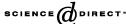
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Voter heuristics and political cognition in Italy: An empirical typology

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Abstract

Within a framework of reasoning voters who use various cognitive shortcuts — heuristics — to arrive at decision, we classify Italian voters on the basis of the information they possess, how information and judgment are organized and whether preferences match actual vote. By using only two sets of variables present in nearly all election surveys, we distinguish four types of voters: *Utilius*, a sort of Downsian voter that uses the left—right dimension in order to reduce the complexity of politics to a unidimensional space; *Amicus*, who conceives politics as an arena in which two main coalitions fight; *Aliens*, a detached voter that is strongly disinterested in — or even disappointed by — politics and its protagonists; and *Medians*, who belongs to a residual category. By distinguishing voters according to their actual knowledge and style of political reasoning, we provide a classification that is both able to grasp actual differences in the level of political cognition and sophistication, and suggestive with respect to the kind of information that are pertinent for the task at hand. We demonstrate that people follow multiple strategies and rely selectively on different kind of available information. It follows that parties, leaders, coalitions and media affect voter behavior, but they have different leverage on different types of voters. We conclude that a proper account of voter behavior

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needs to move from the search of the determinants of vote to the search of multiple mechanisms through which voters perceive, represent and evaluate the political landscape. © 2005 Elsevier Ltd. All rights reserved.

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1. Introduction

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It is not plausible that all voters follow similar procedures for making electoral decisions. Yet, most empirical analyses of electoral surveys make precisely this assumption by using a single set of independent variables for modeling electoral choice. In fact, each variable category is assumed to apply to all voters in the same way.

It is more plausible that voters reason in qualitatively different ways, evaluate according to different criteria, use different types of information, and follow different paths to arrive at the same range of outcomes (such as the choice among several parties). We take this idea seriously by developing a framework of reasoning voters who use various shortcuts—heuristics — to arrive at decisions. Thus, we start by assuming voters heterogeneity (Sniderman et al., 1991; Lupia et al., 2000) and we propose a classification of voters on the basis of their cognitive shortcuts.

After a description of our theoretical framework in section one, in section two we classify people by type of cognitive shortcut. Briefly, the classification criteria used here refer to cognitive ability and style in organizing political objects, for example parties, coalitions and leaders. Voters are distinguished by the kind of political information they possess, how this information and their judgments combine in the political belief system, and whether their preferences match their vote. Using only two sets of variables present in nearly all election surveys, a classification of 4 types of voter (Utilius, Amicus, Aliens and Medians) is proposed.

Rather than assume voters as a homogeneous aggregate, Utilius, Amicus, Aliens and Medians become the protagonists of the story. Utilius uses the categories of left and right in order to reduce the complexity of politics to a one-dimensional space. Following the Downsian model of voter behavior, Utilius chooses the party closer to his/his own ideological position. Amicus, instead, conceives politics as an arena in which two main coalitions, the center-right and the center-left, fight. In contrast to Utilius, who focuses on parties, Amicus shifts focus to the two main party alliances, which become the main objects of evaluation and choice. Consequently, all other information and judgment are subsumed within this duality. In contrast, Aliens is strongly disinterested in — or even disappointed by — political debate and, despite the fact that he/she often votes, rejects politics and its protagonists. Medians belongs to a residual category, composed of those respondents not previously classified. This category does not distinguish a unique kind of political information and a peculiar use of it, therefore the heterogeneity of medians is such that one cannot assess whether vote actually matches preferences or not. Analytically, Medians are deployed as reference category, to which the other types are compared.

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Traditionally, scholars on political cognition and sophistication refer to education, information and interest in politics as proper empirical measures of these concepts. The quality of our partition will be therefore tested for its ability to distinguish respondents by these variables. This is the content of Section 4.

In Sections 5 and 6 we assess similarities and differences across types, showing how political attitudes are shaped by different dynamics for different kinds of voters. Consequently, voter behavior is affected by political objects of different nature: for example, television exerts a direct influence on voter behavior only upon Aliens, who are the less interested and sophisticated voters.

In the next section we introduce the theoretical framework of our model.

2. Heuristics and voter's decision making: a theoretical perspective

How to vote in an election, or whether to vote, is the result of an individual decision making process. This is true even when the vote presents itself as a 'standing decision' (Key, 1966) since deciding to let a standing decision stand is a decision. Most citizens in a democracy agree that voting is serious business, though they differ about the degree of importance of their personal vote, and, in general, the level of political interest and information in mass electorates is low (Campbell et al., 1960; Converse, 1964; Luskin, 1987; Delli Carpini and Keeter, 1993).

For citizens, the lack of detailed political information after a voting decision is made should not be stressed too much. Information no longer relevant to a task at hand is, normally, discarded. Likewise, it is commonly argued that, given limited resources, it is not natural for voter to devote much time to deciding how to vote (Downs, 1957).

This, though true, partly misses the point: if many citizens have little interest in politics and less than detailed information about it, how do they decide how to vote? Moreover, classical democratic theory postulates an informed and participating citizenry, and argues that mass electorates do not meet these requirements. If this is the case, how then do voters vote in a reasonable way when, according to classical theory, they are clearly incapable of doing it?

