An Coimisiún Toghcháin,
Dublin Castle
Dublin 2

Re. Dáil and European Parliament Constituency Review 2023

A Cháirde,

I submit that you change the basis on which you revise constituencies by reverting 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
1. *more recognisable constituencies,*
2. *more predictable boundary trajectories over time,*

as proposed by John Coakley. [1]

I further propose that you commission John Coakley (and provide him with any support needed) to draw a set of recommendations for Dáil constituencies based on his work and which meet your terms of reference. This will inform your consideration of beginning anew within the Constitutional provisions. If John Coakley is unable to update Tables (a). (b), (c), (d) (see Appendix 3), I submit that this work be supervised by him, if possible.

[1] John Coakley (2015) Fixed-Boundary Constituencies and the Principle of Equal Representation in Ireland, Irish Political Studies, 30:4, 531-554, DOI: 10.1080/07907184.2015.1099040

John Coakley published a detailed and worked out consideration of a different way of revising constituencies, more in keeping with the practice of countries which use proportional representation for elections. In addition to the article cited above, he made a detailed case in two articles in Administration[2][3] see attached. In the second article, he provided four tables based on hypothetical constituencies for the period 1911-2006. These *hypothetical constituencies might have been created on the foundation of the state, and later modified slightly, as discussed in the text.*[4]

I ask that you

1. publish any work you commission on an option, as specified by John Coakley, as part of your report;
2. give detailed reasons in your report, should you decide to continue . continue the existing practice of micro-managing constituency boundaries and basing the revision of constituencies on a narrow interpretation of the principle of suffrage equality within the *as far as practical* requirement of Article 16.2.3 of the Constitution ie

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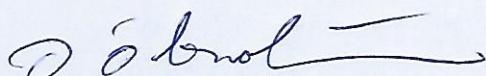
Donal O'Brolċáin

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[2] John Coakley (2007) Revising Dáil constituency boundaries: Ireland in comparative perspective. Administration. 55:3 1-30
[3] John Coakley (2008) Does Ireland need a Constituency Commission? Administration 55:4 77-114
[4] Ibid Appendix p. 109

Appendix 1

Extracts from John Coakley's articles in Administration

especially from 1961 until the establishment of a boundary commission in 1979 it has opened the door to gerrymandering (even if efforts in this direction have not necessarily been effective).

The remedy offered in this article offers an unambiguous answer to the question in its title: whether or not Ireland needs a constituency boundary commission. The independent commissions have been charged with an exceptionally unappealing task. They have been asked to close a badly-designed, flimsy stable door after the horse has bolted – to design, in conformity with arguably inappropriate criteria, constituencies which would have met these criteria had a general election taken place on the same day as the census, but which are unlikely to meet them in any future election. No constituency commission is needed, because constituency boundaries should be fixed, and equal representation should be procured not by changing areas but by varying the allocation of deputies. Whether or not the excitement of the election count gives way to the dull, mechanical routine of electronic vote counting, there is a case for replacing the torture of unending constituency boundary changes by a simpler, more predicable, more consistent and more legitimate system. To achieve this, Ireland needs no more resources than any other country using proportional representation: it does not need a succession of teams of highly qualified boundary architects, but a single moderately numerate apportionment mechanic.

How might this work out in practice? Although this article has shown what might have happened had the Irish Free State chosen to follow the 'normal' (continental European) model in 1922, transition from the present system could take place at any time. A decision could be made, for example, to introduce a system like the one proposed here on the basis of the 2006 census results (the last column of each of the tables in the appendix). This would produce a very unfamiliar *pattern* of constituencies (one three-member, five four-member, nine five-member, six six-member, four seven-member and two eight- 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. They would have the great merit of predictability: following future censuses, the Central Statistics Office could simply recalculate the apportionment of seats and so report to, say, the clerk of the Dáil. As the constitution currently stands, the Oireachtas would then need to give effect to these and, though complaints would not disappear completely, the chances of more widespread acceptance would be greatly enhanced.

A new system of this kind might be seen as conflicting with a literal interpretation of article 16.2.3° of the constitution, and especially with its authoritative Irish wording; but in this respect it is in the same position as *all boundary revision acts since 1923*. On the other hand, it should be seen as compatible with the principle which the constitution seeks to defend, that of equality of representation, so there is a case for introducing it without constitutional amendment. If the courts were to rule this impossible, then constitutional amendment could be contemplated. In that event, there would be a case for considering an issue that has been ignored in this article: whether equality should be measured in respect of the population, or only, as in several other jurisdictions, in respect of the electorate.[20] Whatever the outcome of any such debate, it is hard

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[20] Consideration of this issue raises important questions in political theory regarding the nature of political representation, and the debate as to whether this should reflect people's interests or the people's will. Although distribution of parliamentary seats in proportion to population is common in continental Europe, there are countries (such as Portugal and Sweden) where it is the electorate that is used, while in Finland it is the citizen population that counts. Whatever the outcome of the theoretical debate, data on the electorate have the merit that they are available annually rather than, as in the case of population, quinquennially. This is not to say that they are unproblematic: although it has been argued that the electoral register can be used as a basis for estimating population in intercensal years (Whelan and Keogh, 1980), there was a known issue of systematic over-inclusion in the 1920s (Sinnott, 1995: 85-87), and a study of more recent data showed that the electoral register contains significant errors arising mainly from changes in address, though measures to correct

to argue that Ireland should continue to hold out against an apportionment system which other countries using proportional representation take for granted: there is a case for acknowledging that in this respect public policy embarked down the wrong route in the 1920s (the one signposted 'British system', rather than 'Proportional representation'), and that it is time to try to get back on a less arduous and more appropriate path.

References

American Political Science Association (1951) 'The reapportionment of congress', *American political science review* 45 (1): 153-7

Cain, Bruce E (1984) *The reapportionment puzzle*. Berkeley: University of California Press

Carstairs, Andrew McLaren (1980) *A short history of electoral systems in Western Europe*. London: George Allen and Unwin

Coakley, John (2005) 'Ireland's unique electoral experiment: the senate election of 1925', *Irish political studies* 20 (3): 231-69

Coakley, John (2007) 'Revising Dáil constituency boundaries: Ireland in comparative perspective', *Administration* 55 (3): 1-29

Engstrom, Richard L (1987) 'District magnitudes and the election of women to the Irish Dail', *Electoral studies* 6 (2): 123-32

Engstrom, Richard L (2002) 'The post-2000 round of redistricting: an entangled thicket within the federal system', *Publius: the journal of federalism* 32 (4): 51-70

Forgette, Richard, and John W Winkle III (2006) 'Partisan gerrymandering and the Voting Rights Act', *Social science quarterly* 87 (1): 155-173

Gallagher, Michael (1975) 'Disproportionality in a proportional electoral system: the Irish experience', *Political studies* 23 (4) 1975: 501-13

Gallagher, Michael (1986) 'The political consequences of the electoral system in the Republic of Ireland', *Electoral studies* 5 (3): 253-75

Note 20 continued
for these are available (Keogh and Whelan, 1986). There are typically big variations in the ratio of registered electors to population. In 2006, for instance, the extremes were represented by Donegal South-West (where 87 per cent of the population was entitled to vote) and Dublin South-East (where the corresponding figure was only 57 per cent). Variations of this kind are to be explained by such factors as the distribution of immigrants and of the population of third-level colleges, hospitals and prisons.

formula based on population, electorate and area.[14] In the three Scandinavian countries, a small number of seats is reserved for national level allocation, and in Austria and Greece there are two higher-level allocations based on a more complex formula.

What these systems have in common, and what distinguishes them from the Irish approach, is that in each case a two-stage process is followed: definition of constituency boundaries (typically, for the long term) on the basis of existing administrative divisions, and periodic allocation of seats to these on the basis of an automatic formula. The second process typically follows a different cycle from the first: every ten years in Belgium, for instance (following the decennial population census), but every four years in Sweden (following the electoral cycle, and using electorate rather than population).

Allocating seats proportionally to constituencies seems at first sight a straightforward, arithmetical exercise, but this is not the case. Proportions will almost never result in integer (i.e. whole) numbers of members being allocated to a particular constituency. We may see this from a simple example. Let us suppose that three seats are to be divided between two counties. Red County has a population of 52,000; Green County has 48,000. It makes intuitive sense to divide the total population (100,000) by three, and to use the resulting figure (33,333) as a 'quota', or the population that should be entitled to a single seat (this is generally known as the Hare quota).[15] We may then

[14] This discussion is based on the constitutions, electoral laws and other official publications of the countries in question; for links to their parliamentary web sites, see www.ipu.org. Further information has been derived from Chryssogonos, 2007.

