CHAPTER I

ELECTORAL SYSTEMS: A COMPARATIVE ANALYSIS OF CONCEPTS
The electoral system is a set of rules for conducting an election. These rules specify which public officers are subject to election, who is eligible to vote, how those eligible can claim their right to vote, how the candidates must be selected, and how the votes are to be counted so as to produce overall results.¹ It is a method by which votes cast in an election are translated into the seats won in a legislature by parties and candidates. The electoral system “determines the rules according to which the voters may express their political preferences and according to which it is possible to convert votes into parliamentary seats.”² To quote Gray W. Cox:

Electoral system is... a set of laws and party rules that regulate electoral competition between and within parties... those laws and rules regulating how parties make their nominations; how citizens vote and how those votes are counted; what the district structure of the polity will be; and how counted votes are translated into seats.³

The electoral system became institutionalized when society became too large for every citizen to be involved in each decision that affects the community. It has now become a determining factor in the formation of government, and also in determining how many parties would enter parliament. Since votes roughly translate into seats in the legislature, the electoral system influences the decision whether to form a one-party government or coalition government. The former leads to a political culture of adversary politics; the latter, to coalition culture.⁴ Whereas under one

kind of electoral system (plurality-majority) one party with more votes than others can form the government, another electoral system (proportional representation) is more likely to give rise to coalition government. The electoral system, thus, has a powerful role in promoting both democracy and conflict management. The method of representation also impacts upon divided societies in terms of ethnic alignments, ethnic electoral appeals, multi-ethnic coalition, the growth of extremist parties, and policy outcome.

Society is an important influential factor on the electoral system adopted. Thus, in societies with a democratic orientation, a system of pluralist democracy is more likely. Socio-political factors also determine the consequences of the electoral system. In a fractured polity, the rifts caused by group identities such as race, ethnicity, religion, language, ethno-nationalism, regionalism, class or occupation, conflicts over resources, cultural rights, etc. bring in many uncertainties in the electoral outcome. Social fragmentation increases the probability of the adoption of proportional system and the rise of a multi-party system, whereas in societies, which enjoy greater social harmony, the simple plurality system is more likely to be adopted, with a two-party system. In a multi-ethnic

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5 Ibid, p. 59.
8 Cox, n. 3, p. 15.
society, recognition of human rights and guarantee of free elections are significant in the electoral process.9

Group identities such as race, ethnicity, religion, language, ethnonationalism, regionalism, class or occupation, and the level of hostility and conflict among the societies are determining factors in the working of a country's electoral system.10 The same set of electoral system, applied in the same way, produces political stability in one country and instability in another. The way the proportional representation system works in Western Europe is different from the way it works in Western Africa. Even within Europe, the same electoral system produces regular change of government in Britain but permanent hegemony in Northern Ireland.11 The political consequences of the first-past-the-post system in India are entirely different from those in the United States and the Britain.

In ethnically fractured societies, electoral conflicts adversely affect the minority group in many ways. For one thing, during the election period the dominating group indulges in violence against the minority group to browbeat it. The flaws in the composition of the plurality electoral system are intentionally not modified, to enable the dominant group to retain the upper hand. Observing the experience of Nigeria, where the ethnic polarization caused by the plurality system finally led to civil war (1967-79), Arthur Lewis said that the surest way to kill the idea of democracy in a plural society is to adopt the Anglo-American system of first-past-the-post.

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9 Ibid.
11 Harrop and Miller, n. 1, pp. 2-3.
If minorities are to accept the parliament, they must be adequately represented in it, he said. Alexis de Tocqueville also is of the view that successful application of majority representation needs social homogeneity.

Without open competition between social forces and political groups, there is no democracy. An electoral system is really in practice only when voters have to choose a party or a candidate from at least two options. True democratic choice is achieved only if competitive elections as well as freedom of choice exist. In countries where voters can only cast their vote for a single party this choice is absent, making the elections non-competitive. There can also be semi-competitive election, where restrictions of various kinds limit the opportunity and freedom to vote. In effect, democratic systems have competitive elections, authoritarian systems have semi-competitive elections, and totalitarian systems have non-competitive election.

**TYPES OF ELECTORAL SYSTEMS**

The Royal Commission noted in its report in 1910 that there were over 300 systems in existence, but electoral systems could be analysed as a small number of basic types. Generally, they come under ten types, as shown in Table 1.1. In terms of the proportionality reflected in the ratio of votes to seats, these ten main formulae fall into three broad families: (a) plurality majority system, (b) semi-proportional system; and

13 Ibid.
(c) proportional representation system. In 1998, just over half of the independent states (109) and semi-autonomous territories that have direct parliamentary election had the plurality-majority system; 35 per cent (74 countries), the proportional representation system; and the remaining 29 countries (14 per cent), the semi-proportional representation.15

<table>
<thead>
<tr>
<th>TABLE 1.1</th>
<th>TYPE OF ELECTORAL SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plurality-Majority</strong></td>
<td><strong>Proportional Representation</strong></td>
</tr>
<tr>
<td>First-past-the-post</td>
<td>List system</td>
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<td>Block votes</td>
<td>Single transferable vote</td>
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<td>Two-round or run-off</td>
<td>Mixed system</td>
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<td>Alternative vote</td>
<td></td>
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<tr>
<td>Supplementary vote</td>
<td></td>
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</tbody>
</table>

Plurality-Majority System

This system, established in Britain in the election of the House of Commons, also became the standard method in the USA and English colonies. It was originally introduced in two-member constituencies and later applied in single-member constituencies. In this system, in a constituency the voters prefer candidates, and the candidate with the majority of votes wins the election.

