

## The classification of electoral systems

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**Abstract.** The paper examines existing classifications of electoral systems, discusses their merits and limits, and proposes a more appropriate classification. It shows that it is possible to extract from the definition of an electoral system three basic dimensions: the ballot structure, the constituency structure, and the formula. It also shows that it is possible to distinguish three components of the ballot structure: the object of the vote, the number of votes and the type of vote, and two components of the constituency structure: its nature and its magnitude. It is argued that the classification proposed here is superior to existing ones. It clarifies and refines existing distinctions. It enables one to identify the basic dimensions of electoral systems as well as the logical connections between them. Finally, it has the property of applying the same criteria to all systems.

Electoral systems are back on the agenda of political science. In the 1980s a significant number of books have been published on the topic (Bogdanor 1981, 1984, Bogdanor and Butler 1983, Brams and Fishburn 1982, Cadart 1983, Dummett 1984, Grofman and Lijphart 1986, Katz 1980, Lijphart and Grofman 1984). This renewed interest has led to interesting new developments. For instance, Taylor and Lijphart (1985) have proposed a new criterion - proportional tenure instead of proportional representation - to evaluate electoral systems. Likewise, Taagepera and Grofman (1985) and Taagepera (1986) have suggested new laws to predict the number of parties, laws which implicitly or explicitly question traditional ways of conceptualizing electoral systems. Taagepera and Grofman (1985) argue that 'pluralist elections can be thought of as a special case of list PR, with  $M = 1$ ' (p. 344). Such new findings highlight the necessity of rethinking the classification of electoral systems. The necessity of the task is indeed felt. Lijphart and Grofman (1984) note that they have 'come to regard the dichotomy between PR and plurality as misleading' (p. 5). Yet, they stick to the 'misleading typology', as their own book starts with a discussion of plurality versus proportional representation and even concedes later on that 'PR and plurality may be the main alternatives in choosing an electoral system' (p. 7).

The purpose of this paper is to look closely at how electoral systems are classified, to discuss the merits and limits of these classifications and, finally, to propose what I deem to be the most appropriate classification. The nature of the exercise is thus one of conceptual clarification and this sets out the limits of

the paper. It does not attempt to describe actual systems, nor to explain their relative popularity or unpopularity, nor to assess their impact. It is assumed, however, that any work in this area has to rely on some sort of classification and that a 'better' classification is likely to improve the quality of empirical analyses of the causes and consequences of electoral systems. Even though the approach is basically conceptual, the concerns underlying the analysis are concrete and practical. I am to design a typology which is not only aesthetically satisfactory but also useful and relevant. Finally, I do not wish to start from scratch and I will thus resort to present classifications to the greatest extent possible. Only if these classifications are shown to have serious weaknesses and if a better substitute can be identified will these classifications be replaced. In so doing, I am acknowledging that clarity is not the sole criterion of a sound classification but that simplicity is also crucial and thus that a typology should be as close as possible to the common usage of terms.

I will be concerned with direct electoral systems. Electoral systems are defined as *those rules which govern the processes by which preferences are articulated as votes and by which these votes are translated into the election of decision-makers*. The definition is similar to the one proposed by Rae (1969: 14), except for the fact that it refers to decision-makers rather than to governments or parties. As in Rae (1969), electoral systems are equated with electoral laws and the latter are taken to be a subset of election laws, which correspond to the whole set of rules pertaining to the conduct of elections, including suffrage and registration requirements, districting procedures and campaign financing. For the sake of simplicity, I exclude indirect elections, which introduce complexities that are not crucial to the task.

