRUST×EASY	.114	.528	1.121	–.186	.566	.830	2.593***	.681	13.365	1.541***	.491	4.669
MISTRUST×EASY	–1.602**	.634	.202	–2.900***	.648	.055	–.982	.605	.374	–.892*	.458	.410
TRUST×HARD	.183	.602	1.200	–1.403**	.671	.246	.588	.640	1.800	.893*	.481	2.442
MISTRUST×HARD	–1.427**	.616	.240	–3.269***	.660	.038	–.217	.652	.805	–1.943***	.447	.143
ANTI EU×EASY	–2.499***	.535	.082	–2.608***	.532	.074	–3.856***	.602	.021	–3.160***	.413	.042
ANTI EU×HARD	–.977**	.442	.376	–2.356***	.435	.095	–3.173***	.504	.042	–2.275***	.415	.103
MEDIA	.016	.075	1.016	–.003	.073	.997	.086	.075	1.090	.094*	.053	1.098
CAMPAIGN	.579*	.334	1.785	.098	.326	1.103	–.084	.392	.919	.338	.248	1.402
LATE	.704	.475	2.023	.081	.394	1.085	–.099	.531	.906	1.080***	.378	2.945
Constant	1.031*	.621	2.804	3.834***	.775	46.264	2.588***	.705	13.301	2.907***	.525	18.305
Nagelkerke R^2 (N)	.392	(275)		.558	(408)		.619	(355)		.604	(802)	
–2LL Chi-square	285.39	95.78***		343.98	221.39***		242.92	209.54***		538.10	446.08***	

Note: ***: p<.01. **: p<.05. *: p<.10.

5. Discussion

In this section, we shall address a number of questions that were left unanswered in the analysis of results, and we will try to take steps toward understanding the puzzles that arise from our empirical model. To do so, we shall organize our discussion in five main topics.

First, we come back to our speculation (cf. section 2.3) that heuristics must be 'activated' by campaign cues, at least to some extent, in order to be applied to the evaluation of campaign information. This activation effect is perhaps best demonstrated by the *absence* or the *low profile* of such campaign cues, which in turn should entail a lesser influence of heuristics on the judgment of arguments and on voting decisions. In this perspective, it can be emphasized that 4% of ads in the EEA campaign were sponsored by political parties (alone or with other actors), while parties can be credited with 14% of ads in the BA campaign and 24% in the YtE campaign. This suggests that partisan cues went largely unnoticed in the EEA campaign, but that they were more conspicuous for the BA ballot and still more so for the YtE ballot. To the extent that voters were aware or involved enough to pick up partisan cues from the flow of campaign messages, these differences in cue visibility may explain why concerned voters in the YtE campaign were much more prone to relying on their ideological heuristics than concerned voters in the EEA campaign. Similarly in 2001, the Swiss government was at the same time 'for' Europe (purportedly supporting EU accession in the long haul) and 'against' Europe (rejecting the idea of opening immediate negotiations with the EU). Thus the contradiction between these short-term and long-term goals may have prevented any clear identification of whether the government was an ally or adversary of one's own preferred European policy. Accordingly, this blurring of positions made the 'trust' heuristic essentially inoperative, and prevented its use to evaluate campaign arguments.

Directly related to the question of the availability of campaign cues is the question of which mechanisms account for the actual *reception* and *use* of these cues to activate internal heuristics. In this regard, our theoretical model postulated a substantive distinction between ideological and other categories of heuristics. Getting one's ideology mobilized to make sense of campaign information was expected to require more engagement than using 'simpler' heuristics. However, our results suggest that few systematic differences exist between ideology and other heuristics. In general, the use of *all* kinds of heuristics tends to increase as a function of issue involvement.