In the early stages, the repeated ballot system was used for allocating seats. The Roman Catholic Church had a long tradition of using this method.16 France also followed this system for electing the State General in 1789. This stipulated three successive ballots: the first two were open, and the final one was restricted to just twice as many candidates as

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there were seats left to fill.\textsuperscript{17} This system was discarded four years after the revolution of 1848, after which the single-ballot mass election was introduced. Napoleon III devised a system of two-ballot elections suited to the new situation of manhood suffrage. Under this system, there were no restrictions on the number of candidacies fielded even at the second ballot, and required only simple plurality. The other European countries followed the absolute majority system—Germany up to 1918, Switzerland until 1900 and Austria, Italy, and the Netherlands until the end of World War I.\textsuperscript{18} The majoritarian electoral system came under attack in Germany and France in the later phase of democratization on the ground that the high barriers of the electoral system did not allow the entry of lower-class parties into politics. (The Anglo-American system also suffered from this deficiency even after the extension of suffrage.)\textsuperscript{19}

In the modern world, there are five types of plurality-majority systems. Two are plurality systems—first-past-the-post and block vote. The remaining three are majority systems—two-round run-off, alternative vote, and supplementary vote. In the plurality system, the candidate with the largest number of votes wins. In the majority system, the winning candidates must gain more than 50 per cent of the votes cast.

\textit{First-Past-the-Post System}. Under this system, in a single-member district, voters cast their votes on one-voter-one-vote principle, and the

\textsuperscript{17} Ibid.
\textsuperscript{18} Ibid.
\textsuperscript{19} In the German rule of absolute majority a winning lower-class party had to reach 50 per cent or go without representation. The French and Anglo-American systems also set a high barrier but the initial level was not frozen at 50 per cent; the highest barriers varied with the strategies of the established parties.
candidate who gains more votes wins. Voters choose their candidates with a tick mark or a cross on the ballot paper. This system of relative majority was introduced in Britain for the election of the House of Commons in 1885. It is common for the election of both parliamentary and the presidential election in Canada, India, Britain, USA, and most of the countries that were part of the British Empire.20

**Block Votes System.** In a multi-member district, every voter has the same number of votes as the number of members to be elected. In this case, the voters tend to vote on party basis, voting for candidates of one party only. The party that gains more votes fills positions regardless of the percentage of votes its candidates actually achieve. This method is widely used for local government election in Britain, particularly in London, and committees of voluntary organizations, and in Singapore. This system is also current in some parts of Asia and the Middle East.21

**Two-round or Run-off System.** This is the most common majoritarian form. There are two rounds of voting, often within a week or fortnight. The first round is in the first-past-the-post mode, but with the requirement of an absolute majority for electoral success. If the first ballot does not produce a winner, a second ballot is conducted for the run-off, and the candidate with the most votes gets elected. If there are more than two

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candidates, the contest is between only the two strongest candidates of the first round; the weakest candidates must withdraw. This system was followed in France during the Fifth Republic and was also common in parliamentary election in many countries until the end of the last century.

*Alternative Vote.* In a single-member district, voters are asked to list the candidates in their order of preference. If a candidate receives an absolute majority in the order of preference, he or she is elected. If not, the weaker candidate is eliminated and his or her ballot is redistributed among the remaining candidates according to the second preference of these ballots; this process continues till a majority winner emerges. In multi-member constituencies, each seat is filled by a separate election. The first vacancy is filled in the same way as a single-member alternative vote election. For the successive seats, the ballots of the elected candidate are transferred to the remaining candidates.

Australia had the alternative vote system for elections to the Senate between 1919 and 1946. The system is still used there in the parliamentary election, as 'preferential voting'. Fiji uses the system for the parliamentary election. Papua New Guinea had the system from 1964 to 1975. Weaker candidates are eliminated from the contest, but the voters do not have to cast the votes again.22

*Supplementary Vote.* This is a variation between alternative vote and run-off. Voters mark their preference on the ballot paper as in alternative vote. If no candidate has a majority of first preference votes, the election is

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decided by simultaneously eliminating all candidates other than the top
two from the first count, and counting all available preference votes
marked for one or the other of these two leaders to determine the winner.
In run-off elections there would be two rounds. The supplementary vote
system is an instant run-off system, in one round. This voting is recognized
in Australia as a forerunner to the alternative vote. It was first used in
Queensland in 1892, where it was known as the 'contingent' vote, to
ensure that all winners enjoyed clear majority support. The expression of
'contingent' preference was not compulsory, and voters could number as
many preferences as they wished. This system was replaced by the first-
past-the-post system in 1942. New South Wales also experimented with the
supplementary votes in the election of 1927, before adopting the alternative
vote. In the later part of the nineteenth century, a similar system was also
used in the USA for the primary election in several states. In
Britain, the Labour Party recommended this system as an alternative to the first-past-
the-post system but did not implement it at the national level election. In
1998, the British Government adopted it for the election of the new mayor
of London.

In an alternative vote, it is possible that by the second round, a
candidate who has fewer votes gets elected; in the first-past-the-post
system, the candidate defeated in this system might have won. If the voters

\[24\] Reilly, n. 21, p. 37.
\[25\] Ibid.
\[26\] Ibid.
did not use their preferential votes, the effect of the elections would have remained the same as first-past-the-post. This happened on some occasions in Queens land (1896-1935). Now Sri Lanka alone has this system.

Majority-Plurality System Analysed

In the majority-plurality system, the stronger party mostly achieves an absolute majority in parliament, and is thus able to form a government on its own without having to engage in protracted coalition negotiations with other parties. The formation of a strong government capable of action with majority leads to a better functioning and stable democracy. Since a single party forms a government, it is answerable for the success or failure of the government.27

True representative accountability depends upon the voters' knowledge of their representatives. In single-member constituencies a close link exists between voters and their representative, which facilitates grassroots-level participation in decision-making. The rank and file of the party can influence the selection of its candidates from the constituency level to the national level.

