

Ghana's political parties: how ethno/regional variations sustain the national two-party system

Minion K. C. Morrison* and Jae Woo Hong†

ABSTRACT

This paper analyses Ghanaian electoral geography and its accompanying political party variations over the last decade. After re-democratisation in the early 1990s, the Fourth Republic of Ghana has successfully completed multiple elections and party alternation. Due to its single-member-district-plurality electoral system, the country has functioned virtually as a two-party system, privileging its two major parties – the NDC and the NPP. However, close examination of election results in the last parliamentary and presidential elections reveals that notwithstanding the two-party tendency, there is a dynamic and multilayered aspect of electoral participation in Ghanaian politics. Ethnic-based regional cleavages show much more complex varieties of electoral support for the two major parties, especially in light of fragmentation and concentration. Electoral support in the ten regions varies from strong one-party-like to almost three-party systems. Yet this lower, regional level tendency is not invariable. Regional party strengths have shifted from election to election, and it was just such shifts that made the party alternation possible in 2000. Employing traditional and newly designed indicators, this paper illustrates the patterns of electoral cleavage and regional party organisation, and how these ultimately sustain the party system at the national level in Ghana.

INTRODUCTION

The turbulence that succeeded independence in much of Africa has made it difficult to secure sufficient consistent, cumulative data with which to assess trends about democratic elections and the political parties that shaped them. Indeed most of these democratic experiments were disrupted or corrupted. The heady days of mass nationalist movements rarely met the long-term expectations of deepened citizen participation (Chazan *et al.* 1999: 137–219). Elections, of course, represent just one aspect of such

* Department of Political Science, University of Missouri, Columbia, Missouri, USA.

† Center for Comparative Democratic Studies, Seoul, Korea.

participation, but an important one. And in Africa's second wave of democratisation, elections, accompanied by a plethora of parties, have once again become a symbol and instrument of mass participation (Bratton & van de Walle 1997: 1–18; Salih 2002; Young 1999). Happily too, many African countries have made it far past their first and second elections without interruption, and several of these countries have experienced an alternation in leadership and ruling parties or coalitions (Lindberg 2006). Ghana fits this mould since its transition in 1992, having both sustained multiple elections and alternated the ruling group (Morrison 2004). This provides us a body of evidence to assess the early trends of its election experience, and some of the factors that contribute to its party systems.

Ghana has had a two-party like national system during its oft-interrupted democratic history (Austin 1964; Chazan 1983). According to the conventional wisdom (Duverger 1954) this could be an artifact of its British type single-member district plurality system (SMDP). But little attention has been directed at party configurations in Ghana's regions, where other variations obtain. The location of individual constituencies within the SMDP system may allow a multitude of parties or factional entities to form. In this context, if party support is regionally engaged, the country may have a two-party system at the national level, but one or multiple-party systems at the regional level.¹ Ghana's election structure allows for different types of party system to exist in different parts of the country, with important implications for how citizens participate.

It is our contention that while Ghana has a stable two-party system at the national level, there are variations in party system types in the regions. These regional variations develop as a product of ethnopolitical fragmentation and group concentration (Mozaffar *et al.* 2003), and region-based 'favourite-son' politicians (Morrison 2004). But instead of these variations acting against the national two-party arrangement, they rather sustain and reinforce it. This occurs in several ways. First, in order to reap the political prize of rule, the two main parties are the only game in town, sharing near 95% of the votes. Second, these two parties animate all the regions. Within two regions that are one-party dominant, alternative party preference provides some balance between the two majors. In several two-party dominant regions, competition is high with a willingness to shift support between the two major national parties from one election to the next. And in several other regions with a 'favourite son' element, there is a multiparty effect, and the major parties receive significant 'balanced' support. Overall within this fluid context the competition between the two national 'catch-all' parties is high, resulting in shifts in the strengths of

the two organisations. In the end this elaborate process has so far sustained the electoral dominance of the two national parties. But enough shifts in voter preference have occurred over time to allow the possibility of party alternation, a situation that occurred in 2000. As such, the behaviour of regional parties in supporting the national system appears to be a calculation that political influence comes only with siding with one of the traditional catch-all parties. This seems to accord with broader evidence that 'ethnopolitical fragmentation [such as Ghana's regional party variations] is likely to reduce the number of parties' (Mozaffar *et al.* 2003: 381).

In order to understand what might on its face seem a puzzling outcome, we employ a variety of methods to uncover the party systems functioning in Ghana, and examine how they combine to provide the stable system at the national level. We first survey Ghanaian electoral history to demonstrate the two-party system. Then we employ several means to illustrate the regional party system (a fractionalisation index to determine the number of parties; and a regional party strength measure to compare regional and national party systems). Third, we demonstrate how regional party systems affect the national system (measuring the effective number of regional parties, and regional and multiparty strengths; and comparing these by measuring volatility over 10 years). Finally, we measure alterations in regional party strength over three elections, revealing how these both sustain the two national parties, and forecast alternations between them.

THE ELECTORAL HISTORY OF GHANA

Over the last five decades, Ghana has had four republics that involved competitive elections, although prior to the 1992 government all were disrupted by *coups d'état*. Throughout this period of history, the most apparent tendency in the electoral arena has been two-party competitiveness.

The country's electoral experience goes back to the days leading up to decolonisation. Before full independence in 1957, Ghana (then the Gold Coast) had three consecutive 'tutelary' elections in 1951, 1954 and 1956. In part to support the continuance of the Westminster tradition, the British oversaw this series of electoral contests as a phase of decolonisation. The old Legislative Assembly was converted to a parliamentary type institution, representing the indigenous 'political parties'. In these pre-independence elections, Kwame Nkrumah's Convention People's Party (CPP) won a majority of seats and votes. Whereas the 1951 election was

a landslide victory for the CPP, the 1954 election presaged a characteristic of elections in Ghana that remains to this day: a high degree of competitiveness within its administrative divisions, some ethnic and some regional. A regional party, the Northern People's Party, by winning 15 of 26 seats in the Northern Region, became the first significant electoral opposition group. And by the time of the 1956 election, which ultimately led to independence, two major partisan lines had developed: the Nkrumah and Danquah-Busia axes – the one populist and state-interventionist (CPP); the other liberal-mercantilist with its own tinge of interventionism (the United Gold Coast Convention: UGCC). The historical ethno/regional political elements formed major parts of each axis.

Ghana's first republic was declared in a plebiscite in 1960, when Nkrumah abandoned the Westminster tradition in favour of a strong presidency, organised by a single party. This official single-party dominant regimen remained in place until Nkrumah was overthrown in a *coup d'état* in 1966.² A 1969 election returned a civilian government led by Kofi Busia, whose perennial UGCC-based opposition now ran as the Progress Party (PP), and competition was seriously depressed by the official banning of the CPP and any identifiable remnants. The PP was subsequently ousted in another military coup in 1972. Alternation between the two partisan axes occurred again when Hilla Limann's Nkrumahist Peoples National Party (PNP) gained power in the Third Republic (1979–81). Limann won the presidency by just over 6% of the vote against the old PP forces (now the Popular Front Party – PFP) (Chazan 1983). On 31 December 1981, a *coup d'état* led by Flt. Lt. Jerry J. Rawlings disposed of the elected Limann government, and his People's National Defence Council (PNDC) ruled for 11 years.

When the youthful PNDC junta allowed a new constitution that sanctioned political parties in 1992, the Fourth Republic of Ghana came into existence. It has survived through three election cycles, and also witnessed a peaceful alternation in power when the opposition party ousted its incumbent rival in 2000, the first time this feat had been accomplished since independence in 1957.