It seems that politics is definitely quite obscure to many citizens (Neuman 1986; Delli Carpini and Keeter 1992), and that using seemingly simple proxies — trust in government, attitude toward EU accession — for inferring specific issue positions is not as straightforward as we previously thought. Thus people may well fill in the gaps in their political reasoning, but only to the extent that they are motivated to do so. On the other hand, ideology might be distinct from other heuristics as regards the role of specific knowledge of the ballot issues. As a matter of fact, ideology is the only heuristics whose influence on opinions is contingent on increasing levels of awareness. This may point to the greater difficulty inherent in manipulating ideological concepts, whereby ideology requires both affective *and* cognitive involvement in order to influence the evaluation of campaign information.[33] For other types of heuristics, affective involvement may suffice.

However, it should be stressed that the relationship between issue knowledge and the use of ideology is obvious only in the case of the YtE ballot. This vote possibly comes nearest to the 'normal', domestic situations, where ideological positions are clearly contrasted within the party system. In such situations, the appropriate reception or inference of partisan cues probably owes to some knowledge of the ballot issues, and it leads to a predictable polarization of opinions along ideological lines.[34] Otherwise when knowledge fails to enhance ideological effects (EEA, BA), issue involvement seems to 'channel' them, as both their statistical significance and consistency rise as a function of involvement — no 'unexpected' effects are registered among concerned voters. To some extent then, involvement and knowledge seem to regulate the impact of ideology in an *additive or substitutive way* (the same holds for 'trust' and 'EU' heuristics, though to a lesser degree, owing to the limited impact of issue knowledge). By contrast, more often than

[33] A lack of knowledge on the part of many voters could also mean that they do not know where 'their' party — or indeed any party — stands. Accordingly, such voters simply cannot be influenced by party positions, or use party positions as a tool for helping them to make sense of the campaign information.

[34] By contrast, we tested the alternative hypothesis that our IDEOLOGY measures do not tap the same empirical reality among aware and unaware voters. On the one hand, voters categorized as 'aware' might be *chronically* more knowledgeable about politics and exhibit stronger, more consistent, or more 'trustworthy', ideological orientations; then these orientations would of necessity exercise a stronger constraint on issue opinions than they do for unaware voters. Or put differently, 'unaware' voters may respond to the 'partisan preference' and 'left-right' questions with less 'accuracy' (or even essentially at random), because such concepts are not very meaningful to them; then these voters could not use heuristics that they do not really possess. However in the first analysis, this hypothesis is poorly supported by our empirical data. At any rate, a measure of the *strength of party identification* (available only for the BA and YtE votes; 3 levels: strongly identified, moderately identified, mere sympathizer) shows no systematic relationship with either issue knowledge, issue involvement, or subjective competence (all $p>.13$, except for DIFFICULTY in the YtE vote, where 'easy-deciders' were significantly more identified with political parties than 'hard-deciders').

not the influence of subjective competence on opinions and voting decisions occurs *non-additively* with the two other mediating variables.

These observations lead us to consider a third issue. Overall, the pervasiveness of non-additive or substitution effects of INVOLVEMENT, AWARENESS and DIFFICULTY leaves the possibility open that some of these variables intervene at different stages of the global process outlined in Section 2. To begin with, it is far from obvious whether one moderating variable has primacy over another — for example, does the effect of involvement precede or follow the influence of subjective competence, or do both effects come up simultaneously?[35] Next, it is not uncommon that the same variable has opposite effects at different steps, so as to make its overall influence apparently trivial or non-monotonic (McGuire 1969); in other words, we cannot exclude the possibility that variables which really play a role in the yielding step have their influence diluted or suppressed at later stages — recall opinionation, and so on. Further, even though effects may not cancel each other, the problem remains of identifying with some certainty the mechanism responsible for the observed differences between subgroups of voters. In this respect an important question is whether uninvolved voters take positions on the ballots that are close to those of involved voters. If such is the case, do the uninvolved come to similar responses *through different pathways*? In other words, do unconcerned voters catch up with similarly-minded but more concerned voters at the *opinionation* step, by 'guessing' their survey answers — thereafter the 'opinionation hypothesis' — or do the uninvolved come to comparable opinions and behaviours by using different modes of processing information, that is, by diverging from concerned voters at the *yielding* step?