This electoral system more easily results in a change of government, since a small swing in votes may cause a big change in the number of seats.28 Because of the individual orientation, it provides a chance for a


28 In the parliamentary general election in the U.K. in 1983, the Conservative Party obtained 42.4 per cent of the votes and secured 61.6 per cent of the seats. In 1977 in Sri Lanka, the SLFP received 36.9 per cent of the votes and acquired 60.2 per cent of the
popular individual candidate to be elected. The majority-plurality system also has a major role in determining a country's party system. The voters choose between two broad-based political parties. Fragmented minority parties gravitate towards a party of the left and a party of the right.\textsuperscript{29} The system generally tends to help larger parties more than the small.\textsuperscript{30} Stability is the character of the majority system.

This system also encourages broad-based multi-ethnic political parties. As the system forces political parties to close into two broad organizations, these parties may encompass many elements of a divided society. Stability in a divided society might also be encouraged by excluding "extremist" parties from parliamentary representation, since a minority party is unlikely to win many seats unless it has a geographically highly concentrated electoral support. But if they concentrate in particular areas, they have greater chance of electoral representation under this system than in proportional representation. The Scots, Welsh, Irish, Blacks, and miners in particular British constituencies, the Jews in New York and the Irish in Boston, being geographically concentrated, benefit from this system: they attain more direct representation in parliament and more influence in the politics than they would have if their votes were dispersed or, equivalently, if election were held under proportional representation.
The majority-plurality system is also easy to understand and use, reducing the scope for votes getting invalidated.

In a run-off system, greater responsiveness and moderation on policy position is expected in a successful candidate than would be the case if the winner had a plurality of votes alone.32

In the system of supplementary vote, where voters express their preference votes under the proportional representation system, the minorities have an opportunity to influence the selection of the presidential candidate, even if they do not have the electoral strength to elect their own candidate: they can influence which majority candidate gets elected via their votes as well as their supplementary votes.

On the negative side, all majoritarian systems favour the large parties, leading to disproportional electoral outcome. In the view of Alexis de Toquevile, the majority system has four kinds of adverse consequences in multi-ethnic societies: (1) Since ethnic minorities that do not have regional strongholds are poorly represented, a non-hegemonic ethnic group cannot gain representation. (2) Regional hegemonies get accentuated when ethnic groups are dominant in different regions. The regional electoral strongholds of political parties thus get transformed into territorial political conflicts. (3) The majority in parliamentary terms gets exaggerated compared to votes; the importance of opposition parties is dimmed, while the hegemonic ethnicity at the national political level gets

31 Harrop and Miller, n. 1, p. 54.
32 Ibid, p. 29.
strengthened. (4) The development of dominant parties with oversized majorities in the electoral system makes difficult the growth of alternative political bodies or even an effective political opposition. 

Likewise, under a male-dominated party structure in a plurality-majority electoral system, women have less opportunity to win the election than under proportional representation system. Also, in the system of plurality, individual candidates see a personal benefit in defecting between political parties or by threatening to do so. The minorities' inability to get representation in the legislature can also lead to their alienation. The single-member electoral district offers ways for the manipulation of

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33 In post-war Britain the first-past-the-post system has tended to inflate the seats-to-votes ratio of the largest parties, Labour and Conservative and deflate that of the small Liberal Party. This meant in effect that the number of seats won by each party does not reflect correctly its electoral support on a nation-wide basis. In October 1974, the Labour Party, which obtained 50.2 per cent of the seats, polled only 39.3 per cent of the votes; the Liberal Party, which polled 18.3 per cent of votes, obtained only 2.04 per cent of the seats. In election for the House of Commons in 1983 also, the Liberal Party (third national party) and its alliance was at a loss with under-representation. In terms of popular votes, the Labour Party obtained only 2.2 per cent of the votes more than the alliance got, but the actual results were 23 seats and 209 seats respectively. If calculated in proportion, the Alliance could have obtained 162 seats and Labour 175 seats. The South African, Canadian, and Sri Lankan experiences also showed this trend of disproportion. In the South African parliamentary election of 1948 the National and African alliance formed the government, winning only 42 per cent of the votes but 79 seats. The defeated United Party/Labour government won 52 per cent of the votes but had only 71 seats. In Canada in the House of Commons, the Conservative Party obtained 48 per cent of the votes but well over the two-thirds majority of the seats. The Liberal Party obtained 28 per cent of the votes but only 40 seats out of the 282 seats, that is, 14 per cent. In Sri Lanka, in the 1977 election UNP gained 83.3 per cent of the seats with 50.9 per cent of the votes and SLFP gained only 4.8 per cent of the seats with 29.7 per cent of the votes. See Chanaka Amarathunga (ed.), Ideas for Constitutional Reforms, p. 191 and H. B. W Abeyanaike, n.28, p.344.


35 In 1998 women constituted 13.7 per cent of the members of legislature elected by proportional representation (70 cases) and 8.4 per cent in the legislatures elected by the plurality-majority method (84 cases). For the semi-proportional representation system, the figure was 7.8 per cent. See Rose, n. 4, p. 64.


37 Ibid.
electoral boundaries. This was apparent in Kenya in 1993 and 1997. The political opposition is discouraged from contesting in constituencies where one party is dominant, which may lead to political apathy among the electorate.

The first-past-the-post system does not reflect the equal relationship between voters and seats in the legislative body, and there is also a general tendency to exaggerate the representation of the largest party and reduce that of the smaller ones. The block votes system results in even greater distortion than in a single-member constituency. For instance, one party usually takes the whole representation of any one constituency, and that leads to several seats instead of only one, and the voters' opinion of the candidates personally is often misrepresented. It is possible, for instance, for the most popular candidate to be defeated. If electors vote for Party A, Party B or Party C under a rule awarding all the seats to the party obtaining more votes, the sharing of seats between parties occurs only when those parties are of nearly equal strength in a particular constituency. This effect occurs in the London County Council of Britain and New Brunswick, and national elections of some countries like Greece, and it happened in Turkey during 1950-57.