[15] Alongside the Hare quota (in elections, number of votes divided by number of seats), two others are widely used: the Droop quota (number of votes divided by one more than the number of seats) and the Imperiali quota (number of votes divided by two more than the number of seats). When used in elections, these quotas may require more precision; thus, the Droop quota (which typically leaves a fractional remainder) is truncated, if necessary, and one is added, to ensure that this is 'the smallest number for which it is impossible that more than k candidates should attain it', where k is the number of seats (Dummett, 1984: 269); see Gallagher, 2005, and Sinnott, 2005, for discussions of this system in Ireland.

remainder (Hamilton) system begins by allocating the integer portions to the respective provinces. This accounts for eleven seats. The two remaining seats are allocated to the two provinces with the largest fractions: Ulster (0.82) and Munster (0.60), thus giving Ulster a single seat and Munster a total of four. In the d'Hondt (Jefferson) highest average system, we progressively reduce the size of the divisor (beginning with the Hare quota, 326,142) until we reach a value at which the integer portions sum to thirteen. Once the divisor is reduced to 286,890, we get this result. Any other divisor greater than or equal to 267,265 will yield a similar result; smaller divisors will allocate too many seats – fourteen or more. The outcome, a well-known feature of the d'Hondt system's tendency to favour larger groups, is that Ulster loses its seat and Leinster gains one. The Sainte-Laguë (Webster) system begins with a different logic: finding a divisor which will yield allocations that when rounded (not truncated) will give an integer value of thirteen. Any number from 336,080 to 335,241 will give this result. As table 3 shows, this produces yet a different outcome from the other two methods. The largest remainder system is commonly used in allocation of seats to constituencies in continental Europe, though some countries (such as Portugal) use the d'Hondt system. Specialist study of the issue suggests that the Sainte-Laguë (Webster) system – and not its more complex successor in the USA – is the fairest system all round (Balinksi and Young, 2001: 71-78).

Conclusion

This article has, then, highlighted the difficulties that have confronted those charged with revising constituency boundaries in Ireland. In the early years of the state, politicians were not particularly preoccupied with this aspect of electoral law. When, however, the 1959 constituency boundary Bill appeared to discriminate against Dublin and in favour of rural areas, opposition anger spilled over into a court challenge. The High Court judgement that the Act was unconstitutional and subsequent insistence on a rigid deputy-population ratio ruled out this practice for the future, but it also unintentionally

provided a cloak for gerrymandering by encouraging, if not forcing, governments to micromanage constituency boundaries. The introduction of an independent constituency commission in 1980 depoliticised the process, but boundaries have continued to be amended as vigorously as ever. By contrast, in continental European proportional representation systems, the principle of suffrage equality is met by periodic reallocation of seats to stable administrative districts using a simple arithmetical formula. The later article will show how this might be applied in Ireland, and will discuss the arguments that are likely to be raised against any fundamental change in this deeply ingrained political cultural tradition.

References

Balinksi, Michel L, and H Peyton Young (2001) *Fair representation: meeting the ideal of one man, one vote*. 2nd ed. Washington, DC: Brookings Institution Press

Blackburn, Robert (1995) *The electoral system in Britain*. Basingstoke: Macmillan

Chryssogonos, Kostas (2007) An introduction to Greek electoral law; available www.cecl.gr/RIGASNETWORK/databank/REPORTS/r8/GR_8_Chryssogonos.html [2007-07-18]

Coakley, John (1979) 'Spatial units and the reporting of Irish statistical data: an examination of the evolution of regional divisions', *Administration* 27 (1): 31-55.

Coakley, John (1980) 'Constituency boundary revision and seat redistribution in the Irish parliamentary tradition', *Administration* 28 (3): 291-328

Coakley, John (2007, forthcoming) 'Electoral district delimitation in Ireland', in Lisa Handley, ed., *Redistricting in comparative perspective*. Oxford: Oxford University Press

Dummett, Michael (1984) *Voting procedures*. Oxford: Clarendon Press

Gallagher, Michael (1992) 'Comparing proportional representation electoral systems: quotas, thresholds, paradoxes and majorities', *British journal of political science* 22 (4): 469-96

Gallagher, Michael (2005) 'Ireland: the discreet charm of PR-STV', pp. 511-532 in Michael Gallagher and Paul Mitchell, eds, *The politics of electoral systems*. Oxford: Oxford University Press

Appendix 2

John Coakley (2007) Revising Dáil constituency boundaries: Ireland in comparative perspective. Administration. 55:3 1-30

Revising Dáil constituency boundaries:

Ireland in comparative perspective

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Introduction

When two outgoing Dáil deputies questioned the constitutionality of the arrangements for defining Dáil constituencies just before the May 2007 election, it was a pointed reminder of how sensitive and controversial the whole issue of constituency boundary revision has been.[1] The negative consequences are well documented (Kavanagh, 2003: 93-98). For sitting and would-be Dáil deputies, uncertainty over what the next revision may bring adds further unpredictability to a job that is already quite insecure. For voters, being moved from one constituency to another is potentially confusing and disconcerting, and may rupture long-standing ties with a community to which people are attached. For officials, the process of revision brings yet another heavy and potentially contentious administrative burden that is not necessarily particularly welcome.

This article argues that the political turmoil, popular upset and considerable expense (in time and money) that have been associated with the process of constituency boundary revision since the early years of the state have been unnecessary. The Irish approach to constituency boundary delimitation is an example of Irish 'exceptionalism': an eccentric Irish solution to a problem

[1] The two independent TDs, Catherine Murphy (Kildare North) and Finian McGrath (Dublin North-Central) argued that the Electoral (Amendment) Act, 2005, was in conflict with the Constitution in failing to adhere as far as practicable to a uniform deputy-population ratio, following publication of the 2006 census (the Act was based on the 2002 census). Although the court dismissed the proceedings, it noted an 'urgent obligation on the Oireachtas to deal with the disproportionality which has now emerged'; see judgement of Mr Justice Clarke in 'Murphy and another v. Minister for Environment and others', [2007] IEHC 185; available http://www.bailii.org/ie/cases/IEHC/2007/H185.html [2007-07-08].

that is not Irish, but universal in the world of proportional representation – how to distribute parliamentary seats fairly. A later article (to appear in the next issue of *Administration*) will suggest that (subject to constitutional considerations) a great deal of trouble could have been avoided by adoption of a simple formula that is close to being universal in proportional representation systems: definition of 'permanent' constituency boundaries by legislation in the early 1920s, modified by a few minor local adjustments in subsequent years, with seats re-allocated between constituencies by means of a simple mathematical formula after each population census. The resource needed for each revision is about half an hour of the time of a junior official in the Department of the Environment who can use spreadsheets; there is no need to take up hours of Dáil time or months of work by a high-powered, multi-member constituency commission.

This article begins by outlining the unhappy Irish experience of constituency boundary delimitation. It contrasts this with the much simpler formula used in countries with similar electoral systems. The later article will illustrate what might have happened had the continental European rather than the British or American approach to constituency boundary revision been adopted. The later article will also seek to counter some of the more obvious arguments that would certainly be raised against adoption of a system of this kind in Ireland.

Constituency boundary delimitation in Ireland

In the traditional system of political representation in Ireland, which survived the Act of Union of 1800, members of parliament were elected to represent counties or boroughs with little reference to the distribution of the people.[2] By the early 1880s each county still returned two members to the House of

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[2] This section is substantially based on Coakley, 1980, and Coakley, 2007.

Commons, regardless of population. For example, the small county of Carlow, with a population in 1881 of 41,000, returned two members, the same as the huge county of Cork, with a population of 369,000 (almost ten times the size of Carlow). The inequity of this system was recognised in the Redistribution of Seats Act, 1885, which made a gesture in the direction of equality: Cork was now given seven seats, while Carlow was reduced to one, with other counties allocated two, three or four seats, depending on their population. A price was paid for this: counties were divided into new, single-member constituencies. Thus, for the first time, the new constituencies no longer coincided with counties, but were defined as groups of baronies or in some cases parishes. Indeed, in the case of ten counties, a much smaller unit, the townland, was used.[3] This system was overhauled by the Redistribution of Seats (Ireland) Act, 1918, which re-allocated seats and redefined some boundaries, but otherwise retained the same approach.

The introduction of proportional representation by the Government of Ireland Act, 1920, for the two parts of the newly-partitioned Ireland entailed the creation of multi-member constituencies, and would have permitted a return to counties (or groups of counties) as the basis for new electoral districts. Instead, however, existing constituencies were grouped in peculiar ways to produce a set of twenty-six territorial units returning between three and eight members each. As well as such entities as King's County-Queen's County (now Laois-Offaly), Carlow-Kilkenny and Longford-Westmeath (later to become familiar combinations), this resulted in peculiar combinations

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[3] Up to the end of the nineteenth century, Irish local administration recognised four tiers: 32 counties, more than 300 baronies, more than 2,000 civil parishes and more than 60,000 townlands. The Local Government (Ireland) Act, 1898, reorganised the two intermediate tiers: the baronies were replaced by just over 300 county districts (rural districts, urban districts and municipal boroughs, each now with its own elective council), and civil parishes disappeared for administrative purposes, replaced by more than 3,700 district electoral divisions or, in larger urban areas, wards (Coakley, 1979).

such as Kerry-West Limerick, Waterford-East Tipperary, South Mayo-South Roscommon, East Mayo-Sligo and Leitrim-North Roscommon. Two important elections took place on these boundaries: in 1921 to the House of Commons of Southern Ireland (regarded by Sinn Féin as part of the election of the second Dáil), and in 1922 to the provisional parliament of the Irish Free State (similarly interpreted, at least by the pro-Treaty group, as an election to the third Dáil). The Electoral Act of 1923 replaced this system by a set of twenty-eight territorial constituencies, ranging in size from three to nine members, but returning to the county as the basic unit. The only exceptions were the three double-county constituencies just named (Laois-Offaly, Carlow-Kilkenny and Longford-Westmeath); Dublin city and Mayo county (divided in two by grouping local electoral areas); and Cork county (divided in three on the same basis). The overall distribution of seats under this and subsequent electoral acts is described in Table 1.

