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THE CASE FOR FIXED-BOUNDARY CONSTITUENCIES IN IRELAND

John Coakley

Abstract

The process of constituency boundary revision in Ireland, designed to satisfy what is perceived as a rigid requirement that a uniform deputy-population ratio be maintained across constituencies, has traditionally consumed a great deal of the time of politicians and officials. For almost two decades after a High Court ruling in 1961 (in the O'Donovan case), the process was a political one, was highly contentious, and was marked by serious allegations of ministerial gerrymandering. The introduction in 1979 of constituency commissions made up of officials neutralised, for the most part, charges that the system had become too politicised, but it continued the process of micro-management of constituency boundaries that had been introduced in 1935. This paper suggests that the continuing problems caused by this system—notably, the permanently changing nature of constituency boundaries and resulting difficulties of geographical identification—could be resolved by reversion to the procedure that is normal in proportional representation systems: periodic post-census allocation of seats to constituencies whose boundaries are based on those of recognised local government units and which are stable over time. This reform, replacing the principle of redistricting by the principle of reapportionment, would result in more recognisable constituencies, more predictable boundary trajectories over time, and a more efficient, fairer and speedier process of revision.

Introduction

The ideal of fair, impartially drawn constituency boundaries is a crucial concern in election administration; it has been identified as one of 11 dimensions that are central to the concept of electoral integrity (Norris et al., 2013: 127). Although allegations of gerrymander are now rarely to be heard, it was not always so. Accusations of political bias in the process of constituency boundary revision peaked in the 1960s and the 1970s and, even though they have receded, critics have found other reasons for criticising the process. In this, Ireland is unusual in the world of proportional representation electoral systems. Debates of the kind that take place each time a new blueprint for Dáil constituency boundaries is drawn up are not unknown in continental Europe (for example, the controversy that began in 2003 over the partition of the Brussels-Halle-Vilvoorde parliamentary constituency in Belgium), but they tend to occur for rather unique reasons rather than being inbuilt, predictable components in the revision process, and they have not been associated with anything like the divisiveness of the corresponding debates in Ireland.

The present article addresses this particular issue in election administration in the Irish context; it draws attention to the negative consequences of frequent, unpredictable changes in constituency boundaries, changes whose effects have been well documented (Kavanagh, 2003: 93-98). Consequences include an additional element of insecurity and uncertainty over the future on the part of Dáil deputies; confusion and potential alienation over unfamiliar boundaries on the part of voters; and a heavy, unnecessary and potentially contentious administrative burden on the part of officials. This article argues that the Irish approach to constituency boundary delimitation is eccentric and inappropriate, and that it could be avoided by adoption of a simple formula that is close to being universal in proportional representation systems: definition by legislation of 'permanent' constituency boundaries, which might, however, be subject to minor changes in the long term in response to major population movement patterns or administrative reforms, with seats re-allocated between constituencies by an official by means of a simple mathematical formula after each population census.

The article begins by setting the Irish experience in comparative context. It continues by describing the kind of system that might be adopted with a view to bringing Irish provisions in line with the norm elsewhere in proportional representation systems. It concludes with a discussion of the key issues to which the adoption of such a system in Ireland would give rise.¹

Ireland in Comparative Perspective

Broadly speaking, there are two approaches to achieving what is regarded as one of the cornerstones of modern representative democracy, the notion of equal suffrage—the principle that, where there are territorial constituencies for the election of parliamentarians, the ratio of parliamentary representatives to population should be more or less the same across constituencies. First, especially where there are single-member constituencies, territorial boundaries can be adjusted to match a standard deputy-population ratio (the principle of redistricting). Second, especially where there are multi-member constituencies, the allocation of parliamentary seats to constituencies (typically, administrative districts such as counties or provinces) can be adjusted after each population census to match the standard deputy-population ratio (the principle of reapportionment). Sometimes, both approaches may have a role—in the USA, for example, where the reapportionment principle is used to reallocate seats to states after each census and redistricting is used to distribute these seats within states, or Germany, where one set of seats is redistributed periodically between provinces (*Länder*), while another set is filled from single-member constituencies whose boundaries are revised as necessary (Watson, 2006; Schrott, 2006).

The *redistricting* principle is, then, to be seen in operation mainly in countries that use the plurality system (such as the UK and Canada) or other systems that are normally based on single-member districts (such as France, with the two-ballot system). It is in varying degrees associated with controversy about the boundary delimitation process, with the most bitter disputes taking place in the USA, where allegations of gerrymander are widespread (McDonald, 2008; Brunell and Grofman, 2008).

The *reapportionment* principle is to be seen at work in countries that use the party list system. Where there is a single-tier system, the design of constituencies and the allocation of seats between them is a simple, automatic process. The basic administrative units become constituencies: in Switzerland, the cantons; in Spain, the provinces; in Belgium, the provinces, except for Brabant (which has been partitioned in response to problems of linguistic politics); in Luxembourg, four groups of cantons; in Portugal, administrative districts; and in Finland groups of municipalities, which correspond substantially to provinces. Seats are allocated between these strictly on the basis of population as measured by the most recent census (though occasionally citizen population or electorate may be used). Variants on this system are to be found elsewhere. Sometimes the allocation takes place on a two-tier basis: most seats are allocated to constituencies, but some are held over to a higher level and are allocated on the same mathematical basis (as in Greece, Austria, Sweden, Norway and Denmark, though in the last two of these cases the allocation formula is not based exclusively on population).

The actual mathematical formula used for seat reapportionment is in principle straightforward: a quota (for example, the Droop quota, where the population is divided by one more than the total number of parliamentary seats) is used as a divisor in respect of the populations of the various districts. Since, however, the division process will almost never result in integer numbers of members being allocated, a decision needs to be made on how to deal with the fractional portion (for example, if a constituency is entitled to 4.5 seats, should it get four seats or five?). All conventional apportionment formulas will allocate the integer portion calculated in this way to the respective constituencies. In practice, three types of formula are used to deal with fractional remainders.

- The largest remainder system: remaining seats are allocated to the constituencies with the largest remaining fractions in descending order until all seats have been distributed. This was used over the period 1852-1901 in apportioning seats in the House of Representatives between the states in the USA, where it has been labelled the Hamilton method (Alexander Hamilton had sought unsuccessfully to secure its introduction in the 1790s).