One answer that has been offered by research on decision making is that in such complex, risky and uncertain situations, decision-makers use shortcuts, *heuristics*. Such heuristics enable people to set things done well enough, when their limited resources prohibit using procedures involving full information, unlimited computing and reasoning in order to fit some optimizing criterion (Simon, 1957).

In the analysis of decision making in conditions of uncertainty the term heuristics has been used in various ways. Two are relevant here. In the first, the 'heuristics and

¹ Voters typically are not, as opposed to political scientists, fascinated by politics and therefore discard political information as soon as they have decided how to vote. As the timing of such a decision need not, and usually does not, coincide with the election date itself, the relative lack of information about issues, and the positions of parties and leaders on them, in a campaign is less surprising than it seems (Zeigarnik, 1927; Hoffrage and Hertwig, 1998).

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biases' program, Kahneman and Tversky argue that heuristics are shortcuts and their use, instead of the 'correct' procedure, can be recognized by the typical errors and biases that the heuristic gives rise to (Kahneman and Tversky, 1972; Kahneman et al., 1982; Gilovich et al., 2002). This approach is suggestive, but it is by no means clear what would be a 'correct' decision in an electoral context. For example, does a voter make a mistake when saying s/he is on the left, and orders parties in a commonly accepted left-right dimension and votes for a right wing party? With respect to choosing a party at minimal distance from his/her position on the left right dimension the voter clearly has made a mistake. But this may not be the only relevant dimension, when leadership is relevant and the voter is convinced that the leadership on the right will be better, the choice made is internally coherent. Consequently mass political and electoral decision making is not necessary similar to the logical and probabilistic decision problems dealt with in typical applications of the heuristics and biases approach, and in the absence of a clear idea as to what would be a correct decision, the approach fails to provide leverage (McKenzie, 2003).

More appropriate at the task is the 'fast and frugal heuristics' program (Gigerenzer et al., 1999; Gigerenzer and Selten, 2001). Gigerenzer and collaborators, as with Kahneman and Tversky, deal with contexts in which resources and available time are severely limited. They argue that people use algorithms which are simple and therefore fast, and which require only a limited amount of information and are therefore frugal (Gigerenzer et al., 2002). Choice under uncertainty is described as a sequential process of selection among alternatives based on a single cue at any point in time. As the decision process is a satisfying one, instead of an optimizing one, it stops as soon as a satisfactory choice is reached (Gigerenzer and Goldstein, 1996, 1999). Thus, in these procedures there is no comparison across different cues. The choice of a cue to begin the process may be casual among various cues available, in this case a truly 'minimal strategy', or may involve the choice of one which has performed well in the past, for example the last cue used in a previous decision process ('take the last'), or the cue which is known to work well in a specific environment ('take the best') (Gigerenzer and Goldstein, 1999). Voter heuristics in our analysis are considered within this framework of fast and frugal decisionmaking. In this framework, parties, coalitions, leaders and other objects which populate the Italian political arena, are potential decision cues.

3. Utilius, Amicus, Aliens and Medians: an empirical classification

Within the fast and frugal framework, different heuristics are at work and the highly visible objects of the political landscape are informative starting points.

To investigate this deployment of heuristics, we do not need vast amount of information. Because heuristic reasoning is simple, voters have been classified starting from very few questions, present in nearly all electoral surveys: voter self-placement on the left—right dimension and the location of the major parties in the same one-dimensional continuum; a general judgment of political leaders, on a 1 to

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10 scale; and the actual vote. Data used in this paper come from two Italian postelection surveys, held in the two months after the 1996 and 2001 general elections. The 2001 survey based on face to face interviews with a 3-stage stratified sampling design. The 1996 survey was a telephone survey. Differences in the overall distribution of relevant variables might be due to the classical selection problems (for details, see Itanes, 1997; Itanes, 2001; Caciagli and Corbetta, 2002).

Partition in different types based on (a) the degree of actual information and the related style in combining preferences, and (b) where possible, whether the vote matches this information.

Utilius, the first type of voter, resembles a utility maximizing voter operating on a single dimension in a Downsian way (Downs, 1957). Given voter self-placement and the location of the parties on the same left—right continuum, the Downsian model assumes that the closer a party is to the position of the voter the higher is the utility (or satisfaction) of the voter himself, therefore a 'rational' voter should support the party closest to him or her. Utilius relies on a shared view of the party locations on the left-right continuum and exploits this information consistently in his/her decision-making process. Thus, a respondent is classified as Utilius when he/she (a) gives a self-placement on the left—right scale, (b) locates the (main) parties in such a way that the left—right order² of these locations is compatible with the overall ordering of the whole sample,³ and (c) votes for the party closest to his/her own position.