The next revision, introduced in 1934 by Minister for Local Government Sean T O'Kelly and enacted as the Electoral (Revision of Constituencies) Act, 1935, moved sharply away from the principles of the 1923 Act. It reduced average size, leaving only three constituencies with more than five members (these were the seven-seat constituencies of South Dublin, Limerick and Tipperary). But it also fractured existing boundaries liberally: twenty-seven of the thirty-four con-stituencies were now based on micro-units such as district electoral divisions or, in Dublin, on complex imaginary lines running between named points. County boundaries were also widely breached: 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 Bill attracted intense criticism from the opposition, with the 'mutilation' of county boundaries and suggestions of attempted gerrymander – or

Table 1: Size and population variation of constituencies under electoral Acts, 1920-2005

Act	Constituencies by size (number of members)							total	total TDs	mean size	index of variation
	3	4	5	6	7	8	9				
1920	3	14	4	2	1	2	.	26	120	4.6	29.1
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

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 calculated as range (difference between maximum deviations above and below the mean deputy-population ratio) divided by mean, multiplied by 100. It corresponds to the gap between the largest percentage deviation above the mean and the largest percentage deviation below the mean.

'Kellymander' as an opposition speaker described it – as the most emotive points.[4]

The next electoral Act (that of 1947, introduced by Sean MacEntee) rectified the issue of county boundaries by not breaching them in any case (apart from the three well-known double county constituencies already mentioned), though it continued to use low-level units (district electoral divisions) to define constituencies within counties. Outside Dublin, only six counties were divided: Kerry, Limerick, Mayo and Donegal into two constituencies, and Cork and Galway into three.

The same arrangement was continued by the 1959 Act, but this had a fatal flaw. In introducing it as a Bill, Local Government Minister Neil Blaney had argued that not just the population but the area of each constituency should be considered, on the ground that 'it should be made as convenient as possible for a Deputy to keep in touch with his constituents'.[5] The Act thus allocated proportionally more deputies to the sparsely populated western counties than to built-up areas such as Dublin. Notwithstanding strong opposition, the Bill duly passed. But the government victory was short-lived: an opposition senator, Dr John O'Donovan, contested its constitutionality in the High Court, and won his case, causing the Act to be struck down 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'.[6]

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[4] *Dáil debates* vol. 51, 21 Mar. 1934, col. 1295, for 'Kellymandering'; there were many references to 'mutilation' of boundaries on the same occasion, e.g. cols 1271-2, 1282-3, 1301-3.
[5] *Dáil debates* vol. 177, 28 Oct. 1959, col. 379.
[6] 'John O'Donovan, Plaintiff, v. The Attorney General, Defendant', *Irish reports* 1961, pp. 114-56.

The 1961 O'Donovan case was a landmark, but it turned out to be an unfortunate one. It prevented one form of possible abuse (disproportionate allocation of seats to areas where the governing party might have been strong), but at the cost of facilitating another (straightforward gerrymandering through boundary manipulation). The High Court judgement was interpreted as requiring very close adherence to a uniform deputy-population ratio, and thus as entailing micromanagement of constituency boundaries. This had the potential to give cover for manipulation of boundaries to optimise the chances of government victory, and such misconduct was alleged immediately in respect of the new Electoral (Amendment) Act, 1961. Allegations of gerrymandering escalated with the next two Bills. The 1968 Bill, introduced by Local Government Minister Kevin Boland, was described by the opposition as a 'Bolander',[7] and the debate on it extended over more than 1,000 columns in the official report of the Dáil and Seanad debates (about fifty hours of parliamentary time). The 1973 Bill, introduced by James Tully, Minister for Local Government in the new Fine Gael-Labour coalition government, was similarly dubbed a 'Tullymander',[8] and took up over 1,600 columns (the equivalent of a big, 800-page volume, or about eighty hours of parliamentary time) before completing its electoral passage in 1974. Like other government Bills, these inevitably passed into law, though the latter failed dramatically to enhance the government's position at the next election.

All three of these post-O'Donovan Bills were characterised by a willingness to ignore the county as a basic unit. Under both the 1947 and the 1959 Acts, twelve constituencies had corresponded to counties, with a further four consisting of two-county combinations. But in the 1961 Act, only three constituencies (Cavan, Clare and Wicklow) corresponded to counties, with a further constituency matching the Laois-Offaly combination. In 1969, only one constituency (Wicklow) corresponded to a

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[7] *Dáil debates* vol. 237, 27 Nov. 1968, col. 1243, and 4 Dec. 1968, cols 1809, 1829.
[8] *Seanad debates* vol. 77, 10 Apr. 1974, col. 818, and 30 Apr. 1974, col. 1433.

county, with one other (Laois-Offaly) coinciding with the area of
two counties. In 1974, Waterford replaced Wicklow as the only
constituency corresponding to a county, and Longford-
Westmeath became a second double-county constituency.

The 1974 Act was the last to be drafted under political direction.
Following its return to office in 1977, Fianna Fáil agreed to the
establishment of the state's first-ever constituency commission,
to deal with the relatively uncontentious area of elections to the
European Parliament. This was followed by a series of ad-hoc
commissions to advise on the much more sensitive issue of Dáil
constituency boundaries. The first such commission (a non-
political body, chaired by a judge and with the Clerk of the Dáil
and the Secretary of the Department of the Environment as its
other members) was appointed in 1979, and its recommenda-
tions were enacted without alteration as the Electoral
(Amendment) Act, 1980. Four further ad-hoc commissions on
the same model were appointed subsequently, and reported in
1983, 1988, 1990 and 1995.[9] The first and last of these were
required to take account of the results of the 1981 and 1991
censuses respectively, and their recommendations were duly
translated into law. The 1988 report was based on the results of
the 1986 census, but its terms of reference required a set of three-
and four-seat constituencies, permitting five-seat ones only 'if
necessary to avoid the breaching of county boundaries' (Ireland,
1988: 7). This was seen by the opposition as an attempt to
undermine proportionality and to reinforce Fianna Fáil's
position; and opposition threats to vote against any Bill based on
this principle were sufficient to ensure that no such measure was
brought forward.[10] Instead, a new commission was appointed,

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[9] For the respective reports of the commissions, see Ireland, 1980; 1983; 1988; 1990;
1995.

[10] The smaller parties were vehemently opposed to the proposals – not surprisingly,
in view of the fact that Fianna Fáil sources were quoted as predicting that they would
lose ten seats, of which six would go to Fine Gael and four to Fianna Fáil (*Irish Times*,
9 Nov. 1988). After some vacillation, Fine Gael also came out against the proposals,
sealing their fate, since the minority Fianna Fáil government would be unwilling to
risk a Dáil defeat on the matter (*Irish Times*, 16 Nov. 1988).

and its report became the basis of the Electoral (Amendment) Act, 1990.

The final stage in the depoliticisation of constituency boundary revision came with the Electoral Act, 1997, which placed the boundary commission on a statutory basis. This reduced the role of the Minister for the Environment to the purely formal one of establishing a constituency commission (with pre-determined membership and terms of reference) on publication of the official breakdown of census results by area. The five-person commission is headed by a senior judge nominated by the Chief Justice, and has four ex-officio members: the Ombudsman, the Secretary General of the Department of the Environment, and the Clerks of the Dáil and Seanad. The commission is constrained by the following terms of reference (in addition to the overriding condition of article 16.2.3 of the constitution, not mentioned in the Act, which requires it to observe 'as far as it is practicable' a uniform deputy-population ratio from constituency to constituency):

(*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;
(*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.

The provisions of the act have since then been triggered on three occasions: commissions were appointed in 1997 and 2003 (leading to boundary revision Acts in 1998 and 2005, based

respectively on the 1996 and 2002 censuses), and again in 2007 (to take account of the 2006 census).[11]

The move to an independent boundary commission has resolved two major problems. First, it has promoted wider acceptance of a process that had previously attracted a high degree of public cynicism, as governments were accused of gerrymandering boundaries and pursuing naked electoral self-interest. Second, and related to this, it has saved a great deal of parliamentary time. The last politically driven measure (the 1973 Bill) had, as we have seen, taken more than eighty hours of parliamentary time. But the Bills which gave legal effect to the recommendations of the first five Dáil constituency commissions took between two and seven hours to secure their passage. The 2005 Bill, admittedly, took a great deal longer, but this was because of a range of particular local issues, underscored by grievances over the unrelated matter of electronic voting, and did not reflect on the independence of the commission.