In the 1992 election, the leadership of the military government assumed a civilian posture (National Democratic Congress – NDC) and successfully contested the presidency, winning 58% of the votes. Most of the opposition vote went to a single party – the Danquah-Busia legatee, now named the New Patriotic Party (NPP). The NDC won with a clever reworking of many Nkrumahist themes, rendering itself statist and populist in profile. After the presidential contest in 1992, the major opposition party (NPP) refused to accept the outcome (Morrison 2001), withdrawing from the

TABLE 1
Election results in the era of the Fourth Republic

	Presidential				Parliamentary	
	1992	1996	2000-1	2000-2	1996*	2000
NDC	58.4 %	58.5 %	44.7 %	43.7 %	57.3 %	41.2 %
NPP	30.3 %	38.5 %	48.1 %	56.3 %	39.7 %	44.9 %
PNC	6.7 %	3.0 %	2.9 %		3.0 %	3.4 %

Source: Ghana Electoral Commission; only valid votes are counted.

Some totals are not 100 % because small parties' and independents' vote shares are not reported.

* For the 1996 parliamentary election, only the three major parties' votes are counted.

subsequent parliamentary contest.³ By 1996, the new democracy had gained sufficient strength to produce a widely accepted two-way competitive result, albeit again won by the NDC, taking nearly 58 % of the poll. In 2000, however, the opposition NPP came into power in an even more tightly fought contest, taking 48 % of the vote against 44.5 % in the first round, but 57 % against 43 % in the second round (see Table 1). The Ghana elections in 1996 and 2000 were widely regarded internally and externally as the two most satisfactory in the country's history (see Table 1).

The two-party dominant partisan alignment of the Ghanaian political environment is evident in the 1996 and 2000 elections. In each contest, the two major contenders captured over 90 % of the total votes cast. In each accompanying parliamentary contest, the winning presidential candidate managed a majority, but the competitiveness of this body has continued to intensify. In 1996, the opposition NPP controlled only slightly more than 30 % of the seats, while in 2000 the opposition NDC controlled 46 % of the seats (see Table 1).

MEASURING REGIONAL PARTY SYSTEMS AND PARTY STRENGTHS

A party system consists of a set of political parties operating within a nation in an organised pattern. But the literature hardly reflects agreement on a universal definition of the concept (Duverger 1954; Eckstein 1968; Rae 1971; Sartori 1976). What the current literature does agree on is that 'a party system is an entity that is different from a political party or a simple set of political parties, as a party system involves organization. It consists of a set of political parties operating within a country in an organized pattern, described by a number of party system properties'

(Lane & Ersson 1999: 134). Those properties mainly involve the stability and instability of the system, revealing the bounds within a unit in which party competition occurs.

Studies of Western political parties have generated some typologies of party systems and specified some methods of measurement. The number of parties is one basic property that helps to classify and construct the typologies. Some classical works explored Western party systems by categorising them into one, two or multiple party systems (Blondel 1968; Duverger 1954). Following these, many indicators have been introduced to observe the structure of party systems: Number of Relevant Parties (Sartori 1976), the Fractionalisation Index (Pederson 1979; Rae 1971), the Aggregation Index (Mayer 1980), Effective Number of Parties (Taagepera & Shugart 1989) and the Molinar index (Molinar 1991). These indices are designed to show both the structure of party systems and party strengths. Party strength, which can be defined as a party's electoral performance, is not a preferred usage in the literature, but it is clearly related to the structure of party systems. Some other concepts and methods are also employed to reveal the nature of party competition: e.g. the Polarisation Index (Taylor & Herman 1971), Ideological Distance of Parties (Sartori 1976) and Volatility (Pederson 1979). Most recently, even graphical tools like the Nagayama Diagrams and Simplex Representations are used to display patterns of multiparty competition (Grofman *et al.* 2004; Reed 2001; Taagepera 2004). These methods can be selectively used and variously applied, as we do below, to display temporal structures and changes of party systems for specific research purposes.

Exploring the party system in Ghana, we employ some of these indicators and also develop new measures for party strength. We consider each of the ten Ghanaian regions as a unit of analysis. By this method, we can directly observe the difference between national and regional tendencies. Then, we first calculate the number of political parties in each region to see whether a two-party system found at the national level is also replicated at the regional level. Second, we compare regional party strength to expose the details of regional patterns of party competition. To do this, we employ simple but newly designed indices for party strength. Party strength is measured by the ratio of parties' electoral performance in each region to that of the national level. Third, we observe the changes that occur from one election to another to plot the fixity or fluidity of regional electoral behaviour. Below, we explain methods that we use for measuring party system and strength.

First, we examine the structure of the political party system by counting the number of parties. To do this we use the concept of fractionalisation

of political party systems developed by Rae (1971) and based on the Herfindal-Hirschman index used in economics to measure the degree of market concentration. Among indices for fractionalisation, we calculate the *effective number of political parties*, using the well-known Laakso-Taagepera (1979) scheme. For actual application we then use two available alternative indices: *effective number of legislative parties* (ENPS), and *effective number of elective parties* (ENPV)⁴ (Cox 1997; Ordeshook & Shvetsova 1994).

In this paper we employ both indices. The ENPV is employed for presidential elections, where only one person is elected, usually between candidates from two parties, in a two-round system that militates against strategic voting. Both indices, however, are used for parliamentary elections. Initially, we hesitated to use ENPV because not all parties contested every constituency. Since each region is composed of multiple single-seat constituencies, and some minor parties are not strong enough to nominate candidates in every constituency, the vote shares for minor parties could be skewed. So we first employed ENPS for parliamentary elections. But since the vote shares of minor parties were relatively small, we then also used ENPV for comparison.⁵

We then ask whether the two-party system present at the national level is also maintained at each regional level. This simple indicator allows us to unravel the multiple layers of political party systems and their patterns at the national and regional levels. In this instance, the number of political parties in each region shows how party support is clustered according to ethno-regional identities. This in turn generates multiple local systems, but sustains the two-party national system.

However, ENPV and ENPS illustrate only how many parties are represented or supported through elections. It does not show which party is more favoured in which region. Put differently, using only those two indices we do not know the concrete content of party competition. Hence, we design another indicator to calculate party strength in each region. Our basic assumption is that party strength in each region will reflect sentiments favourable toward ethno-regional interests. Here we define a party's regional strength as its *relative* electoral performance in a region compared to its national performance. This can be expressed using a party's vote share.

Simple comparison between the vote shares in a region and the nation as a whole may show how a party performs in the region, but this does not fully show strength because the performance of other parties. Suppose party *K* receives 70 % of the votes in region *i*, but 60 % in the entire nation. A simple comparison shows that Party *K*'s voting power in region *i* seems 1.167 times stronger than it is in the nation. But if the strengths of other

parties are considered, the figure increases to 1.556.⁶ It implies that party K performs 1.556 times better in region i than it does in the nation as a whole. Since an election represents a competition between multiple players for a fixed number of votes, voting power or electoral performance of one party is always relative to that of other parties. Thus, the latter method is more appropriate to appraise a party's regional electoral strength.