The second type of voters, Amicus, conceives politics as a dichotomy: the clash between the two main coalitions. Following an *amicus/hostis* (friend/enemy) attitude (Baldassarri and Schadee, 2004), such voter judges political objects in a way consistent with his/her own preference for the center—left or center—right alliance. This peculiar pattern of evaluation manifests, for instance, in the evaluations of political leaders: in fact, leaders judgment is strongly consistent with respondents' coalitional preferences. Empirically, Amicus (a) rates the leaders that belong to his or her favorite coalition better than the leaders of the opposite coalition and (b) votes for the preferred coalition. For instance, in the Itanes 1996 survey, four leaders on the center—left are considered: D'Alema, Prodi, Scalfaro and Dini, and four leaders on the center—right: Berlusconi, Fini, Casini and Pannella. This gives rise to 16 paired comparisons between leaders of opposite coalitions. Respondents who (a)

² In the two Italian elections, the ordering concerns seven parties: in 1996 it is RC, Rifondazione comunista; PDS, Partito Democratico della Sinistra; PPI, Partito Popolare Italiano; CCD/CDU, Centro Cristiano Democratico and Cristiano Democratici; FI, Forza Italia; AN, Alleanza Nazionale; MSI, Movimento Sociale Italiano; in 2001 the ordering is: RC, DS, DEM (Democratici), PPI, LN (Lega Nord), FI, and AN.

³ An ordering is considered correct when it contains no inversions of the mean order, and when all parties which are non contiguous in the mean order have different positions. However, to these two criteria a third is added. Any ordering and any locating of parties in the same position which is shared by more than one sixth of the respondents is considered acceptable, because it is problematic to state erroneous a position shared by a substantial part of respondents.

have a count of 14 or more preferences for leaders of the same coalition and (b) vote for the coalition to which these leaders belong, are classified as Amicus⁴.

There is a certain degree of overlap between Amicus and Utilius: some respondents belong to both the types. If there is no other specification, in the following analysis such cases are classified as Utilius (Figs. 1 and 2), for that being Utilius requires more information than being in any other category. While, when distinguishing is relevant, the shared cases are considered separately.

The third type of voters, Aliens, lacks knowledge of party positions and/or refuses to conceive politics in the standard left—right terms. Specifically, Aliens refuses or is unable (a) to locate, even if in rough way, the main parties (such as RC, DS on the left and FI and AN on the right) and/or (b) to give a left—right self-placement. Since the definition does not state how aliens decides, but rather that certain criteria have not been used in deciding, it may be observed that this type is defined in a negative way. Actually, Aliens resembles an 'innocent of ideology' voter (Kinder et al., 1985; Converse, 1964); but at the same time, the absence of the left—right conception may also represent an opportunity either to develop other ideologies for describing the political landscape or to develop a pragmatic rather than ideological beliefs system (Sartori, 1995).

Table 1 reports the percentage of respondents that satisfy the set of conditions for belonging to a specific type. The size of each category is given in the last row. For estimates of types distribution in the population readers should refer to the Itanes 2001 survey. In fact, the 1996 sample resulted from a double procedure of selection, and therefore it is affected by a selectivity bias in favor of the most interested and sophisticated voters.

Utilius, Amicus and Aliens do not exhaustively classify all respondents; respondents not assigned to one of these three types belong to a fourth type: Medians. Forty percent of the respondents in Itanes 1996 and 45% in Itanes 2001 are classified as Medians. One can be disappointed by the huge number of respondents that are not positively classified. Notwithstanding the problem has to be recognized, different arguments contribute to make it less spiky. First of all, the main goal of our research is to identify cognitive heuristics at work, thus there is no necessity of providing a comprehensive classification of all voters. Further, the current selection criteria for classifying cases as Utilius, Amicus and Aliens are quite restrictive. In fact, if softer criteria apply, the number of people in the residual category is lower. Finally, there are potential heuristics (such as the imitation of relevant others) that are hardly or completely impossible to grasp through survey methods.

⁴ For 2001 considering three leaders on the center—left, d'Alema, Amato and Rutelli, and three on the center—right, Berlusconi, Fini and Bossi, only respondents who have all 9 pair comparisons between coalitions in favor of the same coalition are considered. In 2001 the judgments on Umberto Bossi, leader of Lega Nord, were very low in general, therefore a judgment on Bossi equal to that on a leader of the left was considered as a win for the right. In all other situations tails do not count (Baldassarri, 2005).

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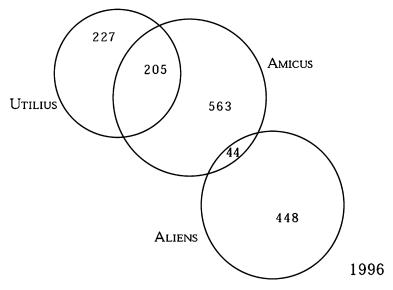


Fig. 1. Types and their overlaps (Itanes, 1996).

In addition, the problem of reduction of the sample size is common to almost every analysis of voter behavior that relies on survey data. Differently from standard analysis, our classification doesn't generate the same level of distortion. In fact, standard analyses usually based on regression models ignore large amount of

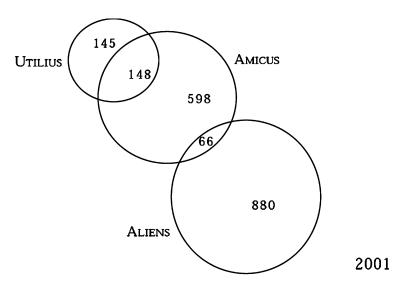


Fig. 2. Types and their overlaps (Itanes, 2001).