The new procedure has not, however, resolved a remaining difficulty, and is in effect prevented from doing so by its terms of reference. Conditions (c), (e) and (f) are essentially conservative, in that they collectively promote stability in constituency boundaries (the third of these explicitly, the other two by implication, in suggesting appropriate deference to very stable county boundaries and unchanging geographical features). But there is a tension between these and condition (b) (which sets the number of deputies per constituency at between three and five), when it is taken in combination with article 16.2.3 of the Constitution (which requires adherence 'as far as it is practicable' to a uniform deputy-population ratio). Vindication of the latter principle, if it is narrowly defined, requires careful attention to the issue of boundary revision, and is likely to lead to frequent changes in the shape of constituencies. This has been reflected in

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[11] For the commission reports, see Ireland, 1998; Ireland, 2004. The appointment of the most recent commission was announced on 26 April 2007.

the extent to which constituency boundaries have continued to be unstable over the years, as summarised in Table 2.

Table 2 uses three criteria to assess the geographical robustness and stability of constituency boundaries. The first is the extent to which they coincide with well-known administrative divisions. As the table shows, the picture here is bleak: 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 is that Ireland possesses truly few administrative districts other than the county, and that use of low-level districts whose boundaries and names evoke minimal levels of public consciousness creates difficulties for popular recognition of the shape of constituencies.

This perspective is reinforced in the second criterion reported in table 2: the number of words used in the schedules to the electoral acts to define constituency boundaries. Except in 1923, this has normally been a long essay.[12] In the case of those constituencies which form part of counties, the description is likely to make sense only to lawyers – and even to them, in a purely formal sense. We may consider the manner in which the division of County Galway into two constituencies was described in the 2005 Act:

> **Galway East**: In the county of Galway the electoral divisions of: Abbeygormacan, Ahascragh, Aughrim, Ballinasloe Rural, Ballymacward, Clonfert, Clontuskert, Kellysgrove, Kilconnell, Killaan, Killallaghtan, Killoran, Killure, Kilmacshane, Kiltormer, Kylemore, Laurencetown, Lismanny,

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[12] To set this in context, the number of Austrian regional constituencies is precisely the same as that of current Irish constituencies, 43; but the number of words required to describe these was only 571; calculated from *Bundesgesetz über die Wahl des Nationalrates (Nationalrats-Wahlordnung 1992 – NRWO),* Anlage 1 (unciteable address beginning http://www.ris.bka.gv.at/) [2007-06-24]. This compares with 3,244 words to describe the same number of constituencies in the 2005 Irish Act.

Table 2: Basis of formation of constituencies created by electoral Acts, 1923-2005

| 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

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.

Oatfield, in the former *Rural District of Ballinasloe No. 1*; Ballinastack, Ballymoe, Ballynakill, Boyounagh, Creggs, Curraghmore, Glennamaddy, Island, Kilcroan, Kiltullagh, Raheen, Scregg, Shankill, Templetogher, Toberroe, in the former *Rural District of Glennamaddy*; Ardamullivan, Ardrahan, Ballycahalan, Beagh, Cahermore, Cappard, Castletaylor, Doorus, Drumacoo, Gort, Kilbeacanty, Killeely, Killeenavarra, Killinny, Kiltartan, Kilthomas, Kinvarra, Rahasane, Skehanagh, in the former *Rural District of Gort*; Aille, Athenry, Ballynagar, Bracklagh, Bullaun, Cappalusk, Castleboy, Cloonkeen, Colmanstown, Craughwell, Derrylaur, Drumkeary, Graigabbey, Grange, Greethill, Kilchreest, Kilconickny, Kilconierin, Killimor, Killogilleen, Kilmeen, Kilreekill, Kilteskill, Kiltullagh, Lackalea, Leitrim, Loughatorick, Loughrea Rural, Loughrea Urban, Marblehill, Mountain, Movode, Raford, Tiaquin, Woodford, in the former *Rural District of Loughrea*; Annagh, Ballynakill, Caltra, Castleblakeney, Castleffrench, Clonbrock, Cloonkeen, Cooloo, Derryglassaun, Killeroran, Killian, Mount Bellew, Mounthazel, Taghboy, in the former *Rural District of Mount Bellew*; Abbeyville, Ballyglass, Coos, Derrew, Drummin, Eyrecourt, Killimor, Kilmalinoge, Kilquain, Meelick, Moat, Pallas, Portumna, Tiranascragh, Tynagh, in the former *Rural District of Portumna*; Abbey East, Abbey West, Addergoole, Annaghdown, Ballinderry, Ballinduff, Ballynapark, Beaghmore, Belclare, Carrownagur, Carrowrevagh, Clare-tuam, Clonbern, Cloonkeen, Cummer, Donaghpatrick, Doonbally, Dunmore North, Dunmore South, Foxhall, Headford, Hillsbrook, Kilbennan, Kilcoona, Killeany, Killeen, Killererin, Killower, Killursa, Kilmoylan, Kilshanvy, Levally, Milltown, Monivea, Moyne, Ryehill, Toberadosh, Tuam Rural, Tuam Urban in the former *Rural District of Tuam*; and the town of Ballinasloe.

Galway West: The county of Galway, except the parts thereof which are comprised in the constituency of Galway East; and the city of Galway.

This description may be reduced to informal but imprecise shorthand, and may be displayed with some clarity on a map; but this does not take from the bewildering wording used formally to define it. We may assume that many people in the Galway East constituency will be aware of the location of Aughrim, Ardrahan and Athenry as placenames; but we may be certain that no-one (even local electoral specialists, politicians and their agents) would know the approximate boundaries of these, or any other, electoral divisions. This is not surprising, since these units were last used for electoral purposes in 1914 to return poor law guardians and rural district councillors.[13] They do not coincide at all with polling districts, and the rural districts referred to disappeared as administrative units eighty-two years ago. It is also likely that few people other than those most directly involved will be able to keep track of constituency boundary changes. For the people of Milltown in East Galway, the county boundary with Mayo is a highly visible and frequently emotive marker; the constituency boundary with Galway West is invisible, arbitrary and largely meaningless.

In urban areas, the position may be even harder for citizens to follow. The 1998 Act, for example, defined the Dublin South constituency as consisting of twenty-seven named electoral

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[13] Electoral divisions were created by the Poor Relief (Ireland) Act, 1838, for the election of 'guardians' of the boards of the network of workhouses then established. They were renamed 'district electoral divisions' by the Local Government (Ireland) Act, 1898, when they also became units for the election of rural district councillors (the position in towns was a little more complicated, and in larger towns the corresponding units were known as 'wards'). The last general election of boards of guardians and of rural district councils from these constituencies took place in May 1914. The elections due in 1917 were deferred due to the war, and the Local Government (Ireland) Act, 1919, introduced proportional representation, grouping district electoral divisions into multi-member 'district electoral areas'. It was in these new units that the local elections of 1920 took place. In the Irish Free State, the boards of guardians of the poor law union workhouses were abolished in 1923 and the rural district councils in 1925, except in Dublin, where they survived until 1930 (Roche, 1982: 50-52). In 1994, district electoral divisions and wards were renamed 'electoral divisions'. In rural Ireland, the great majority of electoral divisions have retained precisely the same boundaries since the reorganisation of poor law administration in 1850.

divisions in Dun Laoghaire-Rathdown county, a further nine in South Dublin county, and portions of three other electoral divisions. Defining two of these portions was straightforward: the constituency was to include the part of Cabinteely-Loughlinstown 'situated west of a line drawn along the road from Carrickmines to Kiltiernan', and the part of Stillorgan-Leopardstown 'situated south-west of a line drawn along the former Harcourt Street-Bray railway line'. But it took 315 words and exceptionally inaccessible text to describe the third portion. The following extract will convey the flavour (to be fair to those responsible for this wording, the constituency is much easier to visualise on a map):

> that part of the electoral division of Firhouse-Village situated north-east of a line drawn as follows – commencing at the intersection of the eastern boundary of the electoral division at Ballycullen Road by the imaginary south-easterly projection of the rear boundary of the curtilage of number 154 Woodlawn Park Grove, thence commencing in a north-westerly direction and proceeding along the said imaginary projection … [195 words omitted] … thence commencing in a north-easterly direction and proceeding along the boundary of the said townland to its junction with the south-western boundary of the curtilage of Firhouse National School (Scoil Carmel), thence along the imaginary north-westerly projection of the said boundary to its intersection by the north-western boundary of the electoral division at the River Dodder.