Here we introduce *Regional Party Strength (RPS)*, which shows how a party performs in a region compared to its national performance. If a party is more preferred in a certain region than in the entire nation, we may say that the region favours this party. Note, however, that this does not mean that this party is the most preferred one in the region. Even if this party is the third or fourth largest party in a region, that level of strength might still exceed its strength at the national level. Another benefit is that by comparing a party's regional and national strength, the indicator controls non-regional factors of party strength.⁷

Although RPS clearly shows one party's performance in the regional and national level, it does not allow for comparison between multiple parties. RPS measures the same party at different levels (regional and national), although the calculation of each level includes the other parties' vote shares. However, *MPS (Regional Multi-Party Strength)* can be used to compare the relative strengths of multiple parties. Standardised MPS that expresses a certain party's strength as a standard point, i.e. $MPS = 100.0$, can be used as an easy indicator to compare multiple parties' strength. In this analysis, we set a winning party's national strength as 100.0.⁸

After examining the structure of the political party system in each election, we then observe its variance over a decade. Ten years is not the most desirable time period (longer would be preferred) to analyse the change of party system and party strength. But during the last decade, Ghana experienced three successful electoral cycles and a peaceful alternation for the first time in its history, affording a body of evidence not previously available. We may expect there to have been meaningful changes in party strengths, even though the contour of a two-party system is sustained. We employ three methods to explore the change of party strength and party system. We calculate the electoral volatility, 'the net change within the electoral party system resulting from individual vote transfers' (Pedersen 1979: 6). This measure can be used to assess ongoing format changes in a party system. Whereas the volatility index⁹ does not deal with each individual party, it can show the contour of changes in each region. Then, we compare MRPS scores between elections. This shows how parties have performed in each region in different elections.

This also illustrates how regional differences contribute to the change in party strengths. Third, we observe shares of the national vote that a party receives within a region. For example, if a party receives 1,000 votes out of 10,000 votes in a region, and the entire valid votes in the nation are 100,000, it is 10% of regional votes, but 1% of national votes. We use the latter rate. These parties' *national shares of regional votes* show how each region contributes to overall party strength, and comparisons of these shares reveal the relative magnitude of vote change in each region.

In this paper, we include five elections, the 1992, 1996 and 2000 presidential and 1996 and 2000 parliamentary elections. Since there was a second round in the 2000 presidential election, the total number of cases is six. The 1992 parliamentary election was excluded because the opposition parties boycotted the race, charging fraud in the earlier presidential election. (The two elections were separated by about three weeks.) The election results were assembled mainly from public domain sources and datasets of the Ghana Electoral Commission (EC). We note a minor problem in the 1996 datasets of the EC, which show votes for only three parties in parliamentary elections. But since the other small parties' vote shares are tiny, we follow the EC in excluding that data. In the 2000 parliamentary election, not all parties were strong enough to run in all constituencies. Thus, regional sums for those minor parties are slightly under reported, but only in the constituencies where they fielded no candidates. Also we did not substitute a zero vote share or alternatives like regional or national average in those areas, because this actually yields a stricter standard for our research purpose. For the empirical findings, we emphasise presidential elections and use parliamentary elections mainly for comparison.

REGIONAL FAVOURITISM AND THE PARTY SYSTEM IN GHANA

Number of party systems in the regions

Ghana's ten regions are divided into multiple single-member constituencies. There has been no change in regional boundaries since the start of the Fourth Republic. Thus we take a region as unit of analysis. Meanwhile, region is also a rough guide for understanding the ethnic distribution of the country. The two-party system prevalent in Ghana since its independence has been sustained during the Fourth Republic. This continues to be influenced by the British-style electoral system, SMDP. This outcome appears to be consistent with Duverger's (1954) law on the relationship between SMDP and the two-party system. In SMDP systems, small parties cannot be easily represented because voters tend

to cast their ballots strategically, based on party preference ordering and calculation of winning odds for parties. When they see little chance for their most preferred parties, they switch their votes to an alternative that is more likely to be elected (Abramson *et al.* 1992; Ordeshook & Zeng 1997).

This does not mean, however, that the two-party system has to be ubiquitous in every SMDP system. Regional or ethnic cleavages may produce different types of party systems in specific regions. In many new democracies, regionalism is a strong factor in voters' decisions, especially when multiple ethnic groups divide the countries. A strong ethnic element in electoral politics has been supposed to negate national identity, thereby creating a lag on the consolidation of the national state. Interestingly this appears to have worked both ways in Ghanaian politics. An element of post-independent political culture militating against ethnic appeals/organisation is longstanding. The first post-independence Nkrumah government not only de-emphasised such local commitments as it sought to construct a national Ghanaian identity, but legislated against it. The formula that most partisans articulate is one that focuses on the national state. This has even been the case for partisan bidders who could barely disguise their ethnic makeup or aspirations, such as the National Liberation Movement (NLM) that challenged Nkrumah's CPP on the eve of independence (Allman 1993; Morrison 1982). The prominence of this element of political culture was affirmed in a study that showed how Ghanaians made a distinction but not a contradictory one between their national identity and local identities; and that support for a well-wrought local identity did not diminish support and commitment for national identity (Morrison 1983). However, the NLM was first and foremost a party associated with the Ashanti peoples who dominated that region and their group political aspirations (articulated as federalism). Scholars have continued to be animated by the prominence of Ashantis and their ethnic kin in the Busia-Danquah strand of parties of which the NPP is legatee. Moreover, the appearance of bloc voting among ethnic Ewes who dominate the Volta Region has sustained similar claims about the ethnic factor as the source of partisan identification and voting (e.g. Chazan 1983; Lindberg 2003). At the same time, Mozaffar *et al.* (2003) indicate that this divergence between local and national partisan identities may equally be a calculus. When an ethnopolitical entity cannot win at the national level by invoking this lower level sentiment, it ultimately produces support for a bigger tent, thus reducing the prospect of a proliferation of fragmented parties in general elections.

Table 2 shows the effective number of political parties in the ten regions and the nation for the six elections. Here we detect some intriguing

TABLE 2
Effective number of political parties*

	Presidential Election: ENPV					Parliamentary Election: ENPS(ENPV)		
	1992	1996	2000 (1st R)	2000 (2nd R)	Mean ^a	1996	2000	Mean
Ashanti	2.10	1.85	1.64	1.47	1.84	1.35 (1.85) ^b	1.13 (1.78)	1.24 (1.82)
Brong- Ahafo	2.11	1.63	2.19	1.95	2.07	1.45 (1.96)	1.80 (2.45)	1.63 (2.21)
Central	1.96	2.02	2.28	1.92	2.15	1.41 (2.03)	1.99 (2.44)	1.70 (2.24)
Eastern	2.12	2.03	2.12	1.88	2.04	1.95 (2.03)	1.74 (1.89)	1.85 (1.96)
G. Accra	2.35	2.08	2.18	1.92	2.11	1.94 (2.08)	1.66 (1.85)	1.80 (1.97)
Northern	2.26	2.03	2.76	2.00	2.53	1.57 (2.07)	1.58 (3.51)	1.58 (2.79)
Up. East	2.45	1.87	2.64	1.96	2.38	1.00 (1.91)	2.09 (3.04)	1.55 (2.48)
Up. West	2.46	1.70	2.29	1.89	2.10	1.00 (1.70)	1.31 (2.34)	1.16 (2.02)
Volta	1.15	1.12	1.33	1.26	1.35	1.00 (1.12)	1.23 (2.02)	1.12 (1.57)
Western	2.32	2.02	2.23	1.98	2.27	2.14 (2.02)	2.19 (2.77)	2.17 (2.40)
Total	2.28	2.04	2.31	1.97	2.08	1.87 (2.05)	2.16 (2.68)	2.02 (2.37)

* ENPV for presidential and ENPS for parliamentary election.

^a Mean score excludes 2nd Round at 2000 presidential election.