Table 1 Utilius, Amicus and Aliens, percentages (Itanes 1996, 2001)

	Political information and judgment		Decision rule
Utilius	Locates all parties and him/herself	'Correct' parties location	Votes for the closer party
1996	84.1	38.5	17.3
2001	50.7	22.4	9.1
Amicus	Judges all leaders	Dichotomous structure of preferences	Votes for the preferred coalition
1996	87.4	39.2	32.5
2001	80.5	27.9	23.4
Aliens	Ignores or refuses self-placement position	Inability in locating parties	No rule
1996	8.9	15.4	19.8
2001	17.3	18.8	29.5

respondents (one third or half of the sample) because of their missing and refusal answers in core questions (Pisati, 1997; Clarke et al., 2003). As those who refuse are less interested and informed than those who answer, the overall outcomes of regression models actually applies only to a subset of voters, those who are more sophisticated. On the contrary, our typology is able to catch also those citizens that are less interested and skilled in politics. Figs. 1 and 2 give a graphical representation of the types overlap. It is worth noticing that the ratio of overlapping and the relative magnitude of the types are similar across years.

4. Education, interest in politics and moment of decision

To test our typology, we consider differences across types with respect to some standard measures of political cognition and sophistication. Specifically, we analyze the distribution by type for education, interest in politics⁵ and the moment of vote decision.

Since Utilius and Amicus show some systematic knowledge or thought in their replies, it is plausible to argue that they both hold higher degree and are much more interested in politics than Aliens do. On the contrary, Aliens voters either reject the use or actually ignore classical political categories. It follows that Aliens might face greater problems in deciding upon a vote. By simply ignoring the problem, Aliens are expected to postpone decisions till late in the campaign. Instead, given the heterogeneity of Medians voters, we expect their level of education and interest in

⁵ Interest in politics combines into a dichotomic variable respondent attitude to be, in general, interested in politics and whether he/she has followed the election campaign.

politics to lay in between Utilius and Amicus, on the one side, and Aliens, on the other side.

Tables 2 and 3 confirm our predictions. Results are sometimes quite striking, such as the very low percentage of Aliens voters who declare an interest in politics (about 6% in the 2001 survey), or their tendency to decide in the last days of electoral campaign.

About three quarters of Utilius and Amicus report that they made up their vote long before the election. This suggests that for many of them the vote is indeed a standing decision (Key, 1966), and that their following the election campaign should be thought of as a monitoring or a search for supporting information. But the electoral decision has been already taken.

Such differences among types confirm that the limited information used in constructing the types are enough for distinguishing voters also with respect to other relevant aspects. This raises two questions. First, given Utilius and Amicus' greater ability in systematizing a peculiar kind of political information, are they also able to perform at the same grade with respect to other forms of political reasoning? In particular, the criteria for assigning a respondent to a type imply that Utilius and Amicus have spent some systematic thought on politics; on the contrary, Aliens refuse some aspects of politics that are part of common-sense political knowledge. It can be expected that Utilius and Amicus should show more organization in political knowledge and a better 'performance' in several political tasks than Aliens and Medians do.

Second, since it is known that (a) education and interest in politics are related to political sophistication and, as previously shown, that (b) Utilius and Amicus are generally more educated and interested than the rest of the sample, we then have to consider the hypothesis that differences in the political skills among types may simply be accounted by differences in education and interest in politics. If this is the case, it

Table 2
Distribution by type for education, interest in politics and the moment of decision, percentages (Itanes 1996)

		Utilius	Amicus	Aliens	Medians	All
Education	Obligatory	20.9	33.9	69.1	37.8	38.3
	Higher secondary	54.5	49.3	34.4	49.2	47.5
	University degree	24.6	16.8	3.6	13.0	14.2
		100.0	100.0	100.0	100.0	100.0
Interest in politics	Not interested	40.6	41.8	84.6	56.6	57.1
•	Interested	59.4	58.2	15.4	43.4	42.9
		100.0	100.0	100.0	100.0	100.0
Moment of decision	While voting	1.6	3.5	23.7	9.9	9.2
	A week before	13.4	9.2	26.8	22.8	18.5
	A few weeks before	13.5	13.3	15.4	17.4	15.4
	Much earlier	71.5	74.0	34.1	49.9	56.9
		100.0	100.0	100.0	100.0	100.0

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Table 3
Distribution by type for education, interest in politics and the moment of decision, percentages (Itanes 2001)

	_	Utilius	Amicus	Aliens	Medians	All
Education	Obligatory	43.3	58.3	72.9	53.9	59.0
	Higher secondary	42.7	31.1	22.0	36.4	32.0
	University degree	14.0	10.6	5.1	9.7	9.0
		100.0	100.0	100.0	100.0	100.0
Interest in politics	Not interested	50.9	62.4	94.1	74.0	75.2
•	Interested	49.1	37.6	5.9	26.0	24.8
		100.0	100.0	100.0	100.0	100.0
Moment of decision	While voting	1.4	1.8	12.0	6.3	6.4
	A week before	4.8	5.6	20.5	13.7	13.0
	A few weeks before	15.4	14.4	22.4	20.2	19.1
	Much earlier	78.5	78.1	45.1	59.8	61.6
		100.0	100.0	100.0	100.0	100.0

may be argued that the organization of political beliefs, rather than being affected by the particular heuristic adopted, is simply result of education and/or interest in politics. In order to reject this hypothesis, the following analyses provide measures of performance not only for our typology but also for the classical measures of political sophistication.