The third criterion used in table 2 is the stability of constituencies. Here, once again, the picture is one of potential difficulty for the electorate: in all electoral Acts except one, most of the constituencies that emerged were new, as their boundaries were altered at least slightly. The only exception, that of 1983, was a striking one, in that all constituencies outside Dublin, and most within the capital, continued unchanged from the 1980 Act. We may consider some statistics. Since the introduction of proportional representation in 1920, no fewer than 348 new

Dáil constituencies have been created. This counts as 'new' any constituency where there was even a marginal change in the boundary (for example, Limerick East in 1980, where the district electoral division of Ballycummin was gained from Limerick West), or where the 'new' constituency had existed previously (for example, Clare in 1980 reverted to its pre-1969 shape). The average life of a constituency is nine years. The record is held by the venerable constituency of Laois-Offaly, which has continued unaltered since it was created in 1920 as the constituency of King's County-Queen's County. But no other constituency comes close; two others created at the same time, Monaghan and Cavan, survived past the age of forty, but disappeared in 1961 and 1969 respectively. The next longest-lived constituency was Louth (1923-61), followed by Wicklow (1947-74); and three current constituencies (Cavan-Monaghan, Louth and Wexford) have already existed unaltered since 1980.

A final vivid example of the effects of frequent changes on local loyalties is offered by the many revisions which have swept people across county boundaries. Up to 1969, the people of Lisdoonvarna were part of the easily recognisable constituency of their own county, Clare (though from 1935 to 1947 this had protruded far into South Galway). In 1969, however, they were separated from Ennis and the rest of the county, and transferred into the constituency of Clare-South Galway. In 1974 they found themselves in the horseshoe-shaped constituency of West Galway. They were restored to their own county only in 1980. This example could be multiplied, with the partition of tiny Leitrim as the most obvious recent case.

Constituency boundary delimitation in Europe

The tone of the debate about constituency boundary revision in Ireland bears some resemblance to that in the UK. This is not altogether surprising: shared historical, cultural and linguistic features have made it natural for Irish people – including Irish lawyers – to look eastwards (and, indeed, westwards) to other English-speaking jurisdictions in the pursuit of constitutional, political, cultural and other models. In the area of parliamentary

seat allocation, Ireland has opted to follow the approach in Britain, which has handed responsibility for periodic revision of constituencies to a boundary commission since 1944, a responsibility earlier borne by politicians (Pulzer, 1975: 31-35; Gudgin and Taylor, 1979: 8-9; Blackburn, 1995: 113-56).

The problem is that the issues raised by the process of seat allocation in Ireland resemble those in continental European countries (where proportional representation with multi-member constituencies is the norm) more closely than those in Britain or the United States (where single-member constituencies are the norm). A very simple, standard approach has been adopted in continental Europe in the pursuit of electoral equity, one far removed from the unending tinkering with boundaries that is necessary to ensure fairness in systems based on single-member districts. It is worth setting the Irish approach in this comparative context.

The Irish Constitution's insistence on maintenance of a uniform deputy-population ratio 'so far as it is practicable' is a conventional attempt to protect the principle of suffrage equality, and is commonplace in democratic constitutions. This is a key ingredient in the so-called 'four-tail formula' for modern representative democracy – one of the demands for institutional reform that played so important a part in the struggle for democracy in nineteenth-century Europe. The 'four tails' demand endorsed by nineteenth century radicals and social democrats finds clear expression in article 1 of the Erfurt (1891) programme of the German Social Democratic Party, which called for 'universal, equal, and direct suffrage, with secret ballot' (other socialist parties, such as the Russian one, followed the same formula). It is also routinely written into contemporary constitutions, generally with the additional requirement that elections be 'free', as in the case of Germany (where article 38 of the constitution requires election of the Bundestag by 'general, direct, free, equal, and secret elections'), and Spain (where article 68 of the constitution provides that the Congress of Deputies be elected by 'universal, free, equal, direct, and secret suffrage').

These demands need to be seen in context. Secrecy of the ballot was designed to neutralise inappropriate external influences in elections, of the kind exercised in Ireland by landlords and priests before the passing of the Ballot Act in 1872 ended open voting. Direct voting (an issue of little importance in the United Kingdom) was designed to thwart the imperfectly democratic device of constraining voters to choose an electoral college which would then select parliamentary representatives, by allowing them instead to vote directly for their representatives (the election of the US President is the major surviving example of indirect voting). Universal suffrage stresses the need for the removal of all exclusion mechanisms so that the whole adult population is enfranchised. Suffrage equality was an effort to ensure that everyone's vote counts equally – to prevent undue parliamentary influence being exerted by small, unrepresentative clusters of powerful people. The 'rotten boroughs' in the British parliament are an example. The many tiny boroughs which each returned two members to the Irish House of Commons up to 1800 fall into the same category: such small villages as Doneraile, Dingle and Duleek returned the same number of members as the large counties which enclosed them (respectively, Cork, Kerry and Meath; see Johnston-Liik, 2002, vol. 2). The universal democratic demand for equality of voting power was designed to counteract abuses of this kind, not to promote a fruitless pursuit of arithmetical equality in an arguably inappropriate ratio (uniformity in the deputy-electorate ratio is a more obvious requirement of fairness than uniformity in the deputy-population ratio – one with which it is likely to conflict).

In continental Europe, the formula for constituency boundary delimitation and seat reapportionment is very simple, as we will see if we look at the position in countries facing the same kind of apportionment issues as Ireland. This means leaving aside the UK (single-member districts using the plurality system), France (single-member districts using the two-ballot system) and Germany (where half of the seats are elected from single-member

districts using the plurality system, with the remainder elected from regional lists). It also means leaving aside the Netherlands (where the whole country is treated as a single 150-member constituency) and Italy (where seats are not pre-allocated to regions before an election).

In those countries with a single-tier voting 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 is divided into three constituencies, Brussels, Louvain, and the Francophone district, using lower-level administrative units); in Luxembourg, four groups of cantons. In each case, seats are allocated between these strictly on the basis of population as measured by the most recent census. In Portugal, administrative districts are used, and in Finland groups of municipalities (which correspond substantially to provinces); but in these two cases the allocation of seats is based on the distribution of the citizen population rather than of the overall population.

In countries with a two-tier system (where most seats are allocated to constituencies, but some are held over to a higher level), the position seems more complex but the principle is the same in allocating seats at the lower level. In Greece, seats are allocated first to fifty-six pre-defined 'minor' electoral districts on the basis of population. In Austria, seats are apportioned initially on the basis of resident population plus registered but absent electors to forty-three 'regional electoral districts', or constituencies formed by combining local government areas. In Sweden constituencies are formed out of the country's twenty-one counties (though two are divided, and three cities constitute separate constituencies), and seats are allocated in proportion to the distribution of the electorate. A similar approach is adopted in Norway and Denmark, but there the allocation formula is more complex: in Norway, population density is taken into account as well as population, while Denmark adds a third consideration: seats are allocated according to a proportionality

formula based on population, electorate and area.[14] In the three
Scandinavian countries, a small number of seats is reserved for
national level allocation, and in Austria and Greece there are two
higher-level allocations based on a more complex formula.

What these systems have in common, and what distinguishes
them from the Irish approach, is that in each case a two-stage
process is followed: definition of constituency boundaries
(typically, for the long term) on the basis of existing
administrative divisions, and periodic allocation of seats to these
on the basis of an automatic formula. The second process
typically follows a different cycle from the first: every ten years in
Belgium, for instance (following the decennial population
census), but every four years in Sweden (following the electoral
cycle, and using electorate rather than population).

Allocating seats proportionally to constituencies seems at first
sight a straightforward, arithmetical exercise, but this is not the
case. Proportions will almost never result in integer (i.e. whole)
numbers of members being allocated to a particular
constituency. We may see this from a simple example. Let us
suppose that three seats are to be divided between two counties.
Red County has a population of 52,000; Green County has
48,000. It makes intuitive sense to divide the total population
(100,000) by three, and to use the resulting figure (33,333) as a
'quota', or the population that should be entitled to a single seat
(this is generally known as the Hare quota).[15] We may then

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[14] This discussion is based on the constitutions, electoral laws and other official
publications of the countries in question; for links to their parliamentary web sites,
see www.ipu.org. Further information has been derived from Chryssogonos, 2007.

[15] Alongside the Hare quota (in elections, number of votes divided by number of
seats), two others are widely used: the Droop quota (number of votes divided by one
more than the number of seats) and the Imperiali quota (number of votes divided by
two more than the number of seats). When used in elections, these quotas may
require more precision; thus, the Droop quota (which typically leaves a fractional
remainder) is truncated, if necessary, and one is added, to ensure that this is 'the
smallest number for which it is impossible that more than k candidates should attain
it', where k is the number of seats (Dummett, 1984: 269); see Gallagher, 2005, and
Sinnott, 2005, for discussions of this system in Ireland.

divide the county population by this figure to give us an indication of the 'fair' number of seats to which it is entitled. In terms of strict proportionality, then, Red County is entitled to 1.56 (52,000 divided by 33,333) seats and Green County to 1.44. All conventional apportionment formulas will allocate the integer portion calculated in this way to the respective counties, so each receives one seat. The simplest formula for allocating the third seat is the 'largest remainder' one: allowing for the two seats already allocated, Red County has a remainder of 0.56 and Green County of 0.48. The third seat is thus allocated to Red County, the one with the largest fractional remainder. This approach can be generalised to deal with larger numbers, so that once integer portions have been distributed, remaining places can be allocated in descending order of largest remainders.