### 1. Existing classifications

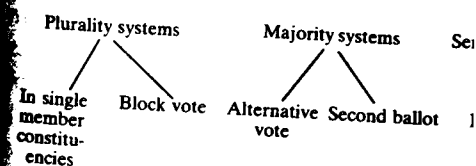
Surprisingly enough there has not been much thorough thinking about ways of classifying electoral systems. Seldom, in fact, is any comprehensive typology suggested. There have been, however, some classificatory schemes. Table 1 summarizes the one found in Lakeman (1974). The major distinction being made is the one between majority and proportional systems. She also distinguishes relative and absolute majority, and within each, single and multi-member constituencies. Amongst proportional systems the distinction has to do with the presence or absence of a party list and the degree of choice among candidates (in a party list).

Figure 1 presents the classification proposed by Bogdanor (1983). The basic distinction is still between majority (and plurality) and proportional systems and the whole classification is quite similar to Lakeman's. The sole addition concerns the geographical nature (national, regional, local) of the list and of the allocation procedure.

Table 1. Lakeman's classification of electoral systems

1. Majority systems
  - A. Relative majority
    1. single-member constituencies
    2. multi-member constituencies
  - B. Absolute majority
    1. single-member constituencies
      - a. second ballot
      - b. alternative vote
    2. multi-member constituencies
      - a. second ballot
      - b. alternative vote
2. Semi-proportional systems
  - A. Limited vote
  - B. Single non-transferable vote
  - C. Cumulative vote
3. Proportional systems
  - A. Party list
    1. no choice between candidates
    2. choice of one candidate within a list
    3. choice of more than one candidate within a list
    4. choice of candidates not confined to one list
  - B. Mixed systems
  - C. Single transferable vote

Source: Lakeman (1974), appendix 1.



Choice of candidate

Source: Bogdanor (1983), p. 17

Fig. 1. Bogdanor's classification of electoral systems.

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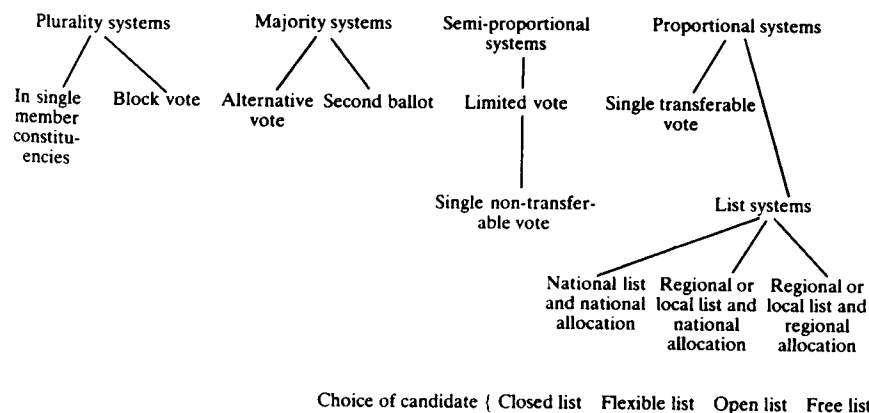
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Table 1. Lakeman's classification of electoral systems.

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1. *Majority systems*
    - A. Relative majority
      1. single-member constituencies
      2. multi-member constituencies
    - B. Absolute majority
      1. single-member constituencies
        - a. second ballot
        - b. alternative vote
      2. multi-member constituencies
        - a. second ballot
        - b. alternative vote
  2. *Semi-proportional systems*
    - A. Limited vote
    - B. Single non-transferable vote
    - C. Cumulative vote
  3. *Proportional systems*
    - A. Party list
      1. no choice between candidates
      2. choice of one candidate within a list
      3. choice of more than one candidate within a list
      4. choice of candidates not confined to one list
    - B. Mixed systems
    - C. Single transferable vote
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Source: Lakeman (1974), appendix 1.



Source: Bodganor (1983), p. 17

Fig. 1. Bogdanor's classification of electoral systems.

Taylor and Johnston's (1979) approach is somewhat different (see Table 2). They first identify three major systems: those based on pluralities, those based on the expression of several preferences, and those based on a choice between party lists. In each of the first two, a further subdivision is made according to the number of members per constituency. The major distinction within list systems is between 'impersonal' and 'personal' votes, which reflects the degree of choice among candidates.