- The D'Hondt highest average system: remaining seats are allocated to the constituencies with the highest average seat-population ratios in descending order, where the average is based on the principle of adjusting the quota such that the final set of numbers for each constituency will, when truncated, total exactly the number of seats in parliament. This has been labelled the Jefferson method; it was adopted in the USA in 1791 in preference to the Hamilton method for allocation of House of Representative seats at federal level, and continued in use until 1842.
- The Sainte-Laguë highest average system: remaining seats are allocated to the constituencies with the highest average seat-population ratios in descending order, where the average is based on the principle of adjusting the quota such that the final set of numbers for each constituency will, when rounded, total exactly the number of seats in parliament. This has been labelled the Webster method in the USA after the lawyer-politician Daniel Webster; it was used in US apportionment at federal level for the periods 1842-52 and 1901-41.

These three methods have different properties (for example, the largest remainder system is open to manipulation in partisan contexts, and the D'Hondt system is biased in the direction of larger groups), and they may be computed following procedures different from those reported here (for example, allocation under the D'Hondt and Sainte-Laguë systems is typically carried out using a division table, as the order in which seats are allocated to groups—and not just the overall total—may matter). But these are ultimately mathematically identical to the procedures described above. They may, however, produce different outcomes in respect of the numbers of seats finally allocated to groups. Specialist study suggests that the Sainte-Laguë (Webster) system—and not its more complex successor in the USA—is the fairest system all round (Balinski and Young, 2001: 71-78). In continental Europe, though, the largest remainder system is commonly used in allocation of seats to constituencies, though some countries (such as Portugal) use the D'Hondt system.

The broad constitutional parameters of the Irish approach to the question of redistricting and reapportionment have remained unchanged since the creation of the state. Article 26 of the 1922 constitution specified the minimum and maximum size of the Dáil (not less than one member for each 30,000 of the population, nor more than one member for each 20,000 of the population), stipulated that the ratio of population to Dáil deputies at the most recent census should 'so far as possible, be identical throughout the country', and required the Oireachtas to revise the constituencies 'at least once every ten years, with due regard to changes in distribution of the population'. These provisions were carried over in the 1937 constitution, except that the revision period was extended from 10 to 12 years, a minimum number of

members per constituency was specified (three), and the requirement of an equal deputy-population ratio 'so far as possible' was mis-rendered in the English version as 'so far as it is practicable', as discussed later.

These constitutional provisions formed the basis for a process of major legislation, the Electoral Act, 1923, which defined the boundaries of the constituencies to be used in the new state. It created a set of 28 territorial constituencies, ranging in size from three to nine members, using the county as the basic unit. The only exceptions were three double-county constituencies (Laois-Offaly, Carlow-Kilkenny and Longford-Westmeath), and three counties divided by grouping local electoral areas (Dublin city and Mayo county divided in two, and Cork county divided in three). The overall distribution of seats under this and subsequent electoral acts is described in table 1.

[table 1 about here]

The requirement for revision at least once every 10 years was immediately breached by late enactment of the Electoral (Revision of Constituencies) Act, 1935. Moving away from the principles of the 1923 act, this reduced average constituency size, leaving only three with more than five members. It also largely disregarded county boundaries: 27 of the 34 constituencies were now based on small or micro-units such as district electoral divisions or, in Dublin, on complex imaginary lines running between named points. For example, the new constituency of Clare included part of Galway, Leitrim included part of Sligo, and Waterford included part of Cork; Carlow-Kildare excluded a small part of Carlow, which was merged instead with Wicklow; and Meath-Westmeath excluded a sizeable portion of the latter county, which was included (together with part of Roscommon) in the new constituency of Athlone-Longford. The act was perceived in partisan terms, with allegations that its promoter, Minister for Local Government Sean T. O'Kelly, was engaging in an exercise in gerrymander (*Dáil Debates*, 21 Mar. 1934, vol. 51, cols 1271-1303). The next act, the Electoral (Amendment) Act, 1947, largely restored county boundaries, though further reducing constituency size (none now had more than five members), and the same pattern was followed in the 1959 act.

The 1959 act, however, turned out to have a fatal flaw. The Minister for Local Government, Neil Blaney, explicitly moved away from the criterion of population, arguing that area also needed to be considered, since 'it should be made as convenient as possible for a Deputy to keep in touch with his constituents' (*Dáil Debates*, 28 Oct. 1959, vol. 177, col. 379). Once again, the opposition smelled a rat, since the sparsely populated areas that would gain from this consideration also happened to be areas of Fianna Fáil strength. The constitutionality of the act was challenged by opposition senator John O'Donovan, and it was struck down in the High Court on the grounds that, in the words of Justice Budd, 'it has been clearly established

that the form of the Act of 1959 has been such as to result in substantial departures from the stipulated ratio of members to population, causing grave inequalities of parliamentary representation, and that it has likewise been demonstrated that there are no relevant circumstances to justify these departures'.²

Although this judgement was widely seen as delivering a blow against politically motivated constituency boundary revision, its effect in practice was quite the opposite. By requiring very close adherence to a uniform deputy-population ratio, the judgement was open to the interpretation that it permitted (or even required) micromanagement of constituency boundaries, thus offering cover for manipulation of boundaries to optimise the chances of government victory. Precisely such allegations were made in respect of the next three revisions, which were enacted respectively in 1961, 1969 and 1974 (the last of these, piloted through by Local Government Minister James Tully on behalf of the Fine Gael-Labour coalition, was the only such measure not drafted by Fianna Fáil). The degree of controversy attracted by the acts may be assessed by reference to the duration of the parliamentary debates on them. Debate on the 1961 act took up almost 500 columns in the official report of the Dáil and Seanad debates (about 24 hours of parliamentary time); the 1969 act took up more than 1,000 columns (about 50 hours of parliamentary time); and the 1974 act took up over 1,600 columns (the equivalent of a big, 800-page volume, or about 80 hours of parliamentary time).

The 1974 act was interpreted by its opponents, and indeed by some of its supporters, as a spectacular 'own goal': because of unexpected changes in patterns of electoral support, a system allegedly designed to secure victory for the Fine Gael-Labour coalition instead gave an advantage to Fianna Fáil, which was swept to victory in 1977. The new Fianna Fáil government reacted by committing itself to depoliticising the process, and duly made provision for a series of ad-hoc constituency boundary commissions—initially to advise on constituency boundaries for the first direct elections to the European Parliament in 1979, and then a set of five once-off commissions (chaired by a judge and with the Clerk of the Dáil and the Secretary of the Department of the Environment as its other members) to determine Dáil constituency boundaries (see Ireland, 1980; 1983; 1988; 1990; 1995). All except that of 1988 (which fell foul of allegations that its terms of reference were biased against smaller parties) were enacted into law without modification.