This formula is widely used in allocation systems, but it has certain acknowledged drawbacks. In the example above, Green County could be divided into two smaller units, Dark Green County and Light Green County, with respective populations of 28,000 and 20,000. The three resulting units would then be entitled to representation of 1.56, 0.84 and 0.60 seats. On the largest remainder system, Red County is first allocated the seat to which its integer portion entitles it; and the two remaining seats go in order of largest remainder to Dark Green County (0.84) and Light Green County (0.60), leaving Red County (remainder 0.56) with only one seat – even though it is more populous than the other two combined. This problem might not be too serious when seats are being allocated automatically to pre-existing territorial units, but it leaves proportional representation list systems based on the largest remainder allocation highly vulnerable to manipulation by parties. A further anomaly arises, though. In certain circumstances, even if there are no new units, no boundary changes and no changes in population, a territory may lose representation *even if the overall number of seats available increases*. This anomaly – someone getting a smaller slice of the cake, even though the overall size of the cake increases and there are no extra mouths to feed – is known as the 'Alabama paradox', since the US 1880 census results would have given Alabama

eight seats in a 299-member House of Representatives, but if the overall number increased to 300 Alabama would end up with only seven. This system 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).[16]

An alternative approach that resolves these problems (but leaves others) is the 'highest average' one. This is based on the allocation of seats in such a way that the seat-population ratio is, as far as possible, the same from one constituency to another (the largest remainder system will not necessarily yield this outcome). This may be described as differing from the largest remainder system in that, following allocation of integer shares of seats on the basis of a quota as discussed above, the remaining seats are allocated to the constituencies with the highest average seat-population ratios in descending order. Seats are allocated initially by truncating proportionate shares (in other words, ignoring fractions). If there is a shortfall in the number of seats to be allocated, the highest average may be arrived at by using the d'Hondt system (calculating population-seat ratios on the basis of new seat distribution scenarios), or by progressively reducing the quota until a point is reached where the sum of the integer portions for all of the constituencies totals the number of seats to be allocated. 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. It corresponds to the d'Hondt system, widely used in European list voting systems, and sometimes used in constituency apportionment.

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[16] The process of seat distribution in the House of Representatives takes place in two stages: a preliminary apportionment of seats to states on the basis of population, and the delimitation of single-member constituencies within states depending on the outcome of this apportionment.

But with this formula there is an added complication: the Jefferson / d'Hondt approach may violate a 'quota rule' by giving a particular constituency, in certain circumstances, a number of seats greater than its proportionate share rounded upwards (for example, allocating an area whose due share is 7.9 seats nine seats rather than eight) – an intuitively unfair result. A variant of this method has been developed to tackle this difficulty. This initially allocates seats to constituencies by rounding rather than by truncating. If this does not result in allocation of the exact number of seats, the quota is adjusted until a value is found which, when rounded, yields exactly the overall number of seats to be allocated. 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; it corresponds to the Sainte-Laguë method widely used (typically in modified form) in northern European electoral systems. In fact, a minor adjustment to this method has been in use for post-census apportionment in the USA since 1941. This is the Huntington-Hill method, which uses the geometric mean rather than the arithmetic mean as the basis for rounding.[17]

The difference between these approaches may be illustrated by an example: how to allocate Ireland's current thirteen European Parliament seats between the provinces (for purposes of illustration, the four traditional provinces are retained – Dublin grouped with Leinster, and Connacht and Ulster as separate provinces). Table 3 shows the population of each province according to the 2006 census, and indicates the exact number of seats to which each is entitled on the basis of population. But this number is not an integer: Ulster, for instance, cannot have 82 per cent of a seat: it must have either one seat, or none. The largest

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[17] The geometric mean is the *n*th root of *n* numbers multiplied by each other; the arithmetic mean is the sum of *n* numbers divided by *n*. For example, the arithmetic mean of 5 and 6 is (5+6) / 2, or 11 / 2, or 5.50; the geometric mean of the same two numbers is $\sqrt{(5*6)}$, or $\sqrt{30}$, or 5.48. For an overview of these systems, see Balinski and Young, 2001; for a comprehensive analysis of their application to the allocation of seats to parties, see Gallagher, 1992.

Table 3: Three methods of seat allocation by province, 2006

Province	Population	Share of seats		Hamilton method			Jefferson method			Webster method	
		proportionate	*total*	*integer*	*remainder*	*added*	*final*	*seats*	*truncated*	*seats*	*rounded*
Leinster	2,295,123	0.541	7.04	7	0.04	0	**7**	8.00	**8**	6.85	**7**
Munster	1,173,340	0.277	3.60	3	0.60	1	**4**	4.09	**4**	3.50	**3**
Connacht	504,121	0.119	1.55	1	0.55	0	**1**	1.76	**1**	1.50	**2**
Ulster	267,264	0.063	0.82	0	0.82	1	**1**	0.93	**0**	0.80	**1**
Total	4,239,848	1.000	13.00	11	2.00	2	**13**	-	**13**	-	**13**

Note: Population figures refer to 2006, and it is assumed that 13 seats are to be allocated. The total share of seats shown in column 4 is based on dividing the population by the Hare quota (total population divided by 13, or 326,142). In the Jefferson method, this quota is progressively reduced to the point where the integer portions total exactly 13 (any number between 267,265 and 286,890, the figure used here, will yield this result). In the Webster method, the quota is adjusted to the point where the rounded figures total exactly 13 (any number between 335,241, the figure used here, and 336,080 will yield this result).

remainder (Hamilton) system begins by allocating the integer portions to the respective provinces. This accounts for eleven seats. The two remaining seats are allocated to the two provinces with the largest fractions: Ulster (0.82) and Munster (0.60), thus giving Ulster a single seat and Munster a total of four. In the d'Hondt (Jefferson) highest average system, we progressively reduce the size of the divisor (beginning with the Hare quota, 326,142) until we reach a value at which the integer portions sum to thirteen. Once the divisor is reduced to 286,890, we get this result. Any other divisor greater than or equal to 267,265 will yield a similar result; smaller divisors will allocate too many seats – fourteen or more. The outcome, a well-known feature of the d'Hondt system's tendency to favour larger groups, is that Ulster loses its seat and Leinster gains one. The Sainte-Laguë (Webster) system begins with a different logic: finding a divisor which will yield allocations that when rounded (not truncated) will give an integer value of thirteen. Any number from 336,080 to 335,241 will give this result. As table 3 shows, this produces yet a different outcome from the other two methods. The largest remainder system is commonly used in allocation of seats to constituencies in continental Europe, though some countries (such as Portugal) use the d'Hondt system. Specialist study of the issue suggests that the Sainte-Laguë (Webster) system – and not its more complex successor in the USA – is the fairest system all round (Balinksi and Young, 2001: 71-78).

Conclusion

This article has, then, highlighted the difficulties that have confronted those charged with revising constituency boundaries in Ireland. In the early years of the state, politicians were not particularly preoccupied with this aspect of electoral law. When, however, the 1959 constituency boundary Bill appeared to discriminate against Dublin and in favour of rural areas, opposition anger spilled over into a court challenge. The High Court judgement that the Act was unconstitutional and subsequent insistence on a rigid deputy-population ratio ruled out this practice for the future, but it also unintentionally

provided a cloak for gerrymandering by encouraging, if not forcing, governments to micromanage constituency boundaries. The introduction of an independent constituency commission in 1980 depoliticised the process, but boundaries have continued to be amended as vigorously as ever. By contrast, in continental European proportional representation systems, the principle of suffrage equality is met by periodic reallocation of seats to stable administrative districts using a simple arithmetical formula. The later article will show how this might be applied in Ireland, and will discuss the arguments that are likely to be raised against any fundamental change in this deeply ingrained political cultural tradition.

References

Balinksi, Michel L, and H Peyton Young (2001) *Fair representation: meeting the ideal of one man, one vote*. 2nd ed. Washington, DC: Brookings Institution Press

Blackburn, Robert (1995) *The electoral system in Britain*. Basingstoke: Macmillan

Chryssogonos, Kostas (2007) An introduction to Greek electoral law; available www.cecl.gr/RIGASNETWORK/databank/REPORTS/r8/GR_8_Chryssogonos.html [2007-07-18]

Coakley, John (1979) 'Spatial units and the reporting of Irish statistical data: an examination of the evolution of regional divisions', *Administration* 27 (1): 31-55.