Finally, it is important to examine the classification used in Rae's influential book (1969). In fact, Rae chooses not to propose a full-fledged typology. He rather prefers to treat each of the three components of an electoral system – ballots, districts, and formulae – separately. He distinguishes categorical and ordinal ballots, majoritarian, plurality, and proportional representation formulae; as to districts, they are defined by their magnitude (Table 3).

Before discussing the actual content of these classifications, two comments would seem to be appropriate. First, there is a consensus about the criteria to be employed in the construction of a typology. These criteria, explicitly mentioned by Rae (1969) and by Taylor and Johnston (1979), are: (1) ballots, (2) districts, and (3) formulae. Secondly, the most basic distinction made in all cases is the one between majority (relative or absolute) and proportional systems, and refers to the formula, which is thus deemed to be the most crucial dimension of an electoral system. An exception could be Rae's approach which refrains from proposing a comprehensive typology and who even notes that 'too much attention is generally given to the effects of electoral formulae, while too little is given to the effects of district magnitude' (p. 124), but as a matter of fact Rae himself first examines the effect of different electoral formulae and dedicates much more space to the impact of formulae than to the

Table 2. Taylor and Johnston's classification of electoral systems.

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1. *Plurality systems*
    - A. Single-member constituencies
    - B. Multi-member constituencies
    - C. Weighted plurality systems
  2. *Preferential systems*
    - A. Single-member constituencies
      1. alternative vote
      2. double-ballot
    - B. Multi-member constituencies: the single transferable vote
  3. *List systems*
    - A. Simultaneous lists
    - B. Local lists
    - C. Party lists
  4. *Mixed systems*
- 

Source: Taylor and Johnston (1979), ch. 2.

Table 3. Rae's components of electoral system

- 
1. *Ballots*: categorical and ordinal
  2. *Districts*: average magnitude
  3. *Electoral formulae*: majority, plurality, proportional
- 

Source: Rae (1969), ch. 2.

one of district magnitude or ballot system. The differential propositions are concerned with the tasks which will be to assess the relevance of

## 2. Towards a new classification

I shall proceed in the following fashion: I shall first present the classification<sup>1</sup> and clarify the underlying actual distinctions that are made with respect to merits and limits, and suggest ways to proceed at the order in which the various districts

### A. The criteria

Rae (1969: 16) argues that the working of an electoral system can be divided into three phases: (1) balloting, (2) districting, and (3) the translation of votes into seats. Taylor and Johnston (1979: 40) distinguish between (1) the number of votes (i.e., ballots); (2) the way in which the votes are cast (i.e., districts); and (3) the way in which the votes are translated into seats (i.e., formulae).

No explicit justification is provided in order to do so, it seems to me, one should first define the electoral system and sort out its implications. The essential function of an electoral system is to translate votes into seats. As a consequence, one may distinguish between the way in which votes are cast, i.e., the ballot, and the way in which votes are translated into seats, what I will call the translation. The way in which votes are translated into seats seems to be a rationale for both Rae and Johnston. The way in which electoral systems have three basic dimensions seems to be a rationale for both Rae and Johnston. The way in which electoral systems have three basic dimensions seems to be a rationale for both Rae and Johnston. The way in which electoral systems have three basic dimensions seems to be a rationale for both Rae and Johnston.

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Source: Rae (1969), ch. 2.

one of district magnitude or ballot structure. Moreover, nine of his thirteen differential propositions are concerned with electoral formulae. One of my tasks will be to assess the relevance of giving such a priority to formulae.

## 2. Towards a new classification

I shall proceed in the following fashion. I will first examine the very bases of the classification<sup>1</sup> and clarify the underlying rationale. I will then discuss the actual distinctions that are made with respect to each criterion, assess their merits and limits, and suggest ways to overcome these limits. I will finally look at the order in which the various distinctions are or ought to be considered.