These two hypotheses are not easy to discriminate. But do uninvolved and involved voters take similar positions in the first place? A comparison of means for POSITION measures in each subgroup of voters suggests so. Combining ideology with issue involvement — that is, of the three mediating variables, the one which maximizes differences between subgroups[36] — one observes

[35] For example, there are two ways to comment on the INVOLVEMENT×DIFFICULTY interaction for the BA data. First, one can put forward that easiness favours the use of heuristics among uninvolved voters, but reduces it among involved voters. Second, one can stress that involvement favours the use of heuristics only among hard-deciders, but not among easy-deciders. Depending on which of the two perspectives is chosen, different accounts of the mediating role of the two variables are conveyed.

[36] Although INVOLVEMENT, AWARENESS and DIFFICULTY all contribute, to some degree, to explaining differences in opinions, an ANOVA shows that INVOLVEMENT accounts for the largest differences in all three ballots ($F>10.74$, $df=1,[938;964]$, $p<.001$), while the effect of DIFFICULTY is non-significant for the YtE vote, all that of AWARENESS is significant only for the BA vote. Besides, a multivariate analysis shows that the most different subgroups are

an average .14 difference in mean POSITION values between uninvolved and involved voters of each ideological group.[37] In proportion to the possible variation in the opinion scale (comprised between 1.89 and 2.00 for the three ballots), this represents a rather small discrepancy. Besides, comparing again involved and uninvolved voters of each ideological group, one obtains an average 11% difference in the percentages of 'yes' votes; this is not an extremely great difference, but it is still larger than the difference in opinions. In sum, it is fair to assert that involvement mainly contributed to *crystallizing* and *consolidating* the potential issue positions inherent in each ideological orientation — rather than changing them. By facilitating the activation of ideological heuristics, involvement urged left, centre, and right voters toward agreement with the ballot proposals, and turned far right voters away from these proposals.

Yet the question of whether such (rather slight) differences stem from yielding or opinionation mechanisms is not resolved. To address it, we proceed from the fact that uninvolved voters, who are assumed to make a relatively more peripheral use of information than involved voters, did nonetheless make a voting decision on the ballots. As we have shown above, they do so partly in accordance with their internal heuristics, from which they most probably develop diffuse beliefs and affective biases about the ballot proposals. If on the other hand, they do *not* use their heuristics to evaluate campaign information, but only to construct opinions on the spot when answering survey questions, then the influence of heuristics on opinions is *not* mediated by internalized beliefs (i.e. yielding) and by recall mechanisms. Thus, although heuristics' influence on opinions was shown to be weaker than for involved voters, it is supposedly direct, while it is probably indirect (i.e. mediated by beliefs) with respect to voting decisions. The way in which uninvolved voters use heuristics to form opinions may have little to do with the way they use them to shape their voting decision. By contrast, in the case of involved voters, opinions *and* voting decisions are both based on internalized beliefs (which in turn follow from heuristics). This is why the relationship between opinions and votes should be more robust for involved voters than it should be for uninvolved voters, if the opinionation hypothesis is correct. Further, because opinions and votes of involved voters are theoretically based on the same set of heuristics, the independent effect of heuristics on the vote should be suppressed by the

uninvolved/unaware 'easy-deciders' (who are most negative toward campaign arguments) vs. involved/unaware 'easy-deciders' (who are most positive toward arguments).

[37] This 'average of means differences' between uninvolved and involved voters is computed on the basis of values for left, centre, right, and far right groups in each ballot (i.e. 12 differences). The small, but consistent, differences in POSITION between uninvolved and involved voters can also be established by comparing the constants in the regression models displayed in Table 4.1

introduction of our opinion scale in the regression model predicting voting decisions. Figure 5.1 sums up graphically the interrelationships between variables implied at the yielding and opinionation steps. Solid arrows stand for theoretically strong relations, while dotted arrows denote weaker or non-existent relations.