Coakley, John (1980) 'Constituency boundary revision and seat redistribution in the Irish parliamentary tradition', *Administration* 28 (3): 291-328

Coakley, John (2007, forthcoming) 'Electoral district delimitation in Ireland', in Lisa Handley, ed., *Redistricting in comparative perspective*. Oxford: Oxford University Press

Dummett, Michael (1984) *Voting procedures*. Oxford: Clarendon Press

Gallagher, Michael (1992) 'Comparing proportional representation electoral systems: quotas, thresholds, paradoxes and majorities', *British journal of political science* 22 (4): 469-96

Gallagher, Michael (2005) 'Ireland: the discreet charm of PR-STV', pp. 511-532 in Michael Gallagher and Paul Mitchell, eds, *The politics of electoral systems*. Oxford: Oxford University Press

Gudgin, G, and PJ Taylor (1979) *Seats, votes and the spatial organisation of elections*. London: Pion Ltd

Ireland (1980) *Da?il Éireann Constituency Commission: Report* (Prl. 8878) Dublin: Stationery Office

Ireland (1983) *Da?il Constituency Commission: Report* (Pl. 1774) Dublin: Stationery Office

Ireland (1988) *Da?il Constituency Commission: Report* (Pl. 5984) Dublin: Stationery Office

Ireland (1990) *Da?il Constituency Commission: Report* (Pl. 7520) Dublin: Stationery Office

Ireland (1995) *Da?il Constituency Commission: Report* (Pn. 1619) Dublin: Stationery Office

Ireland (1998) *Constituency Commission report 1998* (Pn. 5074) Dublin: Stationery Office

Ireland (2004) *Constituency Commission: Report on Dáil constituencies 2004* (Prn. 1554) Dublin: Stationery Office

Johnston-Liik, Edith Mary (2002) *History of the Irish Parliament 1692-1800: Commons, constituency and status*. 5 vols. Belfast: Ulster Historical Foundation

Kavanagh, Adrian (2003) 'The constituency commission', *Irish political studies* 18 (2): 89-99

Pulzer, Peter GJ (1975) *Political representation and elections in Britain*. 3rd ed. London: George Allen and Unwin

Roche, Desmond (1982) *Local government in Ireland*. Dublin: Institute of Public Administration

Sinnott, Richard (2005) 'The rules of the electoral game', pp. 105-134 in John Coakley and Michael Gallagher, eds, *Politics in the Republic of Ireland*

Appendix 2

John Coakley (2008) Does Ireland need a Constituency Commission? Administration 55:4 77-113

Does Ireland need a
Constituency Commission?

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Introduction

The 2007 report of the Constituency Commission (Ireland, 2007) once again highlighted the unstable and unpredictable character of Dáil constituency boundaries. Just over two years after the passage of an Act which redesigned the constituencies, the commission recommended that most of these (24 out of 43) be reshaped, as well as proposing small adjustments to the distribution of Dáil deputies.[1] The revision process had lasted for six months, under the direction of a five-member commission (chaired by Mr Justice Iarfhlaith O'Neill, nominated by the Chief Justice, and with the clerks of the Dáil and the Seanad, the Ombudsman, and the Secretary General of the Department of the Environment as its other ex officio members).

The commission had considered 327 submissions from interested organisations and members of the public (though most of these were short, standardised complaints about the

[1] Since this article continues the argument of an earlier one (Coakley, 2007) which had gone to press before the constituency commission reported, the following data may be noted as updating tables 1 and 2 of the latter. The 2007 report recommended that the number of constituencies and of TDs remain unchanged, at 43 and 166, respectively, giving a mean constituency size of 3.9, with 17 three-seat, 15 four-seat and 11 five-seat constituencies. The index of variation (the difference between the largest deviation in the deputy-population ratio above and below the mean) would be 10.8 per cent, lower than at any electoral Act since that of 1974. Only three of the proposed constituencies (Cavan-Monaghan, Mayo and Wexford) were based entirely on counties, 31 were based on electoral divisions and 9 were based on smaller units or on imaginary lines. Describing the new boundaries (in the first appendix to the report) took up 3,161 words. The commission proposed the creation of 24 new constituencies, with a further 9 carried over from the 2005 electoral Act and the remaining 10 dating from an earlier period.

earlier partition of just one county, Leitrim). As well as engaging the attention of staff in the Department of the Environment, it had received extensive assistance from the Central Statistics Office and the Ordnance Survey. Yet its 84-page report (a portion of which dealt with constituencies for elections to the European Parliament), like that of its predecessors, was greeted with a mixture of lukewarm support and bitter disappointment. Notwithstanding the effort involved, and the Dáil and Seanad time required to translate the commission's recommendations into law, there is a good chance that by the time the new constituencies are actually used in a general election a new census will have taken place, and its results may show that this boundary revision exercise is already out of date.

Nor are some of the other expectations of the public likely to be satisfied. Sense of grievance over the continuing partition of Leitrim draws attention to the long-standing, emotional complaints that successive boundary revision Acts have been responsible for the 'mutilation' of county boundaries. Almost 40 years ago, the Council of Irish County Associations in London appealed to the Taoiseach to protect the integrity of Ireland's least populous county:

> Members of this Council deplore the annihilation of County Leitrim under the proposed Electoral Bill, and appeal to the Irish Government to consider alternative proposals which will preserve County Leitrim as far as possible, as an Electoral Unit, thus enabling the people of Co. Leitrim to enjoy their democratic rights to select and elect Leitrim Deputies to Dail Éireann.[2]

This appeal did not prevent Leitrim from being divided in 1969 between three constituencies, though at least its name was retained in each (Donegal-Leitrim, Sligo-Leitrim and

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[2] Letter to the Taoiseach from Riobárd Ó Dálaigh, secretary of the council, 24 March 1969; Taoiseach's Department papers, National Archives, 2000/6/652 (formerly S 18,290).

Roscommon-Leitrim). This was reduced to a two-way partition (between Sligo and Roscommon) in 1974; and the county borders were restored in 1980, when it once again became a dual constituency with Sligo. But the 2005 revision partitioned the county once more, showing that while the new independent boundary commissions have put paid to political intervention in the revision process, they have not necessarily satisfied all critics.

Is the trauma associated with this apparently unending tinkering with constituency boundaries in a game of catch-up with census data really necessary? An earlier article (Coakley, 2007) drew attention to the much less demanding approach in countries with similar electoral systems to the Irish one, such as those in continental Europe, where seats are reallocated mechanically between stable electoral districts on the basis of a simple formula. It also outlined the contentious Irish experience of constituency boundary delimitation, suggesting that the sense of grievance felt by many politicians, the alienation of a portion of the electorate and the disruption of the work programme of officials caused by this process could have been avoided.

The present article takes the argument forward in two respects. It aims to show that Ireland's departure down a lonely and unfortunate path, though largely taken for granted at all levels of Irish society, has not been necessary. The continental European approach could easily have been applied, and the article demonstrates how this might have been done, documenting this in a statistical appendix which illustrates the kind of constituencies that might have existed. Second, the article argues that such a system could still be adopted; it seeks to counter some of the more obvious arguments that would certainly be raised against it and to present the case for change. It concludes that, notwithstanding their diligent work, constituency boundary commissions have been charged with a pointless task, whose underlying objective might be attained much more easily and effectively by less onerous and more conventional means.

Applying the European Formula in Ireland

It was perhaps natural for Irish lawmakers in the 1920s to consider the British model as the obvious one for constituency boundary delimitation. This was the constitutional system with which most Irish politicians – however radical their republican-ism – were overwhelmingly familiar, and the system of propor-tional representation bequeathed to independent Ireland by the departing British administration was the 'British' single transferable vote (STV) one, not the more common continental European party list system.

There was one important practical consequence of adoption of the STV rather than the party list system of proportional representation. The list system delivers a speedy outcome regardless of constituency size (though of course tending to give a more proportional result in constituencies with large numbers of members). But the human cost and administrative inconvenience of STV rise rapidly with constituency size. If there were, say, 20 seats in a constituency, it is to be expected that large parties would each nominate up to a dozen candidates who, together with candidates from smaller parties, might result in a ballot paper with 40 or 50 names. This would cause administrative problems, and it would pose a significant challenge for voters, who would be entitled to rank all names, and who would be expected to rank at least a few. An election on this scale took place in 1925, the only occasion on which a portion of the Seanad was elected directly by the people: the whole territory of the state became a vast constituency for the election of 19 senators by STV. There were 76 candidates, whose names appeared in four columns on a huge ballot paper, and it took 67 counts over three weeks to complete the election, an outcome that attracted a great deal of criticism (see Coakley, 2005). For this reason, there is a case for not applying the continental European formula without

modification: it would be sensible not to have enormously large constituencies.