### A. The criteria

Rae (1969: 16) argues that the working of an electoral system can be divided into three phases: (1) balloting, (2) districting, and (3) formulae. Likewise, Taylor and Johnston (1979: 40) distinguish three basic characteristics: (1) the number of votes (i.e., ballots); (2) the number of representatives per constituency (i.e., districts); and (3) the way in which votes are allocated (i.e., formulae).

No explicit justification is provided by these authors for these criteria. In order to do so, it seems to me, one should start with the definition of an electoral system and sort out its implications. That definition indicates that the essential function of an electoral system is to translate votes into seats and that, as a consequence, one may distinguish three subsets of rules: (1) those that define how votes are cast, i.e., the ballot structure; (2) those that define how seats are structured, what I will call the constituency structure; and (3) those that define how votes are translated into seats, i.e., the formula. There thus seems to be a rationale for both Rae and Taylor and Johnston's claim that electoral systems have three basic dimensions and that rationale stems logically from the very definition of an electoral system.<sup>2</sup>

## B. The distinctions

The major criteria underlying the classification of an electoral system having been clearly identified and justified, it is now possible to consider the actual distinctions that can be made with respect to each of these criteria. In each case, I will start with Rae's classification, which is the most systematic and explicit, point out weaknesses, and suggest ways to improve the classification.

### 1. The ballot structure

According to Rae (1969), there are two types of ballots: categorical and ordinal. The former 'ask the voter to decide which one of the parties he prefers' and the latter 'allow the voter to express a more complex, equivocal preference by rankordering the parties' (p. 17). The categories are not exhaustive, as it does not take into account approval voting 'which allows a voter to vote for or approve of as many candidates as he wishes' (Brams and Fishburn 1983: 3), nor the limited or cumulative vote, under which the elector has a certain number of votes (Lakeman 1974: ch. IV). Indeed, Rae is quite unclear about what exactly he means by ordinal ballots, since he considers panachage, which does not include any rankordering, to be ordinal.

The problem with this classification is that it deals with two dimensions at once. The first dimension is the number of votes allowed, which may be either one or equal to the number of candidates, of seats, or more than one but less than the number of seats (limited). The second dimension is the type of information the voter is asked to provide. As is well known, a piece of information can be nominal, ordinal, or numerical,<sup>3</sup> depending on the level of measurement which it entails (Blalock 1972). Nominal, ordinal, or numerical ballots can thus be distinguished on the basis of the quality of information they convey.

The ballot structure, however, cannot be reduced to these two dimensions. The fact is implicitly acknowledged by Rae (1969) himself, who, in his Table 2.1 which summarizes electoral laws, refers to party-list and candidate ballots. Bogdanor (1983), Lakeman (1974), and Taylor and Johnston (1979) also refer to party list systems, though they do not mention the obvious opposite, that is, candidate ballots. Whereas the first two dimensions of the ballot structure – the number of votes and the type of vote – identify *how* voters are asked to reveal their preferences, the latter distinction indicates *whom* – individuals or groups of individuals – they can vote for.

### 2. The constituency structure

Rae's second distinction pertains to the magnitude of electoral districts. This leads to the well-known distinction between single-member and multi-member districts, which is used by Lakeman, and Taylor and Johnston. The latter

distinction, however, hides the fact that multi-member districts (Rae 1969, Taagepera and Shugart 1986) should be construed as a numerical distinction: there are districts, which is obviously not the case with single-member districts. This shows that the second basic criterion of Rae's classification is not as clear as Rae (and others) suggest. It rather has two components: the nature of the components (single-member and multi-member districts), and its magnitude.

### 3. The formula

Rae identifies three kinds of electoral systems: single-member, multi-member, and proportional representation. The distinction between single-member and multi-member is quite appropriate. The majority principle, whether absolute and qualified majority, as is the case with the Pope (Favre 1977: 132, 177), but not necessary. Likewise, there are many variations of proportional representation (Taagepera and Shugart 1986) which are not clearly distinguished.