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38 During the period there were huge disparities between the size of the electoral district, the largest having more than twenty times voting strength as the smallest. This allowed the ruling Kenyan African National Union Party to win a large parliamentary majority with less than a third of the popular votes.


40 Sills, n. 16, p. 48.

41 Ibid.
In the *run-off system*, diverse interests of different groups are discouraged. Diverse interest groups compete with each other in the first round, but as the original support base is fractured, no candidates from these groups makes it to the second run-off stage. None the less, the second round of voting usually encourages trade-off between parties and candidates. This system also enables voters to have a second choice or even to change their mind between the first and second rounds. A major problem encountered when applying the run-off system in a divided society is that coalitions do not tend to be clear before the first round of counting, when it becomes clear which candidates are likely to proceed to the next round. This gradually affects the depth and timing of cross appeal. As a result, this weakens the possibilities of incentives for accommodative behaviour than in the case with the preferential system. Therefore, the run-off system is seldom used or advocated for divided societies.

Under the *alternative vote system*, in effect, under conditions of party identification and disciplined voting patterns, the same party can win every seat with a bare majority of the vote, resulting in highly lopsided and disproportional outcome. In Australia, the Australian Democratic Party received 9 per cent of the national votes but could not win any seat because of the lack of majority in any constituency.

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44 See for details, Reilly, n. 21, p. 33-36.
To partly overcome the disadvantage arising from plurality-majority electoral system, New Zealand has reserved six seats for its Maori minority. In India, nearly one-fifth of the seats have been set aside for the 'scheduled castes' and 'scheduled tribes'. Sri Lanka also had some regional, communal electoral districts in the pre-independence period.

Proportional Representation

The proportional representation system seeks to mitigate certain drawbacks of the majoritarian system. Its principles were formulated in the middle of the nineteenth century by C.C.G. Andrae, Thomas Hare and John Stuart Mill. Proportional representation is designed to translate voters' preferences proportionally into representatives in multi-member representative bodies. It ensures minority groups a measure of representation proportionate to their numbers.45 It reflects the voters' opinion in the legislature and functions as a safeguard for minorities.

According to Karl Braunias, there are two distinguishing phases in the introduction of proportional representation: the "minority production" phase and socialist phase. The earliest moves towards proportional representation came in the most ethnically heterogeneous European countries: Denmark in 1855; the Swiss cantons in 1891; Belgium in 1889; Moravia in 1905; Finland in 1906. Since the majority electoral system always threatened their continued existence, the production of some element of minority representation came to be seen as an essential step in a

strategy of territorial consolidation. In the second phase, culturally homogeneous nation-states also faced pressures for the extension of the suffrage and for proportionality. In these countries, the rising working class wanted lower threshold and representation in order to gain access to the legislatures. Established parties also demanded proportional representation to protect their position. Because of the introduction of proportional representation system and adult suffrage, two barriers that the majority electoral system erected were falling together. It became easier to enter the electorate and to gain representation. In Scotland, proportional representation was used between 1918 and 1929 for election to Education Authorities, which had to manage both Protestant and Catholic systems of public education. For the same reason, the British used proportional representation in Northern Ireland during the 1920s and reintroduced it in 1970. After World War I, the main reason for introducing this system was mostly to benefit the political parties.

Variations of the system of proportional representation are: the list system, the single transferable vote method, and the mixed system.

List system. Under this system, the elector votes for a list of candidates put up by the parties. Each party gets a share of the seats proportional to its share of the votes. The degree of proportionality is

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46 Sills, n. 16, p. 13.
47 Belgium's introduction of manhood suffrage in 1983 brought about an increasing polarization between Labour party and the Catholic party and threatened the continued existence of liberals. The introduction of proportional representation restored some equilibrium to the party.
49 Ibid.
50 See Harrop and Miller, n. 1, pp. 46-48.
determined by particular proportional representation formula using district magnitude (number of representatives elected in the district) and electoral threshold (minimum percentage of votes a party needs in order to receive a seat). If the district magnitude increases or electoral threshold decreases, the proportionality increases.\textsuperscript{51} Though it retains some traits of the first-past-the-post system with some form of majority voting, the list system almost always adopts a formula for distributing seats among parties in proportion to the share of votes they earn. The system was successfully adopted in Belgium in 1899 and reduced oscillations between Liberal and Catholic parties. Also, during the last quarter of the Nineteenth Century this system suited political developments in Western and Central Europe. Among the countries using the list system are Denmark, Finland, Italy, Iceland, Norway, Portugal, Sweden, Spain, and Venezuela.

The list system may be based on the highest average (divisor) or the largest remainder (quota). There are further sub-classifications according to particular divisor or quota.

\textit{Highest Average Formula}. One variation of the highest average formula (also known as highest number formula or the divisor formula) is the d'Hondt formula, a brainchild of Belgian mathematics professor Victor d'Hondt (1878). This is followed in most European countries. It favours the largest party.\textsuperscript{52} The seats are awarded one at a time to the party that has the


\textsuperscript{52} Ibid.
highest “average” number of votes per seat. The table below explains this system.

### TABLE 1.2
SEATS ALLOCATION BY D'HONDT HIGHEST AVERAGE FORMULA IN SIX MEMBER DISTRICT WITH FOUR PARTIES.

<table>
<thead>
<tr>
<th>Party</th>
<th>Votes (V)</th>
<th>V/1</th>
<th>V/2</th>
<th>V/3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>42,000</td>
<td>42,000(1)</td>
<td>21,000(3)</td>
<td>14000(6)</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>31,000</td>
<td>31,000(2)</td>
<td>15,000(5)</td>
<td>10,333</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>15,000</td>
<td>15,000(4)</td>
<td>7,500</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>12,000</td>
<td>12,000</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


It is evident that for the seats allocation the higher number of averages are taken into account. So the party A received first, third and sixth seat; Party B secured second and fifth seats; the party C the fourth seat: and D has no seats because his/ her average is less than others.