^b Number in parenthesis is effective number of electoral political parties (ENPV).

patterns. First, in general, a two-party like system has been sustained during the last decade at the national level, but some minor variations are noticeable. The numbers illustrate that nationally there have been two strong parties and other very small ones. In presidential elections, national ENPV scores range from 2.04 to 2.31, if we exclude the second round in the 2000 presidential election (when only two candidates were allowed to run). The mean value of ENPV is 2.08, reflecting a near perfect two-party system.

Similarly, in parliamentary elections, the ENPS scores illustrate that the two-party system is also dominant. In the 1996 election, a third party did not even have a chance. ENPS is less than two (=1.85); and the mean value of the two elections is 2.02, again a nearly complete two-party system. But in case of the parliamentary ENPV, the number of parties reaches 2.68 in 2000, even if some minor parties did not run in several constituencies. This implies that there is meaningful third-party support, at least in terms of vote shares. Since ENPV does not include independent representatives, the actual fragmentation could even be larger. Thus, theoretically a $2 + \alpha$ party system is a possibility at least in ENPV. The gap between ENPS and ENPV is doubtless due to Ghana's SMDP electoral system. Yet observation of regional patterns reveals more intriguing information beyond the SMDP-manufactured two-party system.

An important finding is that the two-party system has been strengthened or weakened according to regional concentration and time. In Volta, where the ethnic Ewes are concentrated, for example, a one (or one-and-a-half) party-like system has appeared. All those elected in the 1996 parliamentary election belonged to one party. ENPS is one ($=1.00$) and ENPV is slightly higher than one ($=1.12$). It shows that Volta is strongly inclined toward a specific party. In Ashanti, where ethnic concentration is a factor, the two-party system has also turned into a one-and-a-half-party system. Like Volta, Ashanti has inclined towards a particular party. Meanwhile, some other regions display possibilities for a $(2 + \alpha)$ multiparty system. In presidential elections, the fragmented but not concentrated Upper East and the Upper West regions in 1992, and the Northern region in 2000 (1st round), had two-and-a-half-party systems. Mean values range from 1.35 in Volta to 2.53 in Northern. In the parliamentary election, the Northern and Upper East regions even reached three-party systems in 2000 in terms of ENPV. ENPV are 3.51 and 3.04 respectively. In summary, whereas a two-party system is sustained in most regions and elections, fluctuations are found in others in regard to fragmentation and concentration. Some are inclined to a one-party system (Ashanti and Volta), and others lean toward $2 + \alpha$ party system.¹⁰

Third, in the case of the parliamentary elections we witness the effects of the SMDP system. There are significant gaps between ENPS and ENPV. For example in the 2000 parliamentary election, the gap is more than double in the Northern region (3.51 *vs.* 1.58). Voters in this region tended to support more than three parties, but one party actually won a majority of the seats. Slightly weaker but similar patterns are found in Upper East and Upper West region in this election. This suggests that if Ghana were ever to employ a PR system, these regions could easily turn into multiparty systems.¹¹

These multiple layered patterns illustrate the ways in which ethnic fragmentation, group concentration, and regional identity combine to the benefit of a two-party-type national party system (a reduction in the effective number of parties) (Mozaffar *et al.* 2003; Morrison 2004). These findings suggest that there are strong variations that are regionally derived. In the regions where there are significant ethnic blocs, there also appears to be a tendency towards one-partyism, where voter outcomes reveal a strong identity with one of the two main, broad-based parties that independently articulate national platforms. In other regions like the North where there is also a strong regional identity, with fragmented ethnic components, voters wager chances on getting national influence via split votes on favourite sons. These favourite sons have thus far articulated

national platforms, consistent with the demands of Ghanaian political culture. Yet in this nuanced game of fragmented groups, the attraction of a favourite son is that he reflects local aspirations and can be expected to deliver if he prevails at the national level. Indeed the northern presidential winner in the Third Republic, Limann, gave credibility to this approach.

Party strength in regions

These indices for the effective number of political parties show the contour of party politics in the regions. But they do not provide any information about which party is preferred in which region. When we say a party is favoured by specific regions, there are two possible meanings. First, it means that the party is the most preferred party in the region. Second, it also implies that the party is more favoured in that region than in the nation as a whole. We believe that the latter delivers more information than the former. In the former, if the most favoured party x in region y is also the national winning party, we still cannot determine if that exceeds preference levels for x in all regions. Two comparisons are necessary to demonstrate regional party strengths. First, we provide a comparison between regional and national strengths of one party in an election. Second, we provide a comparison between multi-parties in an election.

Table 3 shows regional party strength in the ten regions and the nation as a whole. Using RPS, we can see regional preferences of parties in terms of direction and relative magnitude. Unlike the actual vote shares, RPS shows relative strengths of parties in each region compared to their national strengths. Thus, RPS values are useful to see regional differences in terms of party strength. In other words, the values show the relative scale of party strength (percentage) in each region when the national strength of a party is 100.0. If the RPS value of a party is smaller (or greater) than 100.0, the party performs worse (or better) in the region than its national performance. If party L 's RPS is 110.0 in region m , this region favours the party more than the nation as a whole by 10%, or party L has 10% stronger electoral power in region m . Table 4 includes two major parties, the NDC and the NPP, and one minor party, the PNC.

In several regions, specific party favour or disfavour is asymmetric. Among the ten regions, Volta is an extraordinary case. The region has strongly preferred the NDC to other parties. The NDC received over 12 times more relative vote shares than its national average in the 1996 presidential parliamentary elections. But the NPP has only about 10%

TABLE 3
Regional party strength (RPS)

	Presidential Election											Parliamentary Election								
	1992			1996			2000-1st R			2000-2nd R		1996			2000			Mean*		
	NDC	NPP	PNC	NDC	NPP	PNC	NDC	NPP	PNC	NDC	NPP	NDC	NPP	PNC	NDC	NPP	PNC	NDC	NPP	PNC
Ashanti	34.9	353.0	35.3	34.6	307.1	46.1	35.6	321.6	44.0	32.4	308.4	36.3	292.1	46.9	42.4	303.6	57.1	36.0	314.3	45.9
Brong-Ahafo	116.0	96.5	77.2	214.9	45.2	92.2	99.7	110.6	58.0	92.1	108.6	119.9	85.4	76.8	103.2	112.5	39.6	124.3	93.1	68.7
Central	141.4	80.6	26.8	89.2	120.0	46.4	96.1	106.6	17.1	84.7	118.0	91.8	116.0	48.4	109.4	103.2	15.1	102.1	107.4	30.8
Eastern	95.3	139.8	27.4	82.6	130.8	39.1	88.5	129.7	20.4	77.5	129.0	86.6	124.4	39.9	100.6	123.1	25.6	88.5	129.5	30.5
Greater Accra	81.6	135.4	63.2	83.4	122.0	88.8	92.1	119.5	50.5	86.0	116.2	87.4	116.0	90.4	89.4	123.8	54.6	86.7	122.2	69.5
Northern	121.2	44.8	171.9	116.4	75.0	202.8	134.1	42.1	317.5	134.6	74.3	114.8	76.1	206.8	119.6	43.7	253.6	123.5	59.3	230.5
Up. East	83.6	26.9	670.2	164.4	31.2	516.7	153.0	21.5	885.5	171.9	58.2	165.6	31.9	519.0	128.9	33.7	801.0	144.6	33.9	678.5
Up. West	74.1	22.5	820.7	208.7	20.1	533.0	204.3	19.8	609.2	209.8	47.7	218.7	19.1	543.0	217.9	20.9	664.6	188.9	25.0	634.1
Volta	982.7	8.6	21.9	1231.2	7.2	23.5	771.0	10.0	14.9	988.2	10.1	1290.4	7.2	23.9	328.2	10.7	32.4	932.0	9.0	23.3
Western	110.2	67.9	130.3	95.3	110.4	59.5	96.8	110.3	28.3	107.9	92.7	99.9	105.0	60.7	98.2	96.6	29.5	101.4	97.2	61.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* NDC and NPP: Mean of six elections; PNC: Mean of five elections (excluding 2000 2nd Round).