Finally, the boundary revision process was placed on a statutory basis by the Electoral Act, 1997, which provided for a five-person commission (a senior judge nominated by the Chief Justice, the Ombudsman, the Secretary General of the Department of the Environment, and the Clerks of the Dáil and Seanad). In addition to the constitutional requirement to observe

‘as far as it is practicable’ a uniform deputy-population ratio from constituency to constituency, the commission is bound by the following terms of reference:

- (a) the total number of members of the Dáil, subject to Article 16.2.2 of the Constitution, shall be not less than 164 and not more than 168 [amended in 2011 to specify 153 and 160 as the limits];
- (b) each constituency shall return three, four or five members;
- (c) the breaching of county boundaries shall be avoided as far as practicable;
- (d) each constituency shall be composed of contiguous areas;
- (e) there shall be regard to geographic considerations including significant physical features and the extent of and the density of population in each constituency; and
- (f) subject to the provisions of this section, the Commission shall endeavour to maintain continuity in relation to the arrangement of constituencies (Electoral Act, 1997, art. 6.2).

The provisions of the act have been triggered on four occasions in respect of Dáil elections (see Ireland, 1997; 2003; 2007; 2011), leading to boundary revision acts in 1998, 2005, 2009 and 2013, respectively. This new mechanism undoubtedly promoted wider acceptance of a process that had been tainted by allegations of gerrymandering and of pursuit of naked electoral self-interest; related to this, they have saved a great deal of parliamentary time. By contrast with the 80 hours of parliamentary time taken up by the 1974 act, subsequent acts got through the parliamentary process relatively quickly, typically taking about five hours (though, for particular reasons, the 2005 act took a much longer time, while that of 2013 took only a few minutes).

[table 2 about here]

The geographical robustness and stability of constituency boundaries may be assessed in respect of three criteria, as illustrated in table 2. The first is the extent to which they coincide with existing, widely recognised administrative units. As the table shows, though, constituency boundaries do not usually coincide with county boundaries, and where they depart from these they typically use low- or micro-level units for purposes of definition, except in 1923, when local electoral areas were used. The problem here is that because of Ireland’s unusually weak system of local government, sub-county units have for long been used mainly for purposes of statistical reporting. Following the abolition of rural district councils and the consequent sidelining of electoral divisions in 1925, Ireland had a one-and-a-half tier system of local government; this was replaced in 2014 by an unusually centralised single-tier system based on counties. For this reason, sub-county units do not correspond to patterns of local identity, which continue to focus on such entities as towns and, in rural areas, Catholic par-

ishes; and there is no reason to doubt the judgement, several decades ago, that the county continues to be ‘powerfully supported by local sentiment and tradition’ (Ireland, 1972: 25).³

The second, related, criterion is the ease with which constituencies may be described, as measured by the number of words used to define them in the schedules to the electoral acts. In 1923, the description was succinct (386 words), in line with the norm in other countries. In all other case, however, it took something in the region of two to three thousand words to define the new boundaries, and the resulting descriptions relied on unfamiliar areas (electoral divisions) last used for administrative purposes in the local elections of 1914. These units do not coincide at all with polling districts, and the rural districts in which they are grouped disappeared as administrative units in 1925. The example of Galway West as defined in the 2013 act illustrates the byzantine character of such descriptions. Although many of the place names would be recognised locally, and some even nationally, it is unlikely that anyone would be able to identify even the approximate borders of the electoral divisions to which they have given their names without access to official descriptions, which themselves are based on small townlands many of whose names and identities are now obsolete, except in property law):

GALWAY WEST: The city of Galway;

and, in the county of Galway, the electoral divisions of:

Abhainn Ghabhla, An Cnoc Buí, An Uillinn, Ballynakill, Binn an Choire, Bunowen, Cleggan, Clifden, Cloch na Rón, Cushkillary, Derrycunlagh, Derrylea, Doonloughan, Errislannan, Inishbofin, Maíros, Rinvyle, Scainimh, Sillerna, in the former *Rural District of Clifden*;

An Carn Mór, An Spidéal, Árainn, Aughrim, Baile Chláir, Baile an Teampaill, Ballynacourty, Bearna, Belleville, Ceathrú an Bhrúnaigh, Cill Aithnín, Clarinbridge, Deerpark, Eanach Dhúin, Galway Rural (part), Kilcummin, Leacach Beag, Liscananaun, Lisín an Bhealaigh, Maigh Cuilinn, Na Forbacha, Oranmore, Sailearna, Sliabh an Aonaigh, Stradbally, Tulaigh Mhic Aodháin, in the former *Rural District of Galway*;

An Chorr, An Crompán, An Fhairche, An Ros, An Turlach, Camas, Cill Chuimín, Conga, Garmna, Leitir Breacáin, Leitir Móir, Letterfore, Oughterard, Wormhole, in the former *Rural District of Oughterard*;

and, in the county of Mayo, the electoral divisions of:

Ballinrobe, Cong, Dalgan, Houndswood, Kilcommon, Kilmaine, Neale, Shrule, in the former *Rural District of Ballinrobe*;

Garrymore in the former *Rural District of Claremorris* (schedule to Electoral (Amendment) (Dáil Constituencies) Act, 2013).

The third criterion used in table 2 is the stability of constituencies, as measured by their survival unchanged over time. It is possible to measure geographical stability by applying the

'index of change' developed by Anthony Fox (1983), and used extensively by Colin Rallings and Michael Thresher (see, for example, Rallings and Thrasher, 2007b) in respect of British constituency boundaries. This expresses total movement of the electorate (electors leaving the 'base' constituency plus those joining it) as a percentage of the total electorate of the 'base' constituency, defined as the 'old' constituency contributing most electors to the corresponding 'new' constituency. Unfortunately, Irish constituency commission reports do not provide sufficient data to readily compute this index (though it is possible to do so by reconstructing the missing data). A similar index has been devised by Adrian Kavanagh (2014: 227-9); this takes account of change in the number of deputies per constituency, as well as changes in population.