This system tends to create distortion in political representation between votes and seats. As evident from the table, party A has obtained 42 per cent of the total votes to secure 50 per cent of the total seats. Except party D, other parties are benefited. But party D has no seat even though it has obtained 12 per cent of votes, because the dominant party has benefited at the expense of the smallest party. Small parties, being at a disadvantage, explore an alternative option in coalition with the strong party to gain representation, but benefit little compared to the first-past-the-post system. Some countries have tried to eliminate or reduce this disadvantage by applying the modified Sainte-Lague method.

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The Sainte-Lague method has a threefold effect in the typical Scandinavian condition, where it has strengthened the middle size non-socialist parties, by reducing the overrepresentation of the Socialist Democratic Party. It was nevertheless a strategic advantage to the governing parties and it helped all the established parties by discouraging splinters and new parties. The pure Sainte-Lague formula is highly proportional and treats large and smaller parties even-handedly, but the modified Sainte-Lague formula aids middle-size political parties and reduces the number of legislatively represented small parties.

Under the Sainte Lague formula, the method of allocating seats is similar to that of the d'Hondt method. The divisors used in the former method are odd numbers (1, 3, 5, 7 and so on) and not instead of 1, 2, 3, 4 and so on as used in the d' Hondt method. However, it is rarely used in practice due to various problems confronted by the method. A modified form of Sainte Lague method is used in some countries like Sweden, Norway and Denmark. Under this method, the first divisor is 1.4 instead of 1. The table below explains the method. Modified Sainte Lague formula helps middle-size political parties rather than smaller parties. 54

<table>
<thead>
<tr>
<th>Party</th>
<th>Votes (V)</th>
<th>V/1.4</th>
<th>V/3</th>
<th>V/5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>42,000</td>
<td>30,000(1)</td>
<td>14,000(3)</td>
<td>8,400</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>31,000</td>
<td>22,143(2)</td>
<td>10,333(5)</td>
<td>6,200</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>15,000</td>
<td>10,714(4)</td>
<td>5,000</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>12,000</td>
<td>8,571(6)</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


54 Lakeman, no. 53.
Largest Remainder. This method is adopted for constituencies with some number of seats and to ensure that each party obtains seats in proportion to the votes polled.\(^5^5\) In a multi-member electoral district or constituency, seats are allocated to each party, after dividing the votes by the number of seats and then establishing a ‘quota’ to which seats are entitled. Seats are allocated for each list according to votes obtained by each party. If any seats remain, they are allocated between the lists according to the size of the remainder. The quota itself arises as a result of division and the divisor may vary depending on the formula used. In the quota formula, the seats cannot be allocated in a single operation. The size of the divisor can determine the remaining seats, which are allocated in the second round. The common five largest remainder formulae are: (a) the Hare quota (simple quota) formula; (b) Droop quota; (C) Hamilton method (D) Hagen Bach-Bischoff quota; (d) Modified quota (or imperial quota used in Italy from 1948 to 1993); and (F) Niemeyer method.\(^5^6\)

The Hare Quota. English Mathematician Thomas Hare, inventor of the single transferable vote, invented this formula as well. Unlike the highest average system, this system provides more benefit to the minorities. Seat allocation is done in two steps. After obtaining the quota by dividing the number of valid votes by the number of seats to be allocated in the constituency, this quota is used to determine the seats for each party. A seat is awarded to each party for each block of votes equal to a quota. After this allocation the remaining seats, if any, would be allocated

\(^{55}\) Ibid.

\(^{56}\) See Nohlen, n. 2 and Lipset, n. 45.
through second allocation. Any party that did not win a seat in the first stage will have all of its votes counted as a remainder, and any party, which did win seats, will have a remainder equal to its total votes minus a quota for each seat, which was awarded in the first stage. The remaining unallocated seats are then allocated in strict sequence to the parties with the largest remainder. The following table explains the system:

TABLE 1.4
SEATS ALLOCATION IN THE LARGEST REMAINDER HARE QUOTA IN A FIVE MEMBER DISTRICT WITH FOUR PARTIES

<table>
<thead>
<tr>
<th>Party</th>
<th>First round Votes</th>
<th>Hare Quota</th>
<th>Seats</th>
<th>Second round reminder</th>
<th>Seats</th>
<th>Total seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8,700</td>
<td>4,800</td>
<td>1</td>
<td>3,900</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>6,800</td>
<td>4,800</td>
<td>1</td>
<td>2,000</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>5,200</td>
<td>4,800</td>
<td>1</td>
<td>400</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>3,300</td>
<td>4,800</td>
<td>0</td>
<td>3,300</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>24,000</td>
<td></td>
<td>5</td>
<td></td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Hare Quota = Valid votes cast/ Number of seats in the constituency

This system is widely used to elect members of local governments and regional assemblies, as for instance in Tasmania, Australia, and Cambridge, Massachusetts, and Denmark. It has been used in elections in Ireland since 1922 and elections to the Australian Senate since 1949. Italy, Belgium, Luxembourg also follow this system. It is highly proportional and impartial between smaller and larger parties.

Droop Quota. This is a modification by H.R. Droop of the Hare formula. This quota is calculated by dividing the number of seats to be filled by total number of valid votes cast plus one, and one is added to the

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57 Ibid.
58 Lipset, n. 45.
quotient. After this, the process of seat allocation is the same as in the Hare method. Every party is given seats as they have quota of votes, and any unallocated seats are given to parties that have larger number of unused votes (Largest remainder). The following table illustrate the seats allocation by Droop quota.