TABLE 4
Regional party strength (MPS): multiparty comparison

	Presidential Election										Parliamentary Election						
	1992			1996			2000 (1st R)			2000 (2nd R)		1996			2000		
	NDC	NPP	PNC	NDC	NPP	PNC	NDC	NPP	PNC	NDC	NPP	NDC	NPP	PNC	NDC	NPP	PNC
Ashanti	34.9	183.1	4.1	34.6	202.3	2.4	33.1	321.6	2.7	25.2	308.4	36.3	202.4	2.4	38.9	303.6	4.4
Brong-Ahafo	116.0	50.0	8.9	214.9	29.8	4.7	92.7	110.6	3.5	71.5	108.6	119.9	59.2	4.0	94.7	112.5	3.0
Central	141.4	41.8	3.1	89.2	79.0	2.4	89.4	106.6	1.0	65.8	118.0	91.8	80.4	2.5	100.4	103.2	1.2
Eastern	95.3	72.5	3.1	82.6	86.2	2.0	82.3	129.7	1.2	60.2	129.0	86.6	86.2	2.1	92.4	123.1	2.0
Gt Accra	81.6	70.3	7.3	83.4	80.4	4.6	85.7	119.5	3.1	66.8	116.2	87.4	80.4	4.7	82.1	123.8	4.2
Northern	121.2	23.2	19.7	116.4	49.4	10.4	124.7	42.1	19.4	104.5	74.3	114.8	52.7	10.7	109.8	43.7	19.4
Upper East	83.6	14.0	76.9	164.4	20.6	26.6	142.3	21.5	54.1	133.5	58.2	165.6	22.1	26.8	118.3	33.7	61.4
Upper West	74.1	11.7	94.2	208.7	13.2	27.5	190.0	19.8	37.2	162.9	47.7	218.7	13.2	28.0	200.0	20.9	50.9
Volta	982.7	4.5	2.5	1231.2	4.7	1.2	717.0	10.0	0.9	767.5	10.1	1290.4	5.0	1.2	301.3	10.7	2.5
Western	110.2	35.2	15.0	95.3	72.7	3.1	90.0	110.3	1.7	83.8	92.7	99.9	72.7	3.1	90.2	96.6	2.3
Total	100.0	51.9	11.5	100.0	65.9	5.2	93.0	100.0	6.1	77.7	100.0	100.0	69.3	5.2	91.8	100.0	7.7

of its national strength in this region. Likewise, each party has its own favourable regions. The NDC has performed better in Northern, Upper East, Upper West and Volta than it has in the entire nation. The NPP has had greater party strength in Ashanti, Central, Eastern and Greater Accra regions than the party's national strength. In case of these two major parties, Western region has mirrored the national pattern of party strength except in the 1992 presidential election. The small PNC has done well in the northern parts of the country: Northern, Upper East and Upper West regions. In summary, mean value of RPS shows that the NDC has Volta, the NPP has Ashanti, and the PNC has three northern regions as their favorite places *inter alia*. In Brong-Ahafo and Central, parties' strengths have fluctuated, although mean values indicate that these are more often than not favourable to the NDC. The Western Region on the other hand, is a model of equality between the two main parties.

Whereas RPS shows relative regional party strengths of a single party, slightly modified MPS in Table 4 enables us to compare multiparty strengths. For easy comparison we set the winning party's national MPS value as 100.0: the NDC in the 1992 and 1996 elections, the NPP in the 2000 election. Reading this table is easy but understanding the meaning is a little tricky. For example, in the 1992 presidential election, the NPP's MPS score is 183.1 and the NDC's is 34.9 in Ashanti. It means that the NPP's strength is about 183.1% of its NPP's national strength, whereas the NDC's strength is 34.9% of its national strength. So, we can say that the NPP is more than five times stronger than the NDC in Ashanti. However it does not mean that the NPP gets five times more votes than the NDC in Ashanti. In fact the NPP got 65.8% and the NDC received 32.8% of Ashanti votes. This is because the nature of MPS reflects the relative strength of parties based on their national performance. In other words, MPS enables us to conduct between-party comparisons, whereas RPS does within-party comparisons.

Table 4 confirms and enriches the findings of Table 3. The favourite relationships between parties and regions in Table 3 are basically sustained, but this new table provides the magnitude of predilection in multiparty settings. Volta is still home ground for NDC. There, NDC's party strength is unchallengeable. Ashanti is the most favoured place for NPP. An intriguing finding is that we can reveal the magnitude of strength for the PNC, the 'third party', in its favourite three northern regions. In Northern Region, for example, Table 3 (RPS) shows that regional strength of the PNC is about 171.9% of its national strength, and that for the NPP is only 44.8% of its national strength. But Table 4 adds actual comparison. In fact, the NPP is slightly stronger than the PNC in this

region: their strengths are 23.2% and 19.7% of the NDC's national strength respectively.

In addition to the indices of effective number of political parties, measurement of party strengths in each region reveals how electoral support for Ghanaian parties is regionally aligned. We can divide the regions into three different types. First, there are *one-party predilection* regions: Volta favoured the NDC and Ashanti favoured the NPP. The two regions discriminate against all other parties by strongly favouring a specific party. Second, there are *two-party competitive* regions. One-half of the regions have mirrored the national two-party system (Brong-Ahafo, Central, Eastern, Greater Accra and Western), but some variances are detected. Third, there are ' $2+\alpha$ ' party regions. In these regions like the three northern regions, a minor party, the PNC, has the opportunity to be the second largest party in electoral strength.

Changes in party strength and system

Now we explore the changes of electoral competition of parties in detail. The above RPS and MPS indices are designed to compare parties within a single election, but to understand the dynamics of party politics that made the alternation possible, we have to know how party support has changed between elections. To do this we use three different methods to trace the changes of party strength, i.e. electoral support.

First, we observe the magnitude of vote changes by employing the measure of electoral volatility. Although this index does not provide concrete changes of party strength, it helps us to sketch a more general picture of the changes. Table 5 illustrates electoral volatilities of two terms between presidential elections and one cycle of parliamentary elections. Valid votes of the two major parties and one minor party are included. The volatility varies from 2.84% in Volta between the 1992 and 1996 presidential elections, to 59.58% in Brong-Ahafo between the 1996 and 2000 presidential elections. When Ghana experienced party alternation in the 2000 election, national volatility reached 23.36% in the presidential election, which is a relatively high score for a competitive two-party system. In this presidential election, the most notable changes are found in the *two-party competitive* regions. The average of these regional volatilities of presidential elections is 29.05%, whereas that of the other regions is 16.59%. Even in Volta, dubbed the NDC's 'World Bank', the volatility rate was 12.26% in the presidential and 17.43% in the parliamentary elections. Compared with other tables, we can see that these volatilities result from the shifts in preference for the NPP *vis-à-vis* the NDC.

TABLE 5
Electoral volatility*

	Presidential		Parliamentary
	1992–1996 %	1996–2000 %	1996–2000 %
Ashanti	5.88	19.52	8.78
Brong-Ahafo	21.93	59.58	16.26
Central	28.01	19.17	10.52
Eastern	11.06	21.88	9.70
Greater Accra	7.73	21.10	12.51
Northern	19.07	15.44	16.75
Up. East	31.06	18.41	17.94
Up. West	37.38	17.31	11.77
Volta	2.84	12.26	17.43
Western	24.92	23.50	14.26
Total	10.15	23.36	13.08

* Three major parties (NDC NPP PNC) are included. In 2000 election, sum of PNC and CPP is used.