5. Unfolding analysis: heuristics 'performances' and the left-right latent ordering

The 2001 survey contains a series of questions of the format: "which of these parties might you vote for in the future?" followed by a list of parties. Respondents can have positive responses for all parties, for some of them, for one party only, or for no parties at all. The way in which the range of possible choices is shaped for each type provides an interesting source for better investigate dissimilarity in voters' political thought.

The first difference is that respondents with more systematic thought on politics select a larger number of parties they might vote in the future: only a quarter of Utilius indicates a single party and 90% of Amicus indicates more than one party, typically within the same coalition. In contrast, slightly fewer than half (48%) of Aliens do not give a positive reply for even a single party or selects only a single party.

Based on these answers, an unfolding technique has been applied in order to investigate the presence and consistency of a latent ordering. Generally, unfolding analysis assumes there is an underlying, unknown, items (or objects) ordering, whatever such order may be. For example, let us say that the ordering of the parties is A B C D E F G. A voter who is willing to vote for party B and D, should, in principle, be willing to vote for party C, which has a location between these parties.

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If he/she does not, this is counted as an error. However, parties differ in notoriety, therefore one should qualify the voters' willingness to vote for a party: if the party is not very popular, the willingness is less. Hence, the scaling coefficients, used for accounting the goodness of each triple and of the entire scale, control for the relative popularity of parties. The coefficient *H* for a triple is defined as:⁶

$$H(\text{triple}) = 1 - (\text{observed 'errors'})/(\text{'errors' expected})$$

The definition may be extended to an H for a party⁷ and an H for scale⁸ (van Schuur et al., 1990). The maximum value for H is 1, in the case of perfect scalability of all the items; while if the responses are completely independent H is 0.

Conventionally an H(scale) between 0.3 and 0.4 is considered to show weak scalability, between 0.4 and 0.5 a medium scalability, and above 0.5 a strong scalability. We used the program Mudfold (van Schuur, 1984) that searches for an ordering by finding first a triple which has the highest H-value in a particular order and then join other parties to the triple selected in such a way that H(scale) is maximized at each step. The search procedures are developed in van Schuur (1984), while a statistical treatment can be found in Post (1992).

Table 4 gives the result for the unfolding analysis: all parties were ordered, with the single exception of Lista Bonino, the Radical Party; the ordering is the same for all the types and clearly it resembles the left—right order. Hence, there are no differences across the types with respect to the resulting order. Nonetheless, they strongly differ for the consistency of the order. In fact, Utilius and Amicus have an H(scale) of 0.78 (0.77) (very high scalability), Medians has an H(scale) of 0.51 (medium to strong scalability), while Aliens has an H(scale) of 0.33 (weak scalability). Therefore, if compared for their performance in organizing political thought, Utilius and Amicus are much better than Aliens. It can be said that the task at hand pertains the use of left and right categories. As a matter of fact, this is true, but there is no reference to the left—right dimension in the survey questions and we chose the unfolding technique for its ability to originate an ordering without any

⁶ Under the hypothesis of independence among responses.

 $^{^{7}}$ H(party) is defined as H(party)=1-(observed 'errors')/('errors' expected), where the observed 'errors' are the sum of errors in each single triple of which the party is part, and the 'expected errors' are the sum of the expected errors in each triple in which the party is involved.

⁸ Summing over all triples in a given order one can obtain a H(scale) = 1 - (observed 'errors')/('errors') expected), which evaluates the entire scale. This H(scale) is a positively weighted sum of all the H(party) in the scale, and also a positively weighted sum of all the H(triple), which can be formed from the parties in the scale. To form a scale the single H(triple) in the scale should all be positive.

⁹ One minor point needs to be made. Voters who reply for all parties cannot contribute to 'errors' with respect to the scale pattern, neither can voters who do not reply at all, or indicate only one party. The scaling procedure therefore excluded respondents who either gave all parties, or only one party, or no party at all as possible future choices.

¹⁰ No standard errors for the H(party) coefficients are presented in Table 4 but their values are between 0.07 and 0.01 (in Table 7 the standard deviations of the H(scale) for the types are given). The differences therefore are not only large, but also highly significant. Moreover, the various H(party) are quite homogeneous for each type; all parties scale about equally.