By comparing models before and after entering POSITION as a predictor of VOTE (analysis not reported here), one can notice that the improvement in model fit is not strictly equal across subgroups of voters. However, quite contrary to our prediction from the opinionation hypothesis, it is among the *least* concerned group of voters (i.e. unaware/uninvolved) that the improvement is most pronounced, while it is similar among the three other groups.[38] Furthermore, although indeed the independent effects of heuristics on the vote were clearly suppressed by the inclusion of POSITION among involved/aware citizens, the same pattern emerged for uninvolved/unaware voters.[39] What this suggests is that opinions and votes among unconcerned voters do *not* have obviously segregated sources. Hence, although controlling for the acquisition of beliefs at the yielding step is not possible with our one-shot survey data, these results are at least difficult to reconcile with the opinionation hypothesis.[40] Or, put differently, we find no great substantive differences between votes and opinions; votes are seldom influenced by variables that have no bearing on opinions. True, questions about campaign arguments normally should require more reflection during the interview and evince more biases (memory distorsions, framing effects, etc.) than does the question 'How did you vote last Sunday?' and affective and cognitive engagement certainly play a role in making opinions more dependable on internalized beliefs. Yet, engagement probably has stronger effects on the yielding mechanism, as they promote the use of heuristics. At the same time, we have provided evidence that differences in the background of opinion formation have few consequences for the nature of opinions themselves. Rather, substantial differences depend more consistently on ideology and other long-term heuristics.

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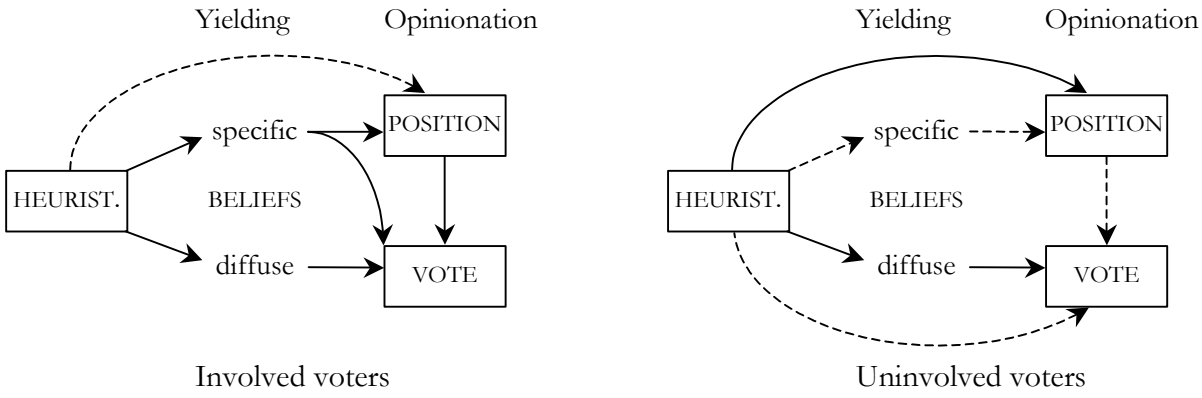
[38] Both pseudo-R^2 values and log-likelihood decreases clearly indicate that the marginal adjustment of the model due to the inclusion of POSITION is largest among uninvolved/unaware voters. The detailed results of this analysis can be obtained upon request to the authors.

[39] In the two other groups, heuristics remain almost as powerful as they were in previous analyses.

[40] An alternative explanation would be that uninvolved/unaware voters use their own voting decision as an 'anchoring judgment' to select evaluatively congruent responses to the opinion questions — as reversal of causality due to social desirability, whereby people feel pressure to impose structure on their behaviours (see Biocca 1988). But, in so doing, voters would not be observed to bring their heuristics to bear on their opinions about campaign arguments.