TABLE 6
Change of party strength (MPS) based on NDC

	NDC		NPP		PNC	
	92–96	96–00	92–96	96–00	92–96	96–00
Ashanti	-0.29	1.00	19.20	143.53	-1.68	0.52
Brong-Ahafo	98.91	-115.20	-20.28	89.13	-4.12	-0.94
Central	-52.18	6.90	37.19	35.64	-0.69	-1.27
Eastern	-12.70	5.90	13.62	53.30	-1.13	-0.68
Gt Accra	1.84	8.70	10.12	48.08	-2.68	-1.26
Northern	-4.76	17.70	26.17	-4.17	-9.30	10.42
Upper East	80.84	-11.40	6.58	2.53	-50.34	31.57
Upper West	134.64	-4.40	1.59	8.06	-66.76	12.57
Volta	248.48	-460.20	0.25	6.04	-1.31	-0.23
Western	-14.92	1.50	37.52	45.88	-11.89	-1.21
Total	0.00	0.00	14.00	41.65	-6.33	1.42

Second, we examine the changes of party strength by using the MPS indicator. Table 6 displays MPS changes between the three presidential elections. While calculating MPS, we set strengths of the NDC in each election as the baseline.¹² Thus, numbers in the cells mean relative party strength changes when we assume the NDC's party strength remained the same between elections (MPS change of the NDC = 0.00). In Table 6,

the NDC-favoured Volta shows dramatic changes. While the NDC doubled its electoral strength between the 1992 and 1996 presidential elections, the party significantly lost strength between the 1996 and 2000 presidential elections. The other regions also showed interesting patterns of support for the NDC. In four out of five regions (Brong-Ahafo, Upper East, Upper West and Volta) where the NDC increased strength between the 1992 and 1996 elections, the party lost strength between the 1996 and 2000 elections. In the other five regions (Ashanti, Central, Eastern, Northern and Western), where the NDC lost strength between 1992 and 1996, it did manage to regain strength in the next (1996–2000), but the gains in these regions, except Northern, were not as much as the previous losses.

The NPP, on the contrary, continuously increased its strength between elections. Even in the 1996 election when the party lost, it managed a 14% increase compared to the NDC. Then in the 2000 election, the party boosted its strength by 41.65%. Regionally the NPP was also very successful. Between 1992 and 1996, compared with the NDC, the NPP lost strength only in Brong-Ahafo. However, the party gained support in this region at the next period, and these gains even exceeded the previous loss. In the period between 1996 and 2000, the NPP increased strength in all regions except Northern, where the decrease was tiny compared to the previous gain. The PNC, on the other hand, lost strength in the 1992–96 interim period, but remained successful in the three northern regions.

We found other intriguing facts through analysis of the regional dimension. In the two *one-party predilection* regions, Volta and Ashanti, the NDC and the NPP significantly boosted their strength respectively when each party won the election. In the five *two-party competitive* regions, the parties perform differently as we discussed above. Brong-Ahafo made significant changes between the two parties. In the three *2 + α party system* regions, the NPP gained strength in the 2000 presidential election.

Finally, we observe the direct magnitude of voting powers that each region cast for the parties. Whereas Tables 4, 5 and 6 show relative strength, Table 7 illustrates the vote shares that the parties received from all of the regions: in other words, the national shares of regional votes. The table excludes parliamentary elections. Each cell presents the percentage of votes out of the entire valid votes cast in the elections.¹³ Thus, the percentages show the actual magnitude of support. For example, the NPP received the most votes from Ashanti in the 1992 election, reaching 10.84% of the entire valid votes cast, and equal to 35.79% of all votes that the NPP received in that election. This table is useful not only for the

TABLE 7
Regional vote contribution to parties in presidential elections

	NDC (%)				NPP (%)				PNC (%)		
	1992	1996	2000-1	2000-2	1992	1996	2000-1	2000-2	1992	1996	2000-1
Ashanti	5.89	5.91	4.45	4.01	10.84	11.86	14.89	15.92	0.44	0.25	0.26
Brong-Ahafo	6.12	5.66	4.21	3.80	2.92	1.66	4.77	5.32	0.52	0.21	0.16
Central	5.58	4.49	3.69	3.08	2.18	3.46	4.19	4.69	0.16	0.11	0.04
Eastern	7.26	6.58	4.79	4.17	4.79	5.51	6.27	6.93	0.24	0.15	0.07
G. Accra	6.81	9.43	7.26	6.54	4.73	7.57	8.94	9.79	0.55	0.47	0.26
Northern	5.10	5.30	4.12	4.29	1.32	2.73	2.22	4.11	0.89	0.51	0.69
Up. East	2.74	3.31	2.34	2.40	0.53	0.77	0.70	1.80	1.65	0.65	0.89
Up. West	1.66	2.09	1.73	1.62	0.29	0.31	0.43	0.99	1.21	0.40	0.43
Volta	11.22	9.89	7.87	9.14	0.43	0.49	0.77	1.19	0.19	0.08	0.04
Western	6.02	5.81	4.25	4.65	2.26	4.15	4.89	5.55	0.85	0.18	0.08
Total	58.39	58.47	44.71	43.71	30.29	38.52	48.08	56.29	6.70	3.01	2.94

comparison of different parties in the same election, but also for the comparison of one party's strength between elections.

There are several findings from this table. In the 1992 and 1996 elections, except Ashanti, which has the largest population in the country, the NDC received more votes in every region although its party strength varies. The NDC had the largest number of votes from Volta, for example, but Volta ranks seventh in population among the regions. Between the 1996 and 2000 elections, there were big changes. First, in the 2000 presidential election the NDC lost actual vote shares in every region. The NDC-favoured Volta still strongly supported the party but the actual votes declined. Volta's vote contribution to the NPP was reduced to less than 10% of the party's overall vote. Even in the second-round election, for the first time, the NPP (13.02%) made inroads in this region by gaining more than 10% of NDC's share. Second, the NPP successfully increased its party strength. The *two-party-competitive* regions changed their favourite party from the NDC to the NPP. Their vote contribution to the party increased from 22.35% to 29.06%. The party's favourite ground, Ashanti, also fortified its support for NPP. Third, the three northern regions did not show crucial changes. The two major parties were no more successful than in the past. The share of votes for the two parties in these regions decreased, except in Upper West, which showed gains for the NPP. The PNC regained votes that it had lost in the 1996 election, but did not reach the share it attained in the 1992 election.

In sum, Tables 5-7 show how regional voting alignment and party strength have changed in Ghana's Fourth Republic. In two electoral

terms and three elections, regions in Ghana showed very different patterns of party system change. As discussed, the ten regions are roughly distinguished into three different groups according to their party strengths: *one-party predilection* (2 regions), *competitive two-party system* (5 regions), and *2 + α party system* (3 regions). This basic tendency has not significantly changed, but crucial changes in voter alignments made alternation possible. Winning parties were extremely successful in their own favoured *one-party predilection* regions. However, when a party's strength was not clearly dominant or waned in a region, that party lost the elections. See for example Brong-Ahafo, which is traditionally a *two-party competitive* region, but where vote outcomes in 2000 swung greatly from the NDC to the NPP.