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Table 4 Parties unfolding, H coefficients (van Schuur and Post, 1990; Itanes 2001)

	CI	RC	DS	Ver	Dem	PPI	CDU	CCD	FI	AN	LN	Scale	N
Utilius	0.84	0.75	0.71	0.71	0.76	0.76	0.76	0.78	0.81	0.80	0.76	0.78	275
Amicus	0.79	0.75	0.77	0.69	0.73	0.74	0.79	0.80	0.81	0.84	0.80	0.77	549
Aliens	0.41	0.33	0.34	0.25	0.31	0.32	0.33	0.38	0.32	0.34	0.27	0.33	456
Medians	0.65	0.54	0.52	0.44	0.49	0.50	0.50	0.55	0.51	0.53	0.37	0.51	1267
All	0.67	0.57	0.58	0.50	0.55	0.56	0.57	0.61	0.58	0.60	0.55	0.58	2547

CI, Comunisti Italiani; RC, Rifondazione Comunista; DS, Partito Democratico di Sinistra; Ver, Verdi Girasole; Dem, Democratici; PPI, Partito Popolare Italiana; CDU, Cristiani Democratici Uniti; CCD, Cristiano Democratici; FI, Forza Italia; AN, Alleanza Nazionale; LN, Lega Nord.

kind of pre-determined scale pattern. Consequently, we can conclude about the uniqueness of the left-right ordering as a pure, interesting result.¹¹

To what extent the performance of Utilius and Amicus can be seen as exceptional? Table 5 shows the H(scale) coefficients for the four types and for educational achievement and interest in politics. The H values are higher for Utilius and Amicus (0.77) than for those with university degree or those interested in politics (0.70) while the value for Aliens (0.33) is distinctly lower than for those with a low level of education or interest in politics (0.53).

The hypothesis that the capability in organizing political beliefs may be a simple function of education or interest in politics is therefore refuted. In fact, notwithstanding about half among Utilius and Amicus have the lower level of education and declares not being interested in politics, their consistency in organizing political information is so high as to overcome the performances of the sub-samples of the most educated and interested. This strongly corroborates the effectiveness of our empirical partition: it better differentiates people according with their level of political cognition. Albeit indirectly, this confirms the idea that Utilius and Amicus' cognitive mechanisms allow citizens to perform satisfactory results in processing political information. In other words, both left-right dimension and the fight between coalitions candidate as proper heuristics that enable citizens 'to make it easy'.

6. Utilius and Amicus styles of judgment: a zero sum game

Up until now, analyses have mainly contrasted Utilius and Amicus with Aliens and Medians. It has been argued greater coherence among Utilius and Amicus than

¹¹ We observe also a higher overall scalability (0.58) in 2001 with respect to the previous decade. Performing unfolding analysis for the local elections occurred in 1990, Schadee (1995, p. 95) obtained much lower H(scale) values: 0.28 for parties voted in the past, and 0.26 for parties which might be voted in the future, always with an ordering corresponding to left-right ordering. Hence, during the nineties, the left-right order in voters' cognition has been, in general, consistently strengthened.

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Table 5

H coefficients by type, education and interest in politics (Itanes 2001)

Types	H	SD(H)	Education	H	SD(H)	Interest	H	SD(H)
Utilius	0.78	0.02	Obligatory	0.54	0.01	Not interested	0.53	0.01
Amicus	0.77	0.01	Higher secondary	0.61	0.01	Interested	0.69	0.01
Aliens	0.33	0.01	University	0.71	0.02			
Medians	0.51	0.01						
All	0.58	0.01						

among Medians, and Aliens. Out of the original classification, real distinction between Amicus and Utilius has still to be demonstrated.

In the previous paragraphs, we showed that Amicus consistently organize their preferences according to a left—right ordering, even if the selection criteria for being Amicus do not imply any kind of skill related to the left—right dimension. On the one hand, this may be regarded at as a result that confirms the advantage connected with the use of a heuristic thought. On the other hand, it requires the investigation of whether Utilius and Amicus really differ or, in contrast, they rely on the same heuristic, based on the left—right dimension.

In order to show the actual difference among types and, specifically, to refute the hypothesis that Amicus and Utilius share the same approach to political reasoning, we focus on existing differences in their style of judgment. In doing this, the partition in four types that has been adopted in the previous paragraphs now subdivides, giving rise to six sub-types. In fact, for better capturing differences among types, is useful to deal with mutually exclusive categories. Originally, those respondents who satisfy the criteria for being both Amicus and Utilius, were assigned to the latter type. They are now labeled *Utilius and Amicus*. Among Amicus voters, there are also respondents who are able to order parties according to the left—right location, but who did not vote the party closest to their self-placement. They have been assigned to the Amicus type in the original classification, but now are classified as Amicus tending toward Utilius (*Amicus* ~ *Utilius*). Finally there are the pure Amicus type (called *Amicus only*), and the pure Utilius type (*Utilius only*), composed by those respondents that do not have any trait of others types. Aliens and Medians remain as before.

In dealing with opinion reported some account must be taken of different response styles across respondents. First, some respondents systematically rate mainly using the higher values at their disposal. In particular, treating the 1 to 10 scale as scholastic scores they are reluctant to give judgments indicating a 'failing grade' (5 or lower). On the contrary, other respondents focus on the low side: for them, no politician performs sufficiently well to merit a grade above 7. These different response styles induce correlations between judgments simply because of similarities in between responses of a single respondent. Subtracting the mean value of all judgments for a single individual from each individual judgment, corrects for this phenomenon.

Response styles differ not only in absolute values, but also in the variance of judgment. Some respondents have a small range in evaluating political leaders, i.e.