Figure 5.1: Relationships between mental constructs and behaviors according to the "opinionation hypothesis"



Another issue that we wish to address here pertains to the role of subjective competence. As we noted above, DIFFICULTY has a polarizing impact on opinions about campaign arguments, as 'easy-deciders' tend to take more extreme positions, regardless of their direction — either negative or positive toward the ballot proposals. In particular, coupling subjective competence and poor information levels with uninvolvement *or* involvement produces extremely negative *or* positive opinions, respectively.[41] In other words, without taking heuristics into account, the baseline profile of easy-deciders is more contrasted than that of hard-deciders. On the other hand, involvement promotes the use of ideological heuristics only among hard-deciders. In sum, the differential interaction of involvement and subjective competence on base-line opinions and ideology-driven opinions is something of a paradox.

One possible explanation of this paradox is that the easiness of taking one's voting decision is used *as a heuristic in itself*. In a manner reminiscent of the 'availability heuristic' (Tversky and Kahneman 1973), voters may judge from the easiness with which they decided on a ballot that any consideration that pops to mind has intrinsic value, or is representative of one's thoughts about an object. Thus according to this 'easiness-as-heuristic' hypothesis, uninvolved easy-deciders should lean toward considerations favouring a rejection of ballot proposals, because they have not really attended the campaign and have not internalized new beliefs about the ballots; therefore they have a pool of accessible ideas that is heavily biased toward the status quo. On the contrary, involved easy-deciders are more prone to recollect some new considerations

[41] Thus it is that uninvolved and unaware easy-deciders were most critical about the ballots, whereas involved and unaware easy-deciders were most supportive (an exception being the BA vote, where involved and *aware* easy-deciders were most supportive).

brought about by the campaign. Besides, although ideological heuristics certainly determine which considerations come to mind at the time of the interview, involvement does not elicit a more careful mnemonic search and a more selective retrieval of information along ideological lines; whatever their political leanings, voters tend to follow the 'satisficing' principle 'what first comes to mind is important'. Quite different would be the situation of hard-deciders, to whom the basic tenets of our model would apply more specifically. By and large, uninvolvement in the ballot issues prevents an efficient use of heuristics by uninvolved hard-deciders, and drives these voters toward indifference or ambivalence. By contrast, coupled with subjective incompetence, involvement fosters the use of heuristics to arrive at 'plausible' judgments about campaign arguments. Though very tentative, this whole hypothesis is tenable to the extent that, as we envisioned in Section 2, DIFFICULTY is an inappropriate indicator of the 'need for cognition' felt by voters. Of course, both mechanisms — need for cognition and easiness-as-heuristic — may be at work for different categories of voters, and a thorough test of these alternative hypotheses goes well beyond our empirical data.

The last issue considered in this section has to do with the effect of control variables in our regression models. The variables designed to measure the effect of campaigns (MEDIA, CAMPAIGN, and LATE) have a rather limited impact on opinions and votes. If anything, the influence of these variables is mainly concentrated among uninvolved voters, and the regression coefficients tend to be positive. This suggests that, whatever the exact content of campaigns, mere exposure and reception of campaign messages tends to elicit a (slight) departure from the status quo, by heightening disagreement with 'no' arguments appealing to neutrality, popular rights, or protection of native workers, and by increasing acceptance of 'yes' arguments. According to our theoretical model, the influence of the exposure and reception steps is not direct, but mediated by yielding and subsequent steps. Admittedly though, peripheral processing of information among uninvolved voters is often poorly accounted for by the impact of ideological and other heuristics, because a number of peripheral cues (e.g. length of arguments) have little to do with partisan or other political cleavages. Encounter with campaign information may simply increase the awareness of new arguments and liking for them, without pre-existing beliefs being much brought to bear on their acceptation or refusal. In addition, the fact that such 'mere exposure' effects occurred preferentially among involved voters in the 'Yes to Europe' campaign point to the obvious asymmetry in the intensity of 'pro' and 'anti' campaigns, whereby opponents of the initiative sent out five times more ads than supporters — amounting to ten times more surface area (see

section 3.1). Indeed, in comparison with previous campaigns, it may have required more affective and cognitive resources to simply become aware of 'yes' arguments when receiving campaign information, and to develop any positive attitude toward them. Therefore, campaign exposure actually promoted support to the YtE mainly among involved voters.