The political party arrangements in Ghana lead to a fairly complicated set of party systems. There is a clear two-party pattern at the national level, sustained and reinforced in the regions not by a mere replication of the national system, but by a complex multilayered web that varies from one-party dominant to multiparty patterns. We have illustrated this phenomenon by comparing the fractionalisation within party organisations at the regional level. In a further exploration of this relatively simple conclusion, we have then demonstrated that by observing how vote shares were arrayed between the region and the national levels we could predict regional party strength. Here it was observed that the strengths of parties varied considerably from a two-party pattern – from one + to multiparty. This was determined by both fragmentation and concentration patterns in the regions. Thus its consequence was not disastrous for the system operating at the national level, because strategic choices seemed to be made about the prospects of gaining national influence that strengthened the two main parties. But nor did this result in a fixed pattern. It was fluid because there was considerable volatility within and between alignments from one contest to the next. While this did not alter the two-party game, it nevertheless heightened competition, thus blurring party lines for some voters. This number was sufficient to produce an alternation of power. We observed these outcomes by looking both at RPS (how regional party strength compares with the outcome at the national level), and also MPS (how strengths of multiple parties within regions compare). We then combined these outcomes with what we termed volatility over the ten-year period, revealing the interplay between regional shifts in five elections. These mixes and matches allowed us to calculate how the two parties

were sustained, and ultimately to show that the party alternation in 2000 did not portend any dramatic deviation from the two-party pattern, but rather a predictable outcome in the way the game plays out among the major contenders in Ghana.

We thus conclude that in Ghana, where a SMDP system and certain elements of political culture have laid the foundation for a two-party system, that system is not necessarily destabilised because it functions through electoral regions whose strong independent historical and cultural identities produce a multilayered pattern of partisan alignment. In our analysis we trace the intricacies of the regional array of party alignments, how they compare to each other, and how they compare to overall national outcomes. We show that the way parties align, balance and shift in Ghana over three electoral contests serves to reproduce a two-party alignment that has been virtually intact since the decolonisation campaign. The NDC and the NPP, variants of long-standing political parties, remain the principal contenders for electoral success at the national level. At the regional level, there are multiple party systems in play, including one-party dominant, two-party competitive and multiparty competitive. Yet these strong regional preferences do not diminish the dominant two national parties.

This approach suggests a fruitful line of inquiry for uncovering patterns in the increasing number of longer-term surviving African democracies. In the first place, it offers a scheme by which we may begin to classify party systems, the institutional structures through which electoral processes are conducted in almost all of the new democracies. But it also suggests some directions for uncovering the ways in which fragmentation in diverse societies may act to sustain democratic competition, instead of undermining it as conventional wisdom suggests. Perhaps as Mozaffar *et al.* (2003) suggest, Africa's diversity of partisan political expression at the local level may be a boon to democratic processes. When there is sufficient stability in the rules of the game in the transitional process, partisans are likely to calculate their costs as being lower by making arrangements with competitors, whose incumbency or competitive advantage at gaining power is also advanced by stability and sharing. Under conditions such as Ghana's two-party system, where each major party has a reasonable expectation of sometimes ruling, diversity at the local level is a strong stimulus for national party competition. As the transitional process lengthens in Africa, these patterns of behaviour will tend to stabilise and embed institutional patterns that move the continent along to a measure of consolidation. Lindberg (2006) has shown a number of indicators that illustrate that this may well be happening (more than 30 of about

40 countries have moved beyond their 'founding' election), and that the quality of these democratic processes seems to be deepening. This is especially characteristic of those states with the longest track record of stable, competitive processes. In short, we expect the patterns observable in Ghana to have broader continental applications; and that taken together, this research approach should prove fruitful in accounting for how transitional political processes acquire depth, and ultimately for assessing the potential for democratic consolidation in African societies.

NOTES

1. Ghana is divided into ten regions, whose boundaries more or less follow the pattern fixed during British colonialism. Today's Upper East, Upper West and Northern Regions correspond to the former Northern Territories. The current Ashanti and Brong-Ahafo Regions basically correspond to the former Ashanti Region; the Greater Accra, Western and Eastern Regions correspond to the former Gold Coast Colony; and the Volta Region largely corresponds to the former Mandated Trusteeship Territory (Kimble 1963).

2. Ghana's 1966 *coup d'état* was among the first of what became a wave of military interventions. These authoritarian juntas replaced the nationalists (themselves by then single-party autocrats) who had led independence movements. (Decalo 1991; Pinkney 1972).

3. There has been some debate about the actual level of fraud in the 1992 elections, but current evidence suggests that the irregularities could not have altered the outcome. For further details on these two elections, and the last one in 2000, see Boahen 1995, Gyimah-Boadi 1999, Lindberg 2003, Ninsin & Drah 1993, Nugent 1995 and Sandbrook & Oelbaum 1999.

4.

$$ENPS = \frac{1}{\sum S_i^2} \text{ Where } S_i \text{ is party } i\text{'s } \mathbf{seat} \text{ share.}$$

$$ENPV = \frac{1}{\sum V_i^2} \text{ Where } V_i \text{ is party } i\text{'s } \mathbf{vote} \text{ share.}$$

5. Since Ghana has a SMDP or First Past the Post (FPTP) system, many votes are not translated into seat distribution. Theoretically the largest two parties are overrepresented in SMDP (Duverger 1954). Thus, the elected candidate may have less than a majority of votes if there are more than two candidates. To reveal the people's party preference and party strength more clearly, actual vote shares are better than seat shares.

6. Whereas the first figure simply compares the same party in different level ($\left(\frac{70}{60}\right) = 1.167$), the second figure compares party's regional relative strengths and national relative strength ($\left(\frac{\left(\frac{70}{100-70}\right)}{\left(\frac{60}{100-60}\right)} = 1.556\right)$).

7. RPS is expressed as:

$$RPS_{ij} = \frac{\left(\frac{P_{ij}}{\sum_{i=1}^n P_{ij} - P_{ij}}\right)}{\left(\frac{P_{it}}{\sum_{i=1}^n P_{it} - P_{it}}\right)} \times 100 = \frac{\left(\frac{P_{ij}}{1 - P_{ij}}\right)}{\left(\frac{P_{it}}{1 - P_{it}}\right)} \times 100$$

where RPS_{ij} is Party i 's relative strength in region j ; P_{ij} is party i 's vote share in region j ; and P_{it} is Party i 's vote share in the entire nation. P_{ij} cannot be one ($P_{ij} \neq 1$) because multiple numbers of candidates are allowed to run in free and competitive elections, which under ordinary circumstances make it practically impossible for one party to receive 100 % of the votes. [The value of the index means party strength (percentage) in each region when the national value is 100.0]

8. MPS is expressed as:

$$MPS_{ij} = RPS_{ij} \times \left(\frac{P_{it}}{\sum_{i=1}^n P_{it}} \right) = RPS_{ij} \times P_{it}$$

since $\sum_i^n P_{it} = 1.00$

9. According to Pedersen (1979) electoral volatility can be expressed as: $(V_i) = \frac{1}{2} \sum_{i=1}^n |\Delta P_{it}|$. Where P_i is party i 's vote share and ΔP_{it} is vote share change between election t and $t-1$. The equation shows the sum of vote share changes. Because the gains of winning parties' share are equal to the net losses of defeated parties, the index should be divided by two. Eventually V_i is simply the cumulated gains for all winning parties in the party system, or the numerical value of the cumulated losses for all losing parties. Its range of variation ($0 \leq V_i \leq 100$) is expressed in terms of percentage.

10. ANOVA test for ENPV values of ten regions in six elections indicates that regional differences of ENPV are statistically significant ($F = 5.773$, $P = 0.000$).