Given data access difficulties and the primary concern here with boundary stability, table 2 uses as simpler measure, the number of new and recently created constituencies. It rests on a rather demanding definition, counting as 'new' any constituency where there was even a marginal change in the boundary, or where the 'new' constituency had existed before an earlier revision. The table shows that on each occasion an almost entirely new set of constituencies was introduced—most had not existed previously (1983 was a striking exception, where changes were minor and were confined to Dublin). This measure correlates very closely with the Kavanagh index. The Fox index has also been computed for the 2013 revision. In that year, there was no change in respect of 11 constituencies (index = 0.0); in the remaining 29, it ranged from 1.4 (Waterford) to 96.7 (Dublin Bay North, based on Dublin North-Central), with a mean value of 22.6. Surprisingly, this is higher than the corresponding figure for England in 2006 (20.6), rather lower than the figure for Scotland (45.8), but much higher than the figure for Wales (7.8) (Rallings et al, 2008: 81). Indeed, if the simple indicator use here is applied in the UK, it suggests that Irish constituencies have been considerably less stable than their UK counterparts.⁴ Looking at the stability of Irish constituencies over time, it may be noted that since the introduction of proportional representation in 1920, no fewer than 401 new Dáil constituencies have been created; but many have been used just once, in a single election, before again being adjusted. The record for longevity is held by Laois-Offaly, which remained unaltered since it was created in 1920 as the constituency of King's County-Queen's County until it was broken up in 2009.

In addition to these relatively measurable features of the constituency revision process, there are less obvious social psychological costs. Especially in rural Ireland, where local loyalties—especially county ones—are strong, significant offence may be caused by apparently arbitrary transfers of areas across county boundaries. The extract above shows the inclusion of a significant Mayo population in West Galway, an area with which few Mayo people would

have empathy, with inter-county rivalry easily trumping any perception of shared interests. As a local newspaper put it, there was 'growing resentment' on the part of alienated Mayo voters, who 'would eat you without salt' (quoting a bruised Galway TD); as the newspaper saw it, 'large scale breaches in county boundaries will result in isolation and alienation of the public from national politics' (*Connacht Tribune*, 15 March 2013). This is a recurring theme in the process of boundary revision in Ireland, with local communities complaining bitterly of the 'dismemberment' of their counties (Coakley, 2007: 4-5).

An Alternative System?

The Irish experience of constituency boundary revision need not have been so negative. Other countries which moved to proportional representation in the late nineteenth or early twentieth centuries adopted a more straightforward approach to ensuring equality of representation: they devised stable electoral districts, and then re-allocated parliamentary seats to these, typically following each population census. The Electoral Act of 1923 was quite compatible with this; but subsequent decisions to opt for constituency boundary revision rather than seat reallocation (a preference indeed hinted at in the constitution of 1922) took Ireland down a different path. Instead, the state opted for a UK-style approach to boundary revision, apparently overlooking the reality that, while this was a necessity in the UK, other mechanisms to procure equality of representation exist in the case of multi-member electoral districts.

We may relatively easily illustrate what might have happened had Ireland indeed adopted the continental European system for ensuring that the distribution of parliamentary representation keeps pace with spatial patterns of population change. The first step would be to decide on an overall size for the Dáil. The constitutional stipulation that the number of deputies be not less than one for every 30,000 or more than one for every 20,000 of the population would, on the basis of the 1911 census results, imply a Dáil size ranging from 105 to 156. We assume here, arbitrarily, 140 Dáil deputies (in reality, the number fluctuated around this figure in the early years of the state). Dáil size could have remained at this level for several decades without breaching the constitutional limits, but for illustrative purposes it is assumed here that it would increase to 166 following the 1979 census, and that it would drop to 158 in 2011 (as it did, following a decision that the overall size of the Dáil be reduced).

Second, in defining constituency boundaries it makes sense to start with the country's 31 administrative counties as they existed at the beginning of the twentieth century (of the well-known 26 counties, one, Tipperary, was divided into two entirely separate administrative units or 'ridings', and there were four county boroughs entirely separate from the counties

with which they shared their names—Dublin, Cork, Limerick and Waterford). The 1911 census data would tell us that simply allocating seats proportionately to counties would give us constituencies ranging from Carlow (with two seats) to Cork (with 14). The first of these is too small to facilitate proportional representation, and the second is so large that it risks confusing voters (the number of candidates would be very large, reducing the prospects for informed ranking of the kind which the single transferable vote system implies). Here, we set three as a minimum (a level in any case set by the constitution in 1937), and nine as a maximum, for practical reasons. With these limits in mind, we convert each administrative county into a Dáil constituency, with the following exceptions, to produce a standard set of 25 constituencies:

- The county boroughs (cities) of Limerick and Waterford are included in the counties with which they share their names; the two ridings of Tipperary together constitute a single constituency; and the small counties of Carlow, Laois, Longford, Leitrim and Monaghan are merged respectively with the counties of Kilkenny, Offaly, Westmeath, Sligo and Cavan to produce a set of five two-county constituencies
- The county of Cork is divided into two constituencies, 'East' and 'West', by merging major local authority districts; Cork county borough (city) remains separate; and Dublin county borough (city) is divided into two constituencies, 'North' and 'South', on the same basis; Dublin county remains separate.

Third, the Sainte-Laguë / Webster highest average allocation system is applied after each census to distribute Dáil seats to constituencies.

The constituencies thus established would have been very stable. There would originally have been two large nine-seat constituencies (Cork West and Mayo), and five three-seat constituencies, with others returning intermediate numbers. Twenty constituencies could have continued with unaltered boundaries to the present. Five others would, though, have had to be revised. First, population decline would eventually cause Roscommon to fall below the threshold for three seats; here, it is merged with Leitrim-Sligo in 1971 to produce a new, larger constituency. The greater Dublin area would originally have been divided into three constituencies, but population growth and administrative reform there would have resulted in further divisions in 1930 (for administrative reasons), and in 1961, 1979 and 1986 (following the census). The number of Dublin constituencies would thus increase from three to eight (Coakley, 2013: 191). This pattern is illustrated in figure 1 at two points in time: on the foundation of the state, and following the results of the most recent census in 2011 (for the population of each of these notional constituencies at each census, the allocation of deputies to it,

the deputy-population ratio, and the deviation from the mean ratio, see Coakley, 2013: 212-216).

[figure 1 about here]

In respect of the allocation of Dáil deputies between the constituencies, in some cases, representation would have been virtually unchanged from 1923 to 2011: Carlow-Kilkenny, Laois-Offaly and Wexford as five-member constituencies, for example, though their representation would occasionally have slipped back to four. In areas of traditionally high emigration, there would have been a big but gradual drop, though without any need for boundary change: Mayo falling from nine to four, for instance, and Cavan-Monaghan from seven to five. In yet other cases, notably in constituencies adjoining Dublin, there would have been an increase in representation: Kildare from three to seven, Meath from three to six, and Wicklow from three to five, for example.