<table>
<thead>
<tr>
<th>Party</th>
<th>Votes</th>
<th>Droop quota*</th>
<th>Full quotas</th>
<th>Remaining seats</th>
<th>Total seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>42,000</td>
<td>2.94</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>31,000</td>
<td>2.17</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>15,000</td>
<td>1.05</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>12,000</td>
<td>0.84</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100,000</td>
<td>7.00</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

*Droop quota = \( \frac{100,000}{6}+1 = 14285+1 = 14286 \).


Hamilton Method. This is an electoral formula used by the list system to translate votes into seats. It operates through various electoral quotas, the most common ones are Hare, Droop and Imperial. The counting process is done in two stages: (1) those parties which secure votes beyond the specified quota are awarded seats, and the quota is subtracted from their total vote; (2) those parties left with the greatest number of votes (the 'largest remainder') are awarded the remaining seats in order of vote size. This formula favours smaller parties. It has been introduced in Sri Lanka with some modification.
The process of seat allocation in the Hagen-Bachoff formula, modified quota formula, and Niemeyer method are similar, and the divisors vary with the formula used.59

The largest remainder formula works only in large constituencies, which yields results closest to the proportional ideal. Small parties fare better under it than under the largest average formula. Italy uses a special variety of the formula, called the Imperial formula, whereby the electoral quota is established by dividing the vote by the number of parties plus two. This modification increases the legislative representation of small parties but leads to a greater distortion of the proportional ideal.

*Single Transferable Vote.* The single transferable vote system starts with the conception of representation radically different from that embodied in the plurality system. The plurality system perceives a territory as a representation of communities; the single transferable vote sees representation as fundamentally personal—that members of parliament are elected by the voters to serve their people, who reflect the interests of the community. In its early years, this system was described by the term “personal representation”. Thomas Hare (1806-1891) is its innovator.60 Hare’s proposal of single transferable votes envisages the entire Britain as one vast constituency in which all candidates for Parliament simultaneously stand to be chosen. Voters would have to rank the order on their ballot between several thousand candidates. Single transferable vote was applied in majority as well as proportional representation systems in

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59 For details, see Nohlen, n. 2, pp. 48-76.
60 Ibid.
the nineteenth century. During the same period, Carl Andrae also invented a system with similar principles. In Denmark, the first national-level application of the single transferable vote was for the Danish Federal Assembly from 1855 to 1864. The main attraction of the system is to give power to voters to express preference among individual candidates. Here, voters cast preferential votes for an individual candidate instead of party list.

In a multi-member district, voters arrange candidates in the order of preference on the ballot in the same manner as the alternative vote. Any candidate who has greater preference in the first preference quota is immediately elected. If no one has achieved the quota, the candidate with the lowest votes in the first preference is eliminated and his/her second preferences are redistributed to the respective candidates left in the race, and so on, until all seats are filled by candidates obtaining a quota. In this way, the results reflect fairly accurately the preferences of the electors and their support for both individuals and parties. At the same time, votes for the elected candidates above the quota are also transferred according to the preferential votes. This counting procedure is quite complex, but minimizes the number of wasted votes.

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61 Rose, n. 4, p. 293.
TABLE 1.6
SEATS ALLOCATION BY SINGLE TRANSFERABLE VOTES IN A THREE-MEMBER DISTRICT WITH FIVE CANDIDATES

<table>
<thead>
<tr>
<th>Preferences Order</th>
<th>First count</th>
<th>Second count</th>
<th>Third count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidate P</td>
<td>46</td>
<td>-20=26</td>
<td>26</td>
</tr>
<tr>
<td>Candidate Q</td>
<td>16</td>
<td>+10=26</td>
<td>26</td>
</tr>
<tr>
<td>Candidate R</td>
<td>05</td>
<td>+10=15</td>
<td>+8=23</td>
</tr>
<tr>
<td>Candidate S</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Candidate T</td>
<td>13</td>
<td>13</td>
<td>-13=0</td>
</tr>
<tr>
<td>Non-transferable</td>
<td>-</td>
<td>00</td>
<td>+5=5</td>
</tr>
</tbody>
</table>

Droop Quota = \( \frac{100}{(3+1)} + 1 \times \frac{1}{26} \)


The Republic of Ireland has used the single transferable vote for all national elections since independence in 1922 and Malta for all elections since 1921. Northern Ireland adopted the single transferable vote in the 1920s, replaced it with the plurality system, and re-adopted it in the 1970s virtually for all level of elections. Estonia used single transferable vote in 1990 and then replaced it with variants of list proportional representation.

The proportional representation system delivers a better proportional outcome than in an election held under the majority-plurality system, but has its anomalies. For example, in Ireland, Fianna Fail, the largest party, has won average 45 per cent of the votes in the elections since 1945 and shared 48 per cent of the seats, while the third party Labour has won an average of 11 seats with 12 per cent of the votes. (This conventional criterion is, however, imperfect because not all voters cast their votes on party lines.) The single transferable vote system leads to inner-party and intra-party competition for seat sharing, which proponents of proportional
representation/single transferable vote see as a good thing. They say that it promotes an incentive to seek support from all voters because of the preferences.

Mixed System. This system was evolved in 1946 in West Germany, in an attempt to combine the positive aspects of majoritarian and proportional representation system. Under this system, a proportion of members of parliament are elected from single-member constituencies, and the rest are elected by the proportional representation list. The proportional representation seeks to rectify any distortion in district results, by adding members from separate lists to bring proportionality in the total representation of each party at the national level. It creates two classes of members of parliament. Some countries use the formula separately (independent formula); in others, it is dependent on the outcome (dependent formula; see Table 1.7).