11. In the last decade, there have been crucial electoral system changes in Japan, Italy and New Zealand. While their long-term effects are still being detected, it is reported that the new rules of the game bring significant and intriguing changes not only to the contour of party systems but also to the nature of electoral campaigns and behaviour of representatives (Sakamoto 1999; Baker & McLeay 2000; Denmark 2003).

12. Note that there is a difference between Tables 5 and 7 when calculating MPS scores. In the former, the winning party's strength was set as the baseline (=100.00); thus, the 2000 election was calculated based on NPP's strength. But in the latter NDC strength was the criterion for all three elections.

13. For example, the NPP receives the most votes from Ashanti in the 1992 election, reaching 10.84% of the entire valid votes cast, and also equalling 35.79% of all votes that the NPP received in that election.

REFERENCES

- Abramson, P. R., J. H. Aldrich, P. Paolino & D. Rohde. 1992. "Sophisticated" voting in the 1988 presidential primaries', *American Political Science Review* 86, 1: 55-69.
- Allman, J. 1993. *The Quills of the Porcupine*. Madison, WI: University of Wisconsin Press.
- Austin, D. 1964. *Politics in Ghana, 1946-1960*. Oxford University Press.
- Ayee, J. 1999. *Decentralization and Conflict*. Accra: Ebert Foundation.
- Baker, F. & E. McLeay. 2000. 'How much change? An analysis of the initial impact of proportional representation on the New Zealand parliamentary party system', *Party Politics* 6, 2: 131-54.
- Blondel, J. 1968. 'Party systems and patterns of government in Western democracies', *Canadian Journal of Political Science* 1, 2: 180-203.
- Boahen, A. 1995. 'A note on the Ghanaian elections', *African Affairs* 94, 375: 277-80.
- Bratton, M. & N. van de Walle. 1997. *Democratic Experiments in Africa*. Cambridge University Press.
- Chazan, N. 1983. *An Anatomy of Ghanaian Politics*. Boulder, CO: Westview Press.
- Chazan, N., P. M. Lewis, R. Mortimer, D. Rothchild & S. J. Stedman. 1999. *Politics and Society in Contemporary Africa*. Boulder, CO: Lynne Rienner, 3rd ed.
- Cox, G. 1997. *Making Votes Count: strategic coordination in the world's electoral systems*. Cambridge University Press.
- Decalo, S. 1991. *Coups and Army Rule in Africa*. New Haven, CT: Yale University Press.
- Denmark, D. 2003. 'Electoral change, inertia and campaigns in New Zealand: the first modern FPP campaign in 1987 and the first MMP campaign in 1996', *Party Politics* 9, 5: 601-18.
- Duverger, M. 1954. *Political Parties: their organization and activity in the modern state*. London: Methuen.
- Eckstein, H. 1968. 'Party Systems', in D. L. Sills, ed., *International Encyclopedia of the Social Sciences*, vol. 11, New York: Macmillan & Free Press, 436-53.
- Grofman, B., A. Chiaramonte, R. D'Alimonte & S. L. Feld. 2004. 'Comparing and contrasting the use of two graphical tools for displaying patterns of multiparty competition: Nagayama Diagrams and Simplex Representations', *Party Politics* 10, 3: 273-99.

- Gymah-Boadi, E. 1999. 'Ghana: the challenges of consolidating democracy', in R. Joseph, ed. *State, Conflict, and Democracy in Africa*. Boulder, CO: Lynne Rienner, 409–28.
- Kimble, D. 1963. *A Political History of Ghana*. Oxford: Clarendon Press.
- Laakso, M. & R. Taagepera. 1979. "'Effective" number of parties: a measure with application to West Europe', *Comparative Political Studies* 12, 1: 3–27.
- Lane, J.-E. & S. Ersson. 1999. *Politics and Society in Western Europe*. London: Sage, 4th ed.
- Lindberg, S. 2003. 'It's our time to "chop": elections 2000 in Ghana', *Democratization* 14, 2: 121–40.
- Lindberg, S. 2006. *Democracy and Elections in Africa*. Baltimore, MD: Johns Hopkins University Press.
- Mayer, L. C. 1980. 'A note on the aggregation of party systems', in P. H. Merkl, ed. *Western European Party Systems: trends and prospects*, New York: Free Press. 515–20.
- Molinar, J. 1991. 'Counting the number of parties: an alternative index', *American Political Science Review* 85, 4: 1383–92.
- Morrison, M. K. C. 1982. *Ethnicity and Political Integration*. Syracuse, NY: Africa Monograph Series, Syracuse University.
- Morrison, M. K. C. 1983. 'Ethnicity and integration: dynamics of change and resilience in contemporary Ghana', *Comparative Political Studies* 15, 4: 445–68.
- Morrison, M. K. C. 2001. 'The Fourth Republic of Ghana seeks consolidation', in C. Legum, ed. *African Contemporary Record 1992–94*, New York: Holmes & Meier: B57–73.
- Morrison, M. K. C. 2004. 'Political parties in Ghana through four republics: a path to democratic consolidation', *Comparative Politics* 36, 4: 421–42.
- Mozaffar, S. et al. 2003. 'Electoral institutions, ethno-political cleavages, and party systems in Africa's emerging democracies', *American Political Science Review* 97, 3: 379–90.
- Ninsin, K. & F. K. Drah, eds. 1993. *Political Parties and Democracy in Ghana's 4th Republic*. Accra: Woeli Publishing.
- Nugent, P. 1995. *Big Men, Small Boys and Politics in Ghana: power, ideology and the burden of history, 1982–1994*. London: Pinter.
- Ordeshook, P. C. & L. Zeng. 1997. 'Rational voters and strategic voting: evidence from the 1968, 1980, and 1992 elections', *Journal of Theoretical Politics* 9, 2: 167–87.
- Ordeshook, P. C. & O. V. Shvetsova. 1994. 'Ethnic heterogeneity, district magnitude, and number of parties', *American Journal of Political Science* 38, 1: 100–23.
- Pederson, M. N. 1979. 'The dynamics of European party systems: changing patterns of electoral volatility', *European Journal of Political Research* 7, 1: 1–26.
- Pinkney, R. 1972. *Ghana Under Military Rule, 1966–1969*. London: Methuen.
- Rae, D. 1971. *The Political Consequences of Electoral Laws*. New Haven, CT: Yale University Press, 2nd ed.
- Reed, S. R. 2001. 'Duverger's law is working in Italy', *Comparative Political Studies* 34, 3: 312–27.
- Sakamoto, T. 1999. 'Explaining electoral reform: Japan versus Italy and New Zealand', *Party Politics* 5, 4: 419–38.
- Salih, M. A. M. 2002. *African Political Parties: evolution, institutionalisation and governance*. London: Pluto Press.
- Sandbrook, R. & J. Oelbaum. 1999. *Reforming the Political Kingdom*. Accra: CDD.
- Sartori, G. 1976. *Parties and Party Systems: a framework for analysis*. Vol. 1. Cambridge University Press.
- Taagepera, R. & M. S. Shugart. 1989. *Seats and Votes: the effects and determinants of electoral systems*. New Haven, CT: Yale University Press.
- Taagepera, R. 2004. 'Extension of the Nagayama Triangle for visualization of party strengths', *Party Politics* 10, 3: 301–6.
- Taylor, M. & V. M. Herman. 1971. 'Party systems and government stability', *American Political Science Review* 65, 1: 28–31.
- Young, C. 1999. 'The third wave of democratization in Africa: ambiguities and contradictions', in R. Joseph, ed., *State, Conflict, and Democracy in Africa*. Boulder, CO: Lynne Rienner, 15–38.