6. Conclusion

This article applied a set of general theoretical propositions about opinion formation and voting behaviour to a case study of three instances of direct democracy pertaining to the EU in Switzerland. The basic idea of these theoretical propositions was that not all voters use political information in the same way. Specifically, regarding the three mediating variables we hypothesised that levels of knowledge, involvement and subjective competence matter. Regarding heuristics we hypothesised that there are 'simpler' and 'more complex' ones. In our empirical analysis we postulated that the trust in government and EU attitude heuristics were examples of simple heuristics, while the ideological heuristic is a complex one. Bringing the two hypotheses about voters and heuristics together, we argued a priori that voters with high knowledge, involvement and subjective competence would tend to use the complex heuristic to a relatively great extent compared to the less knowledgeable, involved and subjectively competent voters. The latter were instead supposed to rely predominantly on the simple heuristics.

The results do not wholly confirm these expectations. Concerning opinion formation there are three points to be made. First, at the most generic level knowledge and involvement increase the use of heuristics, whereas subjective competence does not. Second, with respect to the complex heuristic, a higher level of knowledge is (as expected) associated with the use of complex rather than simple heuristics, whereas this was not the case regarding involvement and subjective competence. Third, as regards the simple heuristics, a lower level of knowledge is (as expected) associated with their use, and contrary to our expectations a higher level of involvement has the same effect. Subjective competence, as above, has no real impact. The results of the voting behaviour analysis largely corresponded with the opinion formation analysis. The number of heuristics used increases as a function of knowledge and involvement, subjective competence playing a minor and inconsistent role. The most notable difference between the two analyses is that involvement rather than knowledge is associated with the use of the complex heuristic.

To summarise all the empirical detail, knowledge and involvement are associated with the use of heuristics. This suggests either that the model that was our starting point needs to be reformulated, or that some aspect of the empirical analysis does not test the model in an appropriate manner, or both. To begin with the possibility of re-specifying the model, we must first of all point to the caveat that we have only looked at one of many steps (that is, the yielding step), and are therefore not in a position to make anything more than tentative comments that apply more broadly than that step. Nonetheless, the theoretical expectations about different kinds of voters using different kinds of heuristics are difficult to sustain. We have not found persuasive evidence that the types of voters we assumed to have a higher tendency to use complex heuristics actually do so, and vice versa for the voters we assumed would have a stronger tendency to use simple heuristics. The model reformulation that lies closest to hand is that there is no notable, systematic difference between voter groups' heuristics use on the basis of the groups' knowledge, involvement and subjective competence, at least when it comes to European policy.

Another consideration concerns assumptions we made about the data, specifically that the ideological heuristic is more complex than the 'trust in government' and 'EU' heuristics. In secondary analysis of survey data, there is no way of checking whether voters themselves really do find this or that cue more difficult to interpret, and in light of the results we have to consider the possibility that voters do not find ideology more complex than trust in government or EU attitudes.

Finally, one may ask to what extent our results are also relevant to the discussion about the role of voters' trust in *domestic* government in their evaluation of *foreign* policy ballot proposals. Some researchers have explored the question of whether foreign policy referendums can — particularly under circumstances of imperfect information — become domestic 'plebiscites', whereby voters reward popular governments or sanction disliked governments that happen to support international reforms (e.g. Siune and Svensson 1993; Franklin *et al*. 1994; Schneider and Weitsman 1996). Our results suggest that, although the TRUSTGOV variable did exert an impact on opinions and voting decisions, a whole array of other variables also come into play. Besides, according to the 'punishment/reward' hypothesis, we would expect primarily the most uninvolved and uninformed voters to use their 'trust heuristic' as a means to evaluate the ballot proposals. As a matter of fact though, issue involvement and knowledge tend to *promote* the use of the trust heuristic, suggesting that European referendums are not pure 'popularity contests' for

governments facing a disengaged and ignorant electorate. Rather, the trust or mistrust in government is but one piece of information among others at the disposal of voters who try to make sense of complex measures of European policy.