[table 3 about here]

The overall effect of this design is summarised in table 3. It results in larger mean constituency size and greater variation in the deputy-population ratio than that which has been characteristic of the actual position since 1922 (see table 1). It is much simpler and more likely to be recognisable to voters than the existing system, in respect of the territorial units on which it is based (overwhelmingly, undivided counties), of the ease with which it may be described (a few hundred words) and of the stability of constituency boundaries (20 out of the original 25 would have continued without change since 1922). Further evidence of the robustness of this system emerges from the fact that it was devised and published initially long before the 2011 census took place (Coakley, 2008a); the results of the 2011 census translated seamlessly into a new, plausible allocation of seats.

The Arguments for a Fixed-Boundary System

Both constitutional provisions and political cultural expectations raise distinctive and challenging questions about the appropriateness and viability of a scheme of the kind that is outlined here. Three specific constitutional issues arise: about equality of representation as provided for in the constitution's insistence on a uniform deputy-population ratio, as regards the frequency of revision of constituency boundaries, and concerning constituency size. A fourth consideration is largely a political cultural one: the extent to which constituencies should seek to match, or at least respect, familiar local government boundaries. These four matters may be considered in turn.

The Principle of Equal Representation

The intention of the 1937 constitution seems clear in respect of the principle of equality of representation. Article 16.2.3° provides that ‘the ratio between the number of members to be elected at any time for each constituency and the population of each constituency, as ascertained at the last preceding census, shall, *so far as it is practicable*, be the same throughout the country’ (emphasis added). But the Irish language text is much more demanding; it requires conformity to this ratio ‘*sa mhéid gur féidir é*’ (‘in as far as *possible*’), an important hardening of emphasis (the implication of ‘practicable’ is that while a particular action might be possible, there may be other considerations that militate against its being carried out). The Irish version reproduces the requirement of the 1922 constitution, article 26 of which stipulated conformity to this ratio ‘so far as possible’ across constituencies. This is just one of the several hundred discrepancies between the two versions of the constitution; the definitive study of the Irish language text points out that ‘practically every section of the Constitution contains divergences between the Irish and the English texts’ (Ó Cearúil, 1999: 7). Since the Irish text takes precedence over the English text, the implications of this article are thus more demanding than is widely believed to be the case.

In fact, it could be argued that satisfying this requirement of the constitution would require relying on the most basic building block available in the population census. The Irish census used the townland as its lowest enumeration and reporting unit from 1841 to 1911 (There were 51,158 townlands in 1926, with a mean population of 58). Even after that date population figures at townland level continued to be collated, and were made available on request. Use of this unit permits the fine-tuning of constituency boundaries in such a way that near-mathematical accuracy can, if desired, be obtained in the deputy-population ratio from one constituency to another. Two questions arise from this: whether such fine-tuning is indeed desirable, and whether it is necessary.

At an early stage of the debate about equal representation, the American Political Science Association (1951: 154-5) recommended that approximate equality between congressional districts could be obtained by ensuring that deviations should remain within a 10% band on either side of the mean within an individual state, and that they should in no case exceed 15%. As it happened, though, the trend in the USA was in the direction of rigid insistence on adherence to a uniform population-representative within states (see Huckabee, 2001). Following the apportionment of seats to the states when the results of the decennial census become available, using purely mathematical considerations, a demanding redistricting process is undertaken within each state (a process that, as it happens, has also been tainted by serious charges of gerrymandering).⁵ While, following a series of court decisions, something

close to mathematical parity has been achieved within states; there is virtually no variation from the overall ratio within each state. In New Zealand, a maximum deviation of 5% from the overall population deputy ratio is permitted (McRobie, 2006: 300). Australia uses a complex mechanism that requires forward projection of population by a three-and-a-half year period after the initial creation of a new set of constituencies: by that point, a maximum deviation of 3.5% is permissible, but the deviation may be up to 10% at the point where the constituencies are actually created (Medew, 2008: 100-102).

Elsewhere, a wider range of variation in the population-deputy ratio is tolerated. In Germany, a maximum target deviation of 15% is specified, and this may in no case exceed 25% (Schrott, 2006: 247). Canada allows a relatively generous deviation, 25%, above or below the norm for each province (Courtney, 2008: 16). Deviations from the overall population-MP ratio in the UK may be quite significant; in the review before the 2005 election, for instance, 59 constituencies in England (13% of the total) deviated by more than 10% (Johnston et al., 2003: 339; Rallings et al., 2008: 82-83). Finally, in France there have been huge deviations in the population-deputy ratio since 1986, when a maximum deviation of 20% was permitted; due to failure to revise the boundaries massive inequalities had developed by 2007, with constituencies varying in population from 34,000 to 188,000 (Balinski, 2008: 182-7)—ranging from 67% below to 79% above the national ratio.⁶

While the comparative experience suggests, then, that most jurisdictions do not regard the unqualified pursuit of uniformity in the population-deputy ratio as desirable, there are circumstances that might make it necessary—notably, the position taken by the courts. As already mentioned, the judgement in the High Court in the O'Donovan case (1961) placed limits on the degree to which boundary revision measures might depart from the national norm, but did not insist on mathematical accuracy (nor did it acknowledge the linguistic discrepancy, taking the view that 'no material discordance exists between the English and Irish texts').⁷ Furthermore, the Supreme Court ruled shortly afterwards that 'exact parity in the ratio between members and the population of each constituency is unlikely to be obtained and is not required', leaving it open to the Oireachtas to determine what is practicable, and which other criteria to take account of.⁸ The High Court judgement was widely interpreted as permitting a 'tolerance' level of 5% above or below the average deputy-population ratio. More recently, though, Mr Justice Clarke questioned this interpretation, suggesting that the implications of the 1961 judgement were even narrower: this close reading of the judgement led him to conclude that a 'tolerance' level of somewhere between 1.0% and 1.7% was intended. He did not, however, endorse this as a target to be aimed at, adopting a much broader and more permissive interpretation of what would be acceptable.⁹

It is, then, not clear whether the deviations that would arise under the scheme proposed here would clash with the constitution, but there is no reason to assume *ab initio* that they would. A narrow, literal interpretation might lead the courts to find wanting all boundary revisions to date (including all of those devised by independent boundary commissions). The courts have, however, adopted a more holistic approach, seeking to identify the principles lying behind particular constitutional formulations rather than spelling out the literal implications of specific clauses.