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from 4 to 7, while others use the full scale from 1 to 10. If no correction is made for this, respondents who use a wider range of responses tend to have more weight in determining the correlations between judgments. It is not completely clear whether one should correct for this (to some extent the use of a restricted range corresponds to relatively undifferentiated attitudes). In the analyses of this paragraph, however, individual judgment has been standardized separately for each respondent in order to obtain equal variance. Thus, the set of judgments of each respondent has been linearly transformed for that the mean of the judgments for each respondent is 0, and the variance (standard deviation) is 1.

In Table 6 correlation coefficients for individually standardized values are shown. As expected, correlation values between leaders contrast Amicus with the other three types. Every kind of Amicus (Utilius and Amicus, Amicus \approx Utilius and Amicus only) presents quite extreme values: in particular, extremely positive among leaders of the same coalition, with a correlation coefficient r > 0.60 (and r > 0.75 if one ignores the Bossi–Fini correlation), and strongly negative, r < -0.75, between leaders of opposed coalitions. In contrast, for the remaining three types (Utilius only, Medians and Aliens) correlations within a coalition are relatively low, r < 0.25, and intermediate negative, -0.20 < r < -0.60, in between.

The picture is clear: the *amicus/hostis* style of judgment takes the form of a zero sum game: what is given to the leaders of one coalition is taken away from the leaders of the other coalition. Nothing surprising, this is what should be expected according to the selection rules. Instead, is surprising that all other types show the same 'style of judgment'. No differences can be recognized among the pure Utilius, Aliens and Medians in the way they differ from Amicus. There is no or very weak correlation between leaders of the same coalition; while the correlations between leaders of different coalitions are sometimes negative, but they are much less strong than observed for Amicus respondents.

7. The strategic interplay between vote, self-placement, leaders and TV

Mass surveys are not the best instrument for catching voter heuristics at work, neither to assess the effective impact of political stimuli. Notwithstanding, we refer to the Italian media paradox as a proof of how information and media power affect voter behavior differently according to different heuristics.

In Italy, the TV channel watched predicts whether the vote is to the left, associated with watching the state television RAI, or to the right, associated with watching Mediaset, the Berlusconi's TV empire. We computed different log-linear analysis for Utilius, Aliens and Medians starting from a 5-dimensional table, based on V vote (center–left or center–right coalition); C channel watched (RAI or Mediaset); left–right S self-placement (recoded in three categories left, center, right); the preference for a P premier (Prodi in 1996 and Rutelli in 2001 on the left, and Berlusconi on the right); and including the election Y year (1996 and 2001). Since for Amicus respondents Vote and Premier coincide by construction the Amicus type was not included in the analysis. Table 9 gives the resulting log-linear models and their χ^2

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Table 6 Individually standardized judgments, correlations (Itanes 2001)

		Amato	d'Alema	Rutelli	Berlusconi	Fini
Utilius and Amicus ($N=148$)	d'Alema	0.76				
Amicus \approx Utilius ($N = 122$)		0.76				
Amicus only $(N=482)$		0.73				
Utilius only $(N=145)$		0.05				
Aliens $(N=409)$		0.09				
Medians $(N=1267)$		0.04				
All $(N=2636)$		0.30				
Utilius and Amicus	Rutelli	0.81	0.82			
Amicus≈ Utilius		0.80	0.76			
Amicus only		0.76	0.80			
Utilius only		0.15	0.25			
Aliens		0.05	0.15			
Medians		0.02	0.19			
All		0.29	0.42			
Utilius and Amicus	Berlusconi	-0.85	-0.88	-0.90		
Amicus≈Utilius		-0.88	-0.87	-0.88		
Amicus only		-0.84	-0.87	-0.89		
Utilius only		-0.44	-0.53	-0.53		
Aliens		-0.36	-0.44	-0.50		
Medians		-0.39	-0.49	-0.46		
All		-0.53	-0.62	-0.62		
Utilius and Amicus	Fini	-0.82	-0.87	-0.89	0.82	
Amicus≈Utilius		-0.81	-0.81	-0.83	0.81	
Amicus only		-0.79	-0.85	-0.86	0.82	
Utilius only		-0.40	-0.28	-0.43	0.16	
Aliens		-0.18	-0.24	-0.30	-0.02	
Medians		-0.24	-0.35	-0.45	0.10	
All		-0.42	-0.52	-0.58	0.35	
Utilius and Amicus	Bossi	-0.82	-0.80	-0.81	0.74	0.69
Amicus≈ Utilius		-0.75	-0.75	-0.81	0.72	0.56
Amicus only		-0.75	-0.76	-0.77	0.68	0.60
Utilius only		-0.20	-0.32	-0.38	0.03	-0.08
Aliens		-0.31	-0.30	-0.27	-0.06	-0.22
Medians		-0.25	-0.28	-0.33	0.02	-0.10
All		-0.40	-0.40	-0.43	0.15	0.06

values. The models for Utilius and Aliens are acceptable. The model for Medians needs to include a special term, R, which fits one frequency only. Without this term the only satisfactory model is a saturated model with the interaction of all five variables. The cell fitted separately by R concerns respondents who look at RAI,

have a center position on the left—right self-placement, prefer Berlusconi as premier and vote on the right.