<table>
<thead>
<tr>
<th>Independent combination</th>
<th>Dependent combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coexistence</td>
<td>Conditional (If needed, two formulae are used)</td>
</tr>
<tr>
<td>Superposition</td>
<td>Unconditional (correction)</td>
</tr>
<tr>
<td>Fusion</td>
<td></td>
</tr>
</tbody>
</table>


Independent Combination. Three types of formulae are used, namely, Coexistence, Superposition and Fusion.

Coexistence: A territory is divided into a majority-plurality district and a proportional representation district. In electing the members of the French Senate, a 145,000-member Electoral College elects respective

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62 See further detail Rose, n. 4, pp. no. 165-7.
senators in each department. The majority-plurality system elects 206 members. If there is no majority of votes in the first round for each winning candidate, a second ballot is held and the leading candidates are elected. Using the d'Hondt formula, 98 senators are elected by proportional representation. The parliament of Panama and Niger also use this hybrid system. Historical instances of the use of this system are Greece (1955-58), Zimbabwe (1980-85), and Canadian provinces of Alberta and Manitoba (1920-50).63

Superposition: This is the most popular type of mixed system. The majority-plurality and proportional representation systems apply throughout the territory to all voters. One set of representatives are elected in plurality or majority district and the other set are elected in a larger proportional representation district. Japan adopted this method in Japan in 1994 for 500 seats. Three hundred members were elected from single-member constituencies and 200 from eleven districts by proportional representation. Proportional representation seats are filled without any consideration of the results in single-member districts. In most cases, proportional representation members are elected in a single national constituency and some of them have more than one district.64

63 Ibid.
64 Andorra, Armenia, Azerbaijan, Croatia, Georgia, Guinea, Italy (Chamber of Deputies), Japan (House of Councillors), Mexico (Chamber of Deputies and Senate), New Zealand, the Philippines, Russia, Senegal, South Korea, Thailand, Tunisia, and Britain have one national list each for the proportional election, and some countries like Bolivia, Cameroon, France (Senate), Georgia, Hungary, Italy (Senate), Japan (House of Representatives), Niger, Panama and Venezuela are using more than one district. See Rose, “Mixed Electoral System”, n. 4.
Fusion: Under this system, a fusion of two formulae is adopted within a district. The system exists only in the election of municipal councils in France. Each municipality with population above 3500 is carved as an electoral district. The party, which gets majority of valid votes in the list in a municipality, is entitled to gain half of the seats in the first round. Using the d'Hondt formula, the other half is distributed by proportional representation. If no list secures majority of votes in the first round, the second round is held between the lists that obtain at least 10 per cent of the votes. Small parties can ally with major parties in order to get some representation. In the second round, mere plurality of votes is entitled to get half of the seats. Proportional representation chooses the other half of the members with 5 per cent threshold at both rounds. The combination is independent, since the application does not hinge on the outcome produced by plurality or majority rule.65

Dependent Combination. In these systems, the use of one formula hinges on the outcome of the other. The use of a given formula depends on some condition provided by the law. In 1923, Italian Law specified that two-thirds of the seats be awarded to the party obtaining a plurality of national votes, provided the party received at least 25 per cent of the votes. The remaining seats were allocated to other parties by proportional representation. Under this system plurality rules may or may not apply, depending on the share of the votes the leading party secures. The same principle was embodied in a Romanian law in 1926, in the French law of

65 Ibid.
1919 and 1951 and in the Italian election law. In the mixed system, multiple tiers and ballot transfer are quite complex, giving an impression of electoral manipulation.

Merits and Demerits of the Proportional Representation System

The proportional representation system seeks to ensure proportionality between votes and seats and enables various ideologies and communal minorities to get their own representatives in the legislature without artificial electoral alliance or party mergers. Application of the proportional formula pure and simple leads to an equality in the numerical and success value of the votes. This, in turn, encourages electoral participation. As a result, the parties and candidates maintain a good relationship with the voters and encourage their participation in the elections.

Under this system a single party will find it very difficult to gain absolute majority or two-thirds majority. There is no single winner to take control of the government. For instance, in New Zealand after the introduction of the proportional representation, no single party could form the government without the support of smaller parties since 1993, and after

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66 Ibid.
67 Ibid. Azerbaijan, Guinea, the Philippines, Russia, South Korea exemplify this, while Armenia, Bolivia, Georgia, Germany, Hungary, Italy, Japan, Lithuania, Mexico, New Zealand, Britain, and Venezuela allow a candidate to stand at both levels.
69 The largest parties can win 20 to 47 per cent of the seats. Two larger parties together can take 37 to 89 per cent of the seats. See Rose, n. 4.
forming the government with coalition, the slim majority ensured an important place for the smaller parties.70

The core principle of inclusion, which is a significant part of this system, tends to elect more women and more minorities, and linguistic, ethnic or religious groups. This enhances regime legitimacy and citizens' stratification with democratic governance.71 It avoids any invidious choices in favour of certain minority groups. In addition to permitting representation of self-identified minorities, proportional representation can also give special favours to predetermined minorities.72

Unlike in the first-past-the-post system, proportional representation is party-centred. In the list system, competition is between parties. As it gives greater importance to the party, it makes better governance possible. The temptation for gerrymandering is substantially less.

Criticism of proportional representation is centred on two themes: its tendency towards encouraging coalition government, and failure to maintain the relationship between representatives and the electorate. Seat allocation in large multi-member constituencies leads to the representatives' detachment from their constituencies. In Namibia, Israel and South Africa there is no relationship or accountability between voters and their members of parliament. In the closed list system, voters cannot

determine who will be the person representing them. The system always creates monopoly of the party, by giving too much power to party headquarters over political recruitment. Parties, not the votes, determine who will govern the country in the next term. The winning party or alliance decides the power issue, not during but after the election.73

Most architects of proportional representation wanted to keep trivial splinter groups and tiny anti-regime parties out of parliament. This led to the elimination of the smaller parties from mainstream politics. The effect of the threshold not only eliminates the smaller parties from the contest but also makes for disproportionate results in the outcome of the final result.74 It is also a very complicated system, unlike the majority system. The encouragement to coalition politics that proportional representation system engenders, weakens the government since it is hostage to its coalition partners.75

Semi-proportional Representation System

This system, with features of both proportional representation system and majoritarianism,76 has three varieties, namely, parallel vote, single non-transferable vote, and limited vote system.