The Timing and Mechanics of Revision

Article 16.2.4^o of the constitution requires the Oireachtas to ‘revise the constituencies at least once in every twelve years’. It is thus the responsibility of the Oireachtas, and not of any other body, to carry out the revision. However, the Oireachtas has already created a boundary commission to make recommendations on this process, and up to now has enacted these recommendations without amendment (with an important qualification in the case of the 1988 commission, whose terms of reference were allegedly politically biased). The procedure suggested here could also easily be managed by the Oireachtas. The expression ‘revise the constituencies’ is clearly intended to refer to maintenance of the deputy-population ratio, and this could be done by reapportionment of seats rather than by alteration of boundaries (which would need to take place only rarely). This is rather more straightforward than current practice; it ensures that the constituencies are still being revised, but it greatly simplifies the process, and allows it to be completed more quickly.

Furthermore, the system proposed here would eliminate the need for any significant delay between availability of census data and Dáil seat reapportionment. Notwithstanding the diligent work and judicious recommendations of successive boundary commissions, the outcome of the present arrangement as measured by implementation of policies of electoral fairness has been unimpressive. The statistics are startling.

- Since 1923, the average gap between the date of Irish general elections and the censuses on which their constituencies were based has been 9.1 years (the record is held by the general election of 1933, 22 years after the 1911 census, whose results were used by the 1923 electoral act), though this has fallen to 5.2 years for the period after 1981, when revisions became more frequent.
- Of nine commissions which have recommended new Dáil constituencies, not one has seen its recommendations translated into legally defined constituencies which were used in a general election before the next census intervened.

Of course, it is likely that the commission which reported in 2012 will see the boundaries it devised in use for the general election of 2016, before the results of the 2016 census become available. By way of qualification, it should be pointed out that in two cases (the commissions which reported in 1980 and in 1998) the first general election under the new boundaries took place before the results of the new censuses were actually published. However, in four other cases (the commissions reporting in 1983, 1990, 1995 and 2004) the first general election under the new boundaries took place after the results of a new census showed that these boundaries were already out of date (in three of these cases, these were preliminary census reports rather than final results).

It is hard to avoid the conclusion that the current system gives priority to using a formal, objective historical criterion, rather than to reflecting continuing population change as speedily and efficiently as possible. Since constituency commissions have been introduced, it has taken, on average, almost three years (specifically, 35 months) from the date of the census for a boundary revision act to be passed. This period could be halved if the procedure suggested here were adopted (the final census reports on which the commissions based their findings appeared on average 18 months after the census dates). Furthermore, if preliminary data were used the period of delay could be shortened to three months from the date of the census.¹⁰ The case for using such data is strong: the preliminary census report (compiled from local enumerators' summaries immediately after the census) provides an extremely accurate forecast of the figures in the final report (based on the actual census forms), and was used as the basis for one electoral act (1947). In 2006, the preliminary data on Dáil constituency populations deviated only very slightly from the final figures—the deviations ranged between 0.01% and 0.63%. Because of the pace of recent population movement, it is likely that the population data in the preliminary census reports offer *a more accurate indicator* of population on the day of their publication than do the data in the final reports. By waiting for final corrected (but essentially historical) data, in other words, the boundary review process works with data that are *less* likely to reflect the contemporary population than the preliminary figures were.

The Question of Constituency Size

The constitution is silent on maximum constituency size, but prescribes three as the minimum representation of any constituency. The approach suggested here implies a mean constituency size considerably larger than has been the norm since 1947. Critics might argue that this is incompatible with the single transferable vote system of proportional representation, which for practical reasons implies modest constituency size. But it should be noted that, in the past, voters in Galway were able to cope with a nine-member constituency; large

constituencies have been common in Northern Ireland Assembly elections; and in 1925 the electorate survived a unique event, the election of 19 senators from a list of 76 candidates by means of the single transferable vote (Coakley, 2005). Recent reforms of the local election system have seen constituency size there increase from between three and seven councillors per area to between six and ten (Kavanagh, 2015: 74).

There is, however, a quite different way of looking at this objection. It could be argued that the practice since 1947 of restricting maximum constituency size to five is incompatible with the constitution, which requires not just use of the single transferable vote, but *proportional representation* (i.e. the representation of political forces in the Dáil in approximately the same proportion as among those voting).¹¹ Moderately large constituencies are a prerequisite to this, since the threshold for representation (which approximates to the Droop quota, as used in Dáil elections) will otherwise be too high: 25% in a three-seat constituency, 20% in a four-seater and 17% in a five-seater, for example. The relationship between proportionality and constituency size is well established, with large constituencies important for the representation not just of smaller parties but also of other groups such as women (Shugart, 1994: 32-33).¹² Although it has been acknowledged that in practice the Irish system performs well in delivering relatively proportional results, average constituency size has been described as 'strikingly low' in comparative terms (Gallagher, 2005: 517).¹³ Significantly, one of the unsolicited recommendations of the Irish Constitutional Convention of 2012-14 was precisely that Dáil constituencies should be enlarged, so that the smallest (and not, as currently, the largest) would return five members.

The Relationship to Administrative Boundaries

The extent to which existing administrative boundaries are acknowledged in the constituency boundary revision process is a political cultural matter rather than a constitutional-legal one. It should be noted that deference to important administrative frontiers is often the primary principle in redistricting and seat allocation. Not surprisingly, in such federal systems as the USA, Canada, Australia and Germany the states or provinces are sacrosanct: no constituency may cross their boundaries. Even in unitary states such as England, Wales and Scotland the boundaries of major local government units must be respected 'so far as is practicable', while in France constituency may not cross *département* boundaries.

Although the terms of reference of Irish constituency commissions stipulate that 'the breaching of county boundaries shall be avoided as far as practicable', this has relatively low priority, and county boundaries are widely breached. Constituencies are instead made up of groupings of obsolete local government units or other unfamiliar territorial areas. This means

that they substantially ignore the best-known territorial areas, whose longevity as administrative units seems to have made them a powerful focus of local loyalty. Dating in more-or-less their present shape as stable territorial units since the early seventeenth century, the Irish counties formed the basis for a range of forms of popular mobilisation from the late eighteenth century onwards, and their significance as key cultural units has been reinforced by their role in popular Gaelic games, and perhaps also by the weakness of local democracy below the level of the county. In any case, it is clear that the Irish electorate sets great store by these ancient units, and that they attract considerable popular loyalty. Unpredictable and apparently arbitrary changes in constituency boundaries may, it has been argued, have an alienating effect on the electorate, which may even become politically demobilised (Kavanagh, 2003: 95-96). This sounds plausible, and similar assessments have been given in respect of constituency changes in England; but there appears to be relatively little evidence to back this up, and none to indicate that transferred areas are likely to have a lower electoral turnout rate than other areas (Pattie et al. 2012).