A general observation should be made about these models. The log-linear model does not presuppose directionality of effects. Formally of course, the vote is to be considered as later than the TV channel watched, and it is quite likely that left—right self-placement is antecedent to the vote. However, establishing the direction of dependencies requires richer data than those provided by election surveys (Pearle, 2000).

Our discussion of the log-linear analysis concerns two points: the role of television and the complexity of the models (Table 7).

Medians and Aliens are *directly* influenced by the TV channel watched, as is shown by the term $C \times V$ for Aliens and $P \times C \times V$ for Medians. Specifically, for Aliens this interaction between Vote and Channel watched does not vary as function of other variables, while for Medians the relation between Vote and TV channel varies according to the premier preferred. Utilius, instead, is only indirectly affected by the TV: controlling for Premier and self placement, TV has no direct impact on Utilius vote. Or better, its impact is filtered through other political variables — such as premier and left-right self-placement. In the absence of much more detailed data the causal relations between TV, self-placement and premier remain unclear, but whatever they are, the relation between TV and vote is indirect for Utilius, and direct for Aliens and Medians. This suggests there are real differences among types in the way TV affects the vote. Moreover, it also suggests ways Medians and Aliens use TV in electoral decision-making which have not been caught thus far by the classifying criteria. A logistic-regression model strongly confirms this result: parameters estimate for the TV channel are significant only for Aliens and Medians (Baldassarri, 2005).

At a glance, models differ in complexity. Utilius model involves only pair wise interactions, while Aliens and Medians models are also characterized by some three variables interactions. The high heterogeneity of these two types leads to the complexity of the model: Aliens and Medians use more than one heuristic to arrive at a vote decision. On the contrary, the simplicity of the Utilius model is due to the fact that the left—right dimension provides to this kind of voter a valuable cognitive shortcut, which acts as a powerful mechanism to increase coherence and simplify electoral decision-making. And a similar argument applies to Amicus.

Table 7 Log-linear models by type Var: election year, self-placement, TV channel watched, choice of premier (Itanes 1996, 2001)

	Year	Self placement; Premier; Vote	TV channel	χ^2	d.f.	p
Utilius	$Y \times [P + V]$	$+S\times P+V\times S+V\times P$	$+C\times[P+S]$	49.4	49	0.46
Aliens	$Y \times [V \times S + V \times P]$	$+V\times S\times P$	$+C\times V$	47.5	44	0.33
Medians	$R+Y\times[P+S+C]$	$+S\times P+V\times S+V\times P$	$+C^*V^*P$	70.8	45	0.01

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7. Conclusion

Empirical evidence was provided in favor of a classification of voters according to their style in organizing factual information and judgment. By distinguishing voters on the base of the cognitive shortcuts relevant for making political decisions, we suggested a classification of voters that is both able to grasp actual differences in the level of political cognition and sophistication, and suggestive with respect to the kind of information that are pertinent for the task at hand.

Results deal with three traditional topics of political research: (1) the extent of political cognition at the mass level; (2) the problem of operationalization and measurement of political cognition and sophistication; and (3) the problem of modelling electoral choice.

- 1. Both Utilius and Amicus voters have high levels of political cognition and show well-organized political belief systems. Their number combined, suggests that at least a third of the respondents shares a common, almost coherent representation of the political landscape. Therefore, a fairly considerable part of mass public posses a good level of political knowledge; certainly higher than the original, often contested, picture drawn by Converse and repeated by many later researchers (Converse, 1964, 1975; Luskin, 1987; Delli Carpini and Keeter, 1993; Popkin and Dimoch, 1999). By assuming a framework of reasoning voters who use various heuristics to arrive at decision, we discovered that the amount of citizens that seem to handle politics is higher than suggested by those political analyses that imply a single cognitive model and emphasize the people's lack of knowledge and conceptual schema.
- 2. Political sophistication at least in Italy can be better measured by voter's capability in organizing political information rather than by education or interest in politics. Current researches frequently operationalize political sophistication through education, interest in politics, or their combination (Luskin, 1987; Sniderman, 1991). The analyses in this paper show that the availability of actual political knowledge and the style of political reasoning are better criteria for classifying voters according to their level of political sophistication.
- 3. If it is true, as we claim to have shown, that different heuristics are at work, then it follows that voters have to be conceived as a heterogeneous entity, at least with respect to the variables which affect their choice. This perspective challenges the standard research on the 'determinants' of voting behavior. People follow multiple strategies and rely selectively on different kind of available information. Parties, leaders, coalitions and media affect voter behavior, but they have different leverage on different voters.

Both researchers and politicians are interested, for example, in media influence, in leader's charisma, in the role that a certain issue has played during the campaign and so on. However, such a way of presenting the problem is misleading. A more appropriate question is which voters are influenced by television, or susceptible to a leader or an issue. In other words, any analysis which deals with 'causes' of voter

behavior should specify the type of voter to which the analysis is relevant, instead of assuming that effects are similar among all voters. There is no median voter out there.

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