Some authors also refer to semi-proportional representation (1) to convey the image of a continuum between single-member and multi-member (Lijphart 1984: 207). The limited vote system is labelled as semi-proportional because of its 'degree of representation' (Bogdanor 1983: 8). The distinction is defined on the basis of the actual seat distribution between shares of votes and shares of seats. The degree of representation is defined on the systems level by the deviation index (Lijphart 1984: 207). The degree of representation of classification is different from previous classifications of electoral laws rather than with the degree of representation which dictates the degree of disparity of an electoral system. In defining the ballot structure, the constant deviation index typically produce a given degree of disparity. The degree of representation also to characterize electoral systems as being proportional. It is also clear that the distinction ought to be based on the outcome and not on the basis of the rule. The non-transferable vote is a plurality form of representation. The limited vote system which produces moderate disparity (Lijphart et al. 1986).<sup>5</sup> The degree of disparity<sup>6</sup> can be used to characterize the classification of electoral systems when precise measurement of the deviation index is lacking. (Blais and Carty 1986: 100)

The various distinctions that have been used to classify electoral systems would claim that such a classification is not sufficient in many ways. It is an improvement over

distinction, however, hides the fact that there are substantial variations among multi-member districts (Rae 1969, Taagepera 1986) so that district magnitude should be construed as a numerical variable. This, of course, assumes that there are districts, which is obviously not always the case. It is thus essential to distinguish at-large and district elections (Engstrom and McDonald 1986). This shows that the second basic criterion cannot be defined as the district, as Rae (and others) suggest. It rather has to be constituency structure, with its two components: the nature of the constituency (the presence or absence of districts), and its magnitude.

### 3. The formula

Rae identifies three kinds of electoral formulae: majority, plurality, and proportional representation. The distinction – a standard one – is, in our view, quite appropriate. The majority principle, of course, could be subdivided into absolute and qualified majority, as is the case, for instance, in the selection of the Pope (Favre 1977: 132, 177), but such a refinement does not seem to be necessary. Likewise, there are many variants of proportional representation (Taagepera and Shugart 1986) which need not be reviewed here.

Some authors also refer to semi-proportional systems (see Table 1 and Fig. 1) to convey the image of a continuum from proportional to majority systems (Lijphart 1984: 207). The limited vote and the single non-transferable vote are labelled as semi-proportional because they are ‘providing only rough accuracy of representation’ (Bogdanor 1983: 8). Electoral systems can thus also be defined on the basis of the actual seat-vote relationship, i.e., the *disparity* between shares of votes and shares of seats, which is usually measured at the systems level by the deviation index (Loosemore and Hanby 1971). This type of classification is different from previous ones, in that it deals with the outputs of electoral laws rather than with the laws themselves.<sup>4</sup> No specific rule dictates the degree of disparity of an electoral system but a given *set* of rules defining the ballot structure, the constituency structure and the formula will typically produce a given degree of disparity. So while it is entirely appropriate to characterize electoral systems as being more or less proportional, it should also be clear that the distinction ought to be made on the basis of the actual outcome and not on the basis of the rules themselves. For instance, the single non-transferable vote is a plurality formula, multi-member district, one nominal vote system which produces moderately ‘proportional’ outcomes (Lijphart et al. 1986).<sup>5</sup> The degree of disparity<sup>6</sup> can also be used as an overall characterization of electoral systems when precise information about the specific components is lacking. (Blais and Carty 1987b).

The various distinctions that have been made are summarized in Table 4. I would claim that such a classification is superior to those usually proposed in many ways. It is an improvement over Rae’s classification in that it clarifies

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and refines distinctions concerning the ballot structure and adds an important component of the constituency structure (its nature) omitted by Rae. It is even more an improvement over other classifications in that it is systematic. It enables one to identify the basic dimensions of electoral systems as well as the logical connections between these dimensions. It has the property of applying the same criteria to all systems rather than making different distinctions – the logic of which is not made clear – in various classes or sub-classes.