Nevertheless, the system proposed here offers a more stable response to people's sense of local identity than the present system, one more respectful of well-known territorial entities. This is not to argue that county boundaries should be sacrosanct, or that they should be given the same weight as major units in federal systems, such as US states. But the unrelenting revision of constituencies that has been characteristic of the Irish experience is unnecessary unless a very narrow standard of equal representation is specified, and this risks coming into conflict with other important principles which a democratic constitution should protect.

Conclusion

The Irish approach to the achievement of the principle of equality of representation has been firmly based on the British model, where the number of seats in a constituency is fixed (at one) and boundaries change relatively frequently to match the changing distribution of the population. In administering this approach, the new Irish state began with an essentially political process, which in effect gave a key role to the Minister for Local Government, leaving the door open to partisan manipulation—a temptation that not all ministers were able to resist (Mair, 1986). The High Court judgement in 1961 in the O'Donovan case tied the minister's hands by insisting on a narrow definition of equality, but left the process otherwise open to abuse, in that the governing party was free to force through a blueprint in which boundaries were micro-managed to the potential benefit of those in power. The introduction of a non-partisan constituency boundary commission in 1979 effectively depoliticised the process, but continued with an approach in which the number of seats per constituency would be fixed

within narrow limits (between three and five deputies per constituency) while the fine-tuning needed to ensure equality of representation would be secured by boundary adjustment.

This article has argued that there are serious drawbacks to the current Irish system of electoral redistricting. First, it is time-consuming for those involved (officials and members of the boundary commission), who need to consider a wide range of options before deciding on a final blueprint. Second, it is an unnecessary distraction for politicians, who can enjoy little certainty in respect of the territorial boundaries within which they operate, as their constituencies may acquire or lose additional slices of territory with each revision; and they have no way of knowing whether these gains or losses are short- or long-term ones. Third, it is confusing for voters, at best, and deeply alienating, at worst: they may find themselves transferred, as they see it, out of their own county and into a neighbouring one, potential losing the services of a long-term Dáil deputy, in a process that is potentially delegitimizing.

These costs might be worth bearing for a highly desirable outcome; but this article has shown that such an outcome has not been forthcoming in Ireland. Boundary commissions have been asked to design constituencies that would match certain rather narrow criteria of equal representation had a general election taken place on the same day as the census, but which are unlikely to meet them in any election after that. It is worth repeating a point made above about an extraordinary feature of this process: to date, the recommendations of every single boundary commission have been overtaken by the next census (which showed these recommendations to be out of date in varying degrees) before any general election under the recommended boundaries had taken place.

This article has suggested that instead of the British approach, the continental European approach to the principle of equality of representation is more appropriate to the Irish electoral system with its multi-member districts: boundaries are fixed, and the number of members in each constituency is adjusted after each population census. This could be done speedily after the publication of census results (ideally, preliminary rather than final ones) by an official, for formal approval by the Oireachtas. The constituencies suggested here could, for instance, be used for an allocation based on the results of the 2011 census. This would produce a very unfamiliar *pattern* of constituencies (two three-member, six four-member, nine five-member, six six-member, three seven-member, one eight-member and two and nine-member constituencies); but the *shape* of the constituencies themselves would be very familiar, based on well-recognised administrative areas. Their average size would be large, but they would be more clearly compatible with the constitution than the present pattern (if we take into account arguments in respect of proportionality of representation). Even if this did cause constitutional difficulties, these would not be unresolvable. The challenge in moving to any new system

is likely, however, to lie in persuading decision makers who have been returned to the Dáil under the existing system to take a leap of faith into unfamiliar new territory.

What are the implications of the Irish experience for broader issues of electoral integrity and election administration? The partisan system of constituency boundary revision that survived to the 1970s incentivised the micromanagement of boundaries—unintentionally assisted by a court ruling in 1961—that left it all too open to accusations of gerrymander. The de facto transfer of responsibility to independent commissions brought accusations of political bias substantially to an end, but the commissions' terms of reference were seen as constraining them to continue the practice of frequent, large-scale boundary adjustment. There might be a case for transferring this responsibility to a standing, multi-purpose electoral commission; but this article has argued that there is an even stronger case for simply moving to an automatic formula based on familiar administrative boundaries.

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Table 1: Size and population variation of constituencies under electoral acts, 1923-2013

Act	Constituencies by size (number of members)								total TDs	mean size	index of variation
	3	4	5	6	7	8	9	total			
1923	6	4	9	.	5	3	1	28	147	5.3	17.4
1935	15	8	8	.	3	.	.	34	138	4.1	20.5
1947	22	9	9	.	.	.	.	40	147	3.7	27.8
1961	17	12	9	.	.	.	.	38	144	3.8	8.1
1969	26	14	2	.	.	.	.	42	144	3.4	9.8
1974	26	10	6	.	.	.	.	42	148	3.5	9.8
1980	13	13	15	.	.	.	.	41	166	4.0	12.7
1983	13	13	15	.	.	.	.	41	166	4.0	14.6
1990	12	15	14	.	.	.	.	41	166	4.0	14.6
1995	12	15	14	.	.	.	.	41	166	4.0	12.6
1998	16	12	14	.	.	.	.	42	166	4.0	14.1
2005	18	13	12	.	.	.	.	43	166	3.9	15.4
2009	17	15	11	.	.	.	.	43	166	3.9	10.8
2013	13	16	11	.	.	.	.	40	158	4.0	9.9

Note: The 1959 act (which was declared unconstitutional) has been omitted. Data refer to territorial constituencies only, i.e. excluding two university constituencies in 1920 (returning four members each) and 1923 (returning three each). The index of variation is the difference between the largest percentage deviation above the mean and the largest percentage deviation below the mean.

Table 2: Basis of formation of constituencies created by electoral acts, 1923-2013

Act	Boundaries on which based					No. of words to describe boundaries	Creation date of boundaries		
	county	sub-county level	total				new	recent	old
		large	small	micro					
1923	20	8	.	.	28	386	18	10	.
1935	7	.	22	5	34	1,837	28	3	3
1947	16	.	18	6	40	1,725	30	6	4
1961	4	.	23	11	38	2,168	34	2	2
1969	2	.	24	16	42	3,816	37	3	2
1974	3	.	36	3	42	2,708	35	4	3
1980	10	.	21	10	41	2,914	40	.	1
1983	11	.	21	9	41	2,768	4	36	1
1990	10	.	20	11	41	2,616	25	1	15
1995	9	.	21	11	41	3,147	21	8	12
1998	9	.	21	12	42	3,373	22	7	13
2005	5	.	26	12	43	3,244	28	5	10
2009	3	.	38	2	43	3,161	24	9	10
2013	3	.	35	2	40	3,022	29	4	7

Note: The 1959 act (which was declared unconstitutional) has been omitted. 'Large' sub-county units refer to local electoral areas; 'small' units to district electoral divisions, wards, or electoral divisions; 'micro' to townlands and urban street lines. 'New' boundaries are those created for the first time by the act in question; 'recent' refers to those created in the immediately preceding electoral act; and 'old' refers to all others.