Appendix: Construction of variables

POSITION: The variable is created from a battery of questions asking respondents whether they agree or disagree with statements about the vote issue. Actually, these statements are arguments that were raised during the campaigns (e.g. 'Entering the EEA will cause an invasion of foreign workers'); the number of such arguments submitted to evaluation varies between votes (EEA: 14 statements; BA: 10; YtE: 6). After being standardized across the three votes, POSITION ranges from –1 to 1.

INVOLVEMENT : The variable is created from a question asking respondents how personally important a vote issue is to them. Responses in the bottom half of the scale (1-5) are recoded into an 'uninvolved' voters category, while the other half (6-10) is assigned to 'involved' voters. Unfortunately the question wording for this survey item changed slightly between surveys (1992 was somewhat different from 2000 and 2001). As is well-known, slight wording changes can have non-negligible but hard-to-estimate effects. We assume that in this instance, the effect may have been to reduce the number of people who fall into the 'found vote issue important' category in 1992 compared to the other years — although the EEA campaign was much more intense and the turnout was much higher than in the two subsequent votes, suggesting that the project was deemed more important in the population at large. Therefore it seems peculiar that the 'involved' category in 1992 has a comparatively low number of people, and we put the reason down to the question wording changes.

AWARENESS: The variable relies on questions about the title of the ballot (0: unknown; 1: known), about the content of the object (0: no valid answer; 1: one feature known; 2: two features known), about the governmental vote recommendation (0: unknown; 1: known), about specific aspects of the project's content (0 to 8 aspects known), or about the capacity to motivate one's vote decision (0 to 1 motive given). Since these questions were not systematically posed for the three ballots, here are the variables used for each ballot: *EEA*: title, content, government's position, motivation. *BA*: content, specific questions. *YtE*: title, content, motivation. After

summation of the scores on each question, the index is recoded so as to obtain four categories of comparable size. This is possible only to some extent, given the small number of original values; for the EEA and YtE data the final index is clearly skewed toward higher values. After recoding, the variable ranges between 1 (very low) and 4 (very high). Eventually this index is simply collapsed into two equivalent categories: 'unaware' voters (1-2) and 'aware' voters (3-4).

IDEOLOGY: The five categories of this variables (left; centre; right; far right; without clear ideological position) are constructed on the basis of party identification, whereby some 15 different parties are classified according to their general position on the left-right axis. However because more than 50% of respondents do not declare any partisan preference, we supplement this missing measure by the respondents' self-positioning on the left-right scale (0-10), which we also recode into four categories. This procedure reduces the number of respondents with no attributed ideological stance to less than 16% of the total sample (and 11% of voters). 2% of respondents refusing to respond altogether (instead of admitting DK) are declared missing.

EUACC: The questions on which the variable is based are not identical for all ballots. For the EEA and the BA, the question asks directly about 'voting intentions', had Switzerland to choose about joining the EU or not (categories: definitely yes, rather yes, DK, rather no, definitely no). For the YtE, the best available indicator is a 6-position scale distinguishing voters wanting an 'open Switzerland' from those wanting to 'defend traditions'. After recoding the scale, the problem is the very low number (only 1%) of undecided ('neutral') respondents serving as reference category (see main text).

MEDIA: 12 different media are included in the Vox questions, namely: newspaper articles, radio; television; information booklet issued by the government; prints; advertisements in newspapers; street posters; letters to the editor; street stands; direct mailing; discussions at the workplace; Internet (for the EEA: flyers).

CAMPAIGN, LATE, EARLY: 'Early deciders' are people for whom the voting decision was 'clear from the beginning', that is was made more than six weeks before the vote. 'Late deciders' took their decision in the last week of the campaign. 'Campaign deciders' took their decision between one and six weeks before the vote.

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