At the same time, the classification proposed here is simple. The number of dimensions (3) or even of total components (6) is small. The links between these dimensions and components are straightforward. Finally – and this is an important consideration – it does not depart too much from existing classifications, so that it can be integrated into the literature rather easily. Indeed, our whole approach has been to start with what was deemed to be the most valuable classification proposed until now and to improve it whenever weaknesses were detected.

Finally, it should be specified that actual electoral systems may be a mixture of systems. This fact has led some authors to refer to 'mixed' systems. But a mixture is a mixture, and the only way to identify a mix is to refer to its basic components, which I hope to have established here.

### C. *The order of distinctions*

The last question to be addressed is whether the distinctions that have been made ought to be considered in any specific order. It was noted earlier that most classifications start with the distinction between majority, plurality, and PR systems and it has to be established whether that distinction (or any other) is more basic and should be given some priority. The approach here could be either empirical or conceptual. First, is there any evidence that any dimension

*Table 4.* The dimensions in the classification of electoral systems.

#### A. *The Rules*

##### 1. *The ballot structure*

A. the object of the vote (lists/individuals)

B. the procedure

1. the number of votes

2. the type of vote (nominal/ordinal/numerical)

##### 2. *The constituency structure*

A. its nature (whole constituency/districts)

B. its magnitude

3. *The formula* (majority/plurality/proportionality)

B. *The outcome:* The degree of disparity

or component has greater empirical validity. On the one hand, it is very likely that the order of consequences being examined; different in respect to party fractionalization but not in respect to democracy. On the other hand, there is, for instance, constituency magnitude may increase it in plurality systems (Taagele, 1998) that every variable is crucial and that the order is important of all.

On logical grounds, however, it could be argued that of the formula, one has to know the order of the ballots and seats have to be defined before one can know why, for instance, proportional representation districts, a fact implicitly acknowledged by the two dimensions, it can be shown that the order of structure. The reason is that in order to know preferences, the desired outcome – has to be defined what kind of constituency – has to be defined before resorting to a list system in a single-member district.

The actual implications of such a classification are overstated, however. The order in which the variables to be examined depend more on theoretical considerations than on plain logic, such that the order should be defined on a framework. In many cases, there may be no rationale. The only strong conclusion that can be drawn is that the rationale to justify the logical priority of the classifications.

### 3. Conclusion

When Rae (1969) assessed the state of the literature 20 years ago, the verdict was quite negative.

The limitations of the existing literature are: (1) the shortcomings of its component studies are not defined precisely, (2) data are almost always missing, the standards of verification are usually low, (3) electoral laws – ballot form, districts, and so on – are often too vague, (4) the standards are often too implicit, precise categories, and (5) the standards are often too similar to vague terms. Data are often missing, (6) the population of facts is often too small, and the population of facts is often too small.



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or component has greater empirical import? The answer is clearly negative. On the one hand, it is very likely that importance varies according to the type of consequences being examined; dimension 'A' may be more significant with respect to party fractionalization but dimension 'B' with respect to party democracy. On the other hand, there are likely to be interaction effects: for instance, constituency magnitude may decrease disparity in PR systems but increase it in plurality systems (Taagepera 1984: 101). Interaction effects imply that every variable is crucial and that none can be deemed to be the most important of all.

On logical grounds, however, it could be argued that in order to make sense of the formula, one has to know the ballot and the constituency structures: ballots and seats have to be defined before votes are translated into seats. This is why, for instance, proportional representation is pointless in single-member districts, a fact implicitly acknowledged by Rae (1969: 140). As to the other two dimensions, it can be shown that constituency structure is prior to ballot structure. The reason is that in order to decide how voters will express their preferences, the desired outcome – how many candidates will be elected in what kind of constituency – has to be ascertained. For instance, there is no use resorting to a list system in a single-member constituency.