Table 3: Size, population variation and creation date of notional constituencies, 1923-2013

Census	Constituencies by size (number of members)								total TDs	mean size	index of variation
	3	4	5	6	7	8	9	total			
1911	5	2	6	3	5	2	2	25	140	5.6	23.7
1926	4	6	3	1	6	4	1	25	140	5.6	23.4
1936	4	7	4	6	4	2	.	27	140	5.2	20.1
1946	5	5	5	5	6	1	.	27	140	5.2	25.0
1951	6	4	5	6	3	3	.	27	140	5.2	28.8
1956	6	5	5	5	2	3	1	27	140	5.2	22.0
1961	6	7	4	6	3	1	1	28	140	5.0	26.8
1966	5	6	7	6	2	2	.	28	140	5.0	23.8
1971	4	6	5	5	7	.	.	27	140	5.2	29.3
1979	.	5	7	6	6	3	1	28	166	5.9	22.3
1981	.	5	7	7	4	4	1	28	166	5.9	19.7
1986	1	5	9	6	4	2	2	29	166	5.7	21.9
1991	1	5	9	6	4	2	2	29	166	5.7	16.9
1996	1	5	9	6	4	2	2	29	166	5.7	21.6
2002	1	5	9	6	4	2	2	29	166	5.7	19.3
2006	1	5	9	6	4	2	2	29	166	5.7	20.1
2011	2	6	9	6	3	1	2	29	158	5.4	23.9

Note: The index of variation is the difference between the largest percentage deviation above the mean and the largest percentage deviation below the mean.

Figure 1. Illustration of possible seat allocation to fixed-boundary constituencies, 1923 and 2013

Note. Boundaries are those of counties or groups of counties, except in the case of Dublin and Cork. Seat allocation is based on the Sainte-Laguë highest average formula, using census data of 1911 and 2011 respectively. Assumed number of seats is 140 (1923) and 158 (2013). One new constituency is shaded. Dublin constituencies, all of which would have changed, over this period, are indicated schematically only.

Notes

1. For further elaboration of points made in this article, see Coakley, 2013: 171-216, on which this article draws extensively; this is based also on Coakley, 2007, 2008a, 2008b.
2. 'John O'Donovan, Plaintiff, v. The Attorney General, Defendant', *Irish Reports* 1961, pp. 114-56.
3. For discussion of the complexities of sub-county territorial units, see Coakley, 1979. Ireland's single-tier local government system is unique, with the closest parallel to be found in the United Kingdom, where Northern Ireland has had a single local government tier since 1973; the Scottish and English local government systems allow for a low tier of community and parish councils respectively. The continental European norm is at least a two-tier arrangement, with a small number of counties, provinces or equivalent, and a very large number of municipalities or communes.
4. Computation by Rallings and Thrasher (2007a: 126) of the percentage of constituencies whose boundaries were changed shows that the mean over six revisions, 1983-2005, was only 35%; the corresponding mean in the Irish case over six revisions, 1983-2007, was 49%, ranging from 10% in 1983 to 65% in 2005.
5. The pursuit of mathematical parity has helped to provide a cover for a revision process that is normally driven by considerations of electoral advantage, and the courts have shown little interest in such gerrymandering. The redistricting process in the USA has thus been perceived in a poor light, and has attracted such negative descriptions over the decades as 'disturbing' 'notorious and shameful' or 'invidious' (Hacker, 1963: 2, 20, 120), 'murky', 'crass' or 'seedy' (Cain, 1984: xi, 1, 189), 'outrageous', 'contorted' or 'scandalous' (Monmonier, 2001: 150, 154, 156), 'one of the most conflictive political activities in the United States' (Engstrom, 2002: 51) and 'often synonymous with gerrymandering' (Altman et al, 2014: 1).
6. The electoral systems discussed include the plurality system in the UK and Canada, the alternative vote system in Australia and the two-ballot system in France, all of which are based on single-member districts. New Zealand and Germany used mixed systems, but only the single-member districts are discussed here.
7. 'O'Donovan v. Attorney General' (1961), pp. 155, 132.
8. See judgement by Chief Justice Maguire, 'In re Art. 26 of the Constitution and the Electoral (Amendment) Bill, 1961', *Irish Reports* 1961, pp. 169-83, at p. 183. This view was echoed by the constituency boundary commission in 1980 (Ireland, 1980: 13). In its 1988 report a more specific conclusion was reached: 'the Commission considered that a departure from the mathematical average of 8% or over would be unacceptable and, in all probability, contrary to the provisions of the Constitution relating to equality of representation' (Ireland, 1988: 28).
9. This judgement rested on a presumption that the 1961 figure was arrived at by expressing 1,000, the average population of a district electoral division, as a percentage of 20,000, the average deputy-population ratio at the time. Justice Clarke argued, however, that the figure of 1,000 needs to be expressed as a percentage of total population, which ranged at the time from about 100,000

in a five-seat to 60,000 in a three-seat constituency, giving a 'tolerance' level of somewhere between 1.0% and 1.7%. See 'Murphy and another v. Minister for Environment and others', [2007] IEHC 185, ss. 3.12-13; *Irish Reports* 2008.

10. The High Court ruled in 2007 that the commission is required to use final rather than preliminary census data. See 'Murphy v. Minister for Environment' (2007); ss. 6.13, 8.3, where Mr Justice Clarke asked 'whether measures can be put in place to minimise the gap between the availability of census figures and the enactment of legislation'.
11. The 2007 High Court judgement fired a warning shot regarding the overriding need to defend proportionality; see 'Murphy v. Minister for Environment' (2007), s. 7.3.
12. This point is also made in respect of Irish elections by Engstrom (1987), but is disputed in the case of the 2002 election by White (2006).
13. The Irish system seems to have achieved a relatively high degree of proportionality initially (Laver and Mair, 1975; Gallagher, 1975; O'Leary, 1979: 107-10), with constituency size apparently having relatively little impact (see also Gallagher, 1986: 258-60). But, whatever the actual outcome the intention to gerrymander has also been alleged (Carstairs, 1980: 217).