Parallel Vote. In this system, part of the legislative members are elected by proportional representation, and the rest by some type of plurality or majority method. Some proportional representation systems

73 Harrop and Miller, n. 1.
74 A. Lijphart and R.W Gibberd, "Threshold and Payoff in List System of Proportion; Representation" European Journal of Political research, 5, 3 September 1977, pp. 219-44.
75 Lakeman, n. 53.
76 Lipset (ed.), n. 51.
allow voters to express their preferences for specific candidates on the party list. Unlike in mixed-member proportional representation system, the proportional representation seats do not compensate for any disproportion arising from the district elections. Two types of parallel systems are found, namely, the superposition method and the fusion method, which have been described above. Superposition is current in more than sixteen countries. Straight plurality is used in single- or multi-member districts in Andorra, Croatia, Guinea, Japan, Russia, Senegal, Seychelles, South Korea, Thailand, Britainraine, and Mexico. Single transferable vote prevails in Taiwan and in the Japanese House of Councillors.

Single Non-transferable Vote. This is a simple extension of the British-style single-member district electoral system. It is a special form of the limited vote method. Under the system, an electoral district has several seats (generally three to five), but every voter still casts just one vote and the candidate with the highest number of votes is elected. (Under the single transferable vote system, each voter lists his or her preference among several candidates, and the votes can be transferred if necessary.) This system was most often associated with Japan from 1947 to 1993. This system provides good opportunity for representation of minority or smaller parties.

79 See Rose, n. 4.
The single non-transferable vote system entails two special problems for larger parties: they have to decide how many candidates they can safely nominate. Over-nomination or under-nomination and unequal vote distribution may lead to loss of seats in parliament.\(^8\) To win a majority in a multi-member constituency a large party must run more than one candidate per district, leading to intra-party competition and split votes.\(^8\) This system also carries with it the disadvantage of disproportion between votes and seats.

**Limited Vote System.** Introduced in Britain in 1867, this system attempts to remedy minorities' inability to secure representation in a constituency, which is a weakness in the plurality system.\(^8\) It operates in multi-member constituencies with limited votes. In this system, people cast their votes only for the candidate and not for the list. This device, thus, is capable of giving due representation for all range of parties. It is currently used in the Spanish Senate, where citizens of most provinces cast three votes in a district returning four members. Most of the limited vote systems, in which voters cast only a single vote in multi-member districts, are currently used in Taiwan, Japan and South Korea. The system gives more benefits for the minorities and depends on strategic voting and the

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\(^8\) For example, a party winning 50 per cent of the votes in a three-member district might return three candidates who finish third, fourth and fifth, winning only one seat. However, if the party runs two candidates, those candidates will finish first and second, winning two seats.

technique of contest of the particular party. Under this system, however, parties face the problem of coordination. In the block vote system parties can easily nominate as many candidates as there are seats, but in limited vote system this leads to poor results. Because of the uncertainty on nomination tactic limited vote system does not guarantee majority and minority representation and also does not ensure proportional representation between votes and seats.

CONCLUSION

Electoral systems operate within a complex context of multiple factors, which vary between countries and time periods. Some electoral systems help the second or third strongest political party to outflank the strongest one in the legislature and successfully form a coalition government. Experience also seems to bear out Maurice Duverger's view that the electoral system determines the party system. Thus, plurality tends to produce a two-party system, whereas proportional representation tends to favour a multi-party system. In New Zealand, after mixed member proportional representation was introduced, the number of parties in parliament increased their range of interests represented. The electoral system also determines the credibility of a political party. For instance, in an ideologically distinctive society, the credibility of the "minor party" threat may be directly related to the incentive with a system.

83 See Ostrogorski, "'Vote as you are told' was the pass word", Democracy and the Organization of Political Parties (Japan: N.P, 1993), vol. I, p. 162.
85 Barker and McLeay, n. 70, p. 136.
Electoral systems help structure the boundaries of acceptable political discourse. Lijphart says that "if one wants to change the nature of particular democracy the electoral system is likely to be the most suitable and effective instrument for doing so." In deeply divided societies, where language, race, religion or ethnicity represents fundamental political cleavages, the electoral system becomes a tool for managing political conflict, encouraging parties to appeal for electoral support outside their own core vote base. This, of course, presupposes an electoral system that rewards candidates and politics that act in co-operative and accommodating manner, and not one which appeals only to a political party's own ethnic groups.

The stability and efficiency of a government depends upon a multitude of factors. The electoral system is one of them. When people perceive the system to be unfair, overtly discriminates against certain parties or communal groups, and brings about a government unable to govern, that system is bound to lack credibility. The system of proportional representation has been blamed for disintegration, party fragmentation, political instability, etc.; plurality-majority systems are considered responsible for promoting disintegration or unchangeable government.

Different methods of counting, just as different conceptions of representation, usually reflect cultural, social-structural, and political circumstances in a particular jurisdiction. Majority or plurality methods of

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86 Rose, n. 4, p. 58.
87 Ibid.
88 Nohlen, n. 2, p. 23.
voting are most likely to be acceptable in relatively stable political cultures. In such cultures, fluctuations in electoral support, given to one party or another from one election to the next, reduce polarization and make for political centristm. Thus, the “winner takes all” implications of the majority or plurality formulae are not experienced as unduly derivational or restrictive. Proportional representation, on the other hand, is more likely to be found in societies with traditional ethnic, linguistic, and religious cleavages or in societies experiencing pervasive class and ideological conflicts.