The actual implications of such logical considerations ought not to be overstated, however. The order in which the various distinctions are or ought to be examined depend more on theoretical and empirical considerations than on plain logic, such that the order should vary according to the particular topic or framework. In many cases, there may not be any need for a specific order. The only strong conclusion that can be drawn is thus a negative one: there is no rationale to justify the logical priority given to formulae in most existing classifications.

### 3. Conclusion

When Rae (1969) assessed the state of research in electoral systems twenty years ago, the verdict was quite negative.

The limitations of the existing literature reflect the three most persistent shortcomings of its component studies: (1) categories of analysis are seldom defined precisely, (2) data are almost never treated systematically, and (3) the standards of verification are usually left inexplicit. The properties of electoral laws – ballot form, districts, 'formulae' – are not classified according to explicit, precise categories, and party systems are usually described in similarly vague terms. Data are often confined to the experience of a single country, and the population of facts is either small or, worse yet, undefined.

Standards of evidence . . . are typically left flexible or even unstated . . . (p. 6).

Even though the field is still rather thin, in terms of quantitative output at least (Lijphart 1985), much progress has been made in the recent years, especially with respect to the systematic analysis of the consequences of electoral laws (see Taagepera 1986, Taagepera and Shugart 1986, Taagepera and Grofman 1985, Taylor and Lijphart 1985). However, the classification of electoral systems remains as vague and imprecise as it was twenty years ago, and this has prevented some interesting findings of empirical research to permeate the debate on electoral systems. Indeed, Sartori's (1970) assertion to the effect that 'political scientists eminently lack . . . a training in logic - indeed in elementary logic' (p. 1033) made also quite a time ago, still holds true (see also Sartori 1986).

In order to fill the gap, I have examined the major classifications that are used in the literature and pointed out their shortcomings. I have shown that the classification of electoral systems ought to take into account three basic dimensions which can be subdivided into six components: (1) the nature of the constituency (whole constituency/districts); (2) constituency magnitude; (3) the object of the vote (lists/individuals); (4) the number of votes allowed; (5) the type of vote (nominal/ordinal/numerical); and (6) the formula (majority/plurality/proportionality). I have also indicated that electoral systems can be distinguished on the basis of their outcomes, in terms of relative disparities between shares of votes and shares of seats.

### Acknowledgements

I would like to thank Arend Lijphart, Rein Taagepera, Jean Laponce, Richard Johnston, Ken Carty, Duff Spafford, Vincent Lemieux and Stephane Dion for their comments on a first draft of this paper.

### Notes

1. Clearly identifying the basis of a distinction ensures that one of the fundamental logical criteria of a sound classification - that the distinction proceeds upon one, and only one, principle - is respected. See Cohen and Nagel (1934: 242).
2. Nohlen (1984) distinguished four 'areas' of electoral systems: districts, candidacy, ballot structure, and translation of votes into seats. It will be shown later, however, that candidacy (individuals versus lists) can be conceived as a component of the ballot structure, a point implicitly acknowledged by Nohlen, who treats candidacy and ballot forms in the same section (4.2) of his book.

3. I leave aside the distinction between interval use here.

4. Taagepera and Shugart (1986) likewise note inputs and by empirical outputs.

5. In fact, the average deviation index is 6.5% in is 4.7% in P.R. systems and 11.5% in plural data base described in Blais and Carty 1987a

6. I prefer disparity to proportionality or disp formula and the outcome.

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3. I leave aside the distinction between interval and ratio measurement, which is not of practical use here.
4. Taagepera and Shugart (1986) likewise note that electoral systems can be classified by legal inputs and by empirical outputs.
5. In fact, the average deviation index is 6.5% in single non-transferable vote elections, whereas it is 4.7% in P.R. systems and 11.5% in plurality systems (these figures are computed from the data base described in Blais and Carty 1987a, which includes 20 democracies).
6. I prefer disparity to proportionality or disproportionality in order to better distinguish the formula and the outcome.

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