The rest of this section considers what might have been: how the principle of equal representation might have been applied in Ireland had the continental European approach been adopted. This principle corresponds with one of the 'four tails' advocated by nineteenth-century radical democrats: it matches the principle of suffrage equality (which, along with the notions of direct voting, secret ballot and universal suffrage, comprised the classic democratic reform programme; see Coakley, 2007). In the Irish constitutional tradition, it is the ratio of population to representatives rather than the ratio of voters to representatives that emerged as crucial. This was written into article 26 of the Irish constitution in 1922: 'the proportion 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 possible, be identical throughout the country'. This formulation was continued in the 1937 constitution, as discussed later here. This section seeks to demonstrate how relatively painless the continental European system can be by looking at what would have been the position had it been introduced at the foundation of the state. Had this been done, the original fundamental electoral Act would have addressed three questions: (1) the total size of the Dáil, (2) the boundaries of the constituencies to be used in returning deputies and (3) the formula to be used in allocating seats to constituencies.

First, a simple approach would be to set Dáil size at, say, 140; the 1911 census, on which this would have had to be based, would have allowed a minimum of 105 and a maximum of 156 deputies, given the constitutional requirement that the number of such deputies be not less than one for every 30,000 or more than one for every 20,000 of the population. This refers, of course, only to Dáil deputies to be elected from territorial

constituencies; the National University of Ireland and Dublin University (Trinity College) each returned four deputies in 1921 and 1922, and three from 1923 to 1937. Dáil size could have remained at this level almost until the present, but would have had to be altered on the basis of the 2006 census results (which require the Dáil to have between 142 and 211 members, on the basis of the ratios mentioned above). For illustrative purposes, it is assumed here that Dáil size would be increased to 166 following the 1979 census (as indeed it was).

Second, administrative counties in principle become constituencies. There were 31 of these, with a small average population, and some would be entitled to only one or two members – levels too low to permit genuine proportional representation. It is assumed here that three would be set as minimum constituency size (a level in any case set by the constitution in 1937), and that an upper size of nine members would be set, for practical reasons already discussed. To achieve appropriate constituencies, it would be necessary to merge smaller counties with adjacent ones with which they had links at least at the geographical level, and in exceptional cases to divide counties. The formula could thus be that each administrative county would become a Dáil constituency, with the following exceptions, to produce a standard set of 25 constituencies.

- The county boroughs (cities) of Limerick and Waterford would be included in the counties with which they shared their names; the two ridings of Tipperary would together constitute a single constituency; and the small counties of Carlow, Laois, Longford, Leitrim and Monaghan would be 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 would be divided into two constituencies, 'East' and 'West', by merging major local authority districts;

Cork county borough (city) would remain separate; and Dublin county borough (city) would be divided into two constituencies, 'North' and 'South', on the same basis; Dublin county would remain separate.

Third, it is assumed that the Sainte-Laguë/Webster highest average allocation system would be chosen (it is acknowledged as the fairest system for allocation of this kind), and that it would be applied after every census. This has been discussed alongside its alternatives in an earlier article (Coakley, 2007). It entails finding a quota or divisor which is used to calculate each constituency's proportionate share of seats, so that when fractional remainders are rounded up or down, following basic rules of arithmetic, the total number of seats allocated is exactly the number targeted for distribution.

The outcome of this process would be as reported in appendix 1, part (a) of which indicates the population of each constituency, and part (b) the number of seats based on the Sainte-Laguë/Webster system. Initially, the results of the 1911 census would have had to be used (they did indeed form the basis of the 1923 Electoral Act). There would originally have been two large nine-seat constituencies (Cork West and Mayo), and five three-seat constituencies, with others returning intermediate numbers. The appendix shows how the position would have changed following subsequent censuses. For reasons of space, the outcomes in certain intermediate censuses (1951, 1961, 1971, 1981, 1991 and 2002) have been dropped from the appendix; any issues to which these might have given rise are discussed in the text.

As the appendix shows, this arrangement would have been extraordinarily stable. Twenty constituencies (the first 20 listed) 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. It is assumed here that it
would have been merged with Leitrim-Sligo following the results
of the 1971 census to produce the new constituency of
Connacht East. The greater Dublin area presents a bigger
difficulty. This would originally have been divided into three
constituencies. The extension of the city boundaries that took
place in 1930 could have been followed by dividing each of the
city constituencies (Dublin City North and Dublin City South)
in two, an 'inner' constituency (including areas closest to the city
centre) and an 'outer' one (the newer suburbs).[3] This would have
been sufficiently robust to last to the present, without further
modification. But the growing population of Dublin County
would also require attention. A new constituency of Dun
Laoghaire-Rathdown would have been created in 1961, with the
rest of the county partitioned into northern and southern
constituencies following the 1979 census. These areas would
correspond with the new administrative counties (Dun
Laoghaire-Rathdown, Fingal and South Dublin) created in
1994. But South Dublin would quickly become too large, so it
is assumed here that it would be divided into a northern and a
southern constituency (we might label them Clondalkin and
Tallaght, respectively) following the 1986 census. It should be
noted that, with the exception of the division of South Dublin,
these changes in Dublin County constituencies would have
matched local government reforms, though as envisaged here
they would have fallen due before local government restructuring
actually took place.

This approach, then, gives us a very stable set of constituencies,
each with a clearly defined identity and well-recognised
boundaries. In some cases, representation would have been

[3] Rapid population growth meant that the 1930 local government extension was long
overdue; though radical, it was not as far-reaching as had been recommended by the
Report of the Greater Dublin Commission of Inquiry (McManus, 2002: 89-90).
Later changes in the government of greater Dublin also tended to lag behind
population growth, an important consideration for this article.

virtually unchanged since the 1920s: Carlow-Kilkenny, Laois-Offaly and Wexford as five-member constituencies, for example, though their representation would occasionally have slipped back to four. In others, there would have been a big but gradual drop, though without any need for boundary change: Mayo falling from nine to five, for instance, and Cavan-Monaghan from seven to five. In yet other cases, 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.

Two questions remain to be addressed: how closely do these constituencies adhere to the principle of equal representation, and to what extent do they correspond to stable areas with a large measure of public recognition and acceptance?

As to the first question, the answer is straightforward. None of the revisions proposed here conforms literally to the provisions of the Constitution; all of them conform to its spirit, or intention. But this point must quickly be set in context. *None of the constituency boundary revision measures actually adopted since 1923 has conformed literally to the provisions of the Constitution either; and some of them (especially those adopted since 1947) have arguably failed to conform to its spirit, or intention*. This point will be explored further in the next section, but it may be documented statistically. Part (c) of the appendix reports the population per deputy in the constituencies described here. The simplest way to assess compatibility with the principle that the deputy-population ratio shall as far as possible be the same from one constituency to another is to measure the gap between the lowest and highest ratios. For example, the 2007 commission's recommendations gave Carlow-Kilkenny the highest population-deputy ratio (26,749 people per TD), 4.73 per cent above the national average of 25,541, and it gave Cavan-Monaghan the lowest ratio (24,000), 6.03 per cent below the national average; the gap between these two figures, 10.76 per cent, gives a good indication of the overall deviation. The deviations in the constituencies devised here are reported in part (d) of the

appendix. The smallest difference is 16.9 per cent (1991) and the largest is 29.3 per cent (1971), though these particular years have had to be dropped from the appendix. This compares favourably with the position before the 1961 High Court decision (where the range was from 17.4 per cent in 1923 to 27.8 per cent in 1947), but is rather higher than the deviations that have been the norm in later electoral acts (ranging from 8.1 per cent in 1961 to 15.4 per cent in 2005).[4]

On the other hand, the small loss in equality has been accompanied by significant gains in coherence, familiarity and stability. Three criteria were used in an earlier article to measure these characteristics: the extent to which constituency boundaries coincide with existing administrative boundaries, the ease with which they may be described and recognised, and their durability over time (Coakley, 2007). We may now ask how this approach fares, as measured by these criteria. The point emerged in the earlier article that most constituencies created since 1935 have been defined in terms of low-level units, such as electoral divisions, which are unrecognisable to the general public, and that slices of territory from one county are often incorporated with another. In the scheme suggested here, no county boundaries are breached, and only two counties are divided. In the case of Cork, the original division coincides with well known administrative areas (rural and urban districts) which, though they disappeared in the 1920s, would have left an intra-county border that would by now be quite familiar. In the case of Dublin City, a straightforward, generally recognised division between North and South would have been modified by a further division between 'inner' and 'outer' city areas that would become familiar over time. In Dublin County, changes could have coincided with local government reform, except for the need to divide Dublin County South.

[4] An alternative 'malapportionment index' which takes account of the deviations of all constituencies from the mean population-deputy ratio showed Ireland in the mid-1990s as having a score of 2.6 per cent, rather lower than Austria, Greece and Spain, but higher than Finland, Portugal and Switzerland, to name some of those countries with which it can most easily be compared (Samuels and Snyder, 2001: 660-1).

The complex wording, similarly, required to define boundaries would no longer be needed: the schedule to the original Act would need about 350 words, much shorter than the long essays (typically of more than 3,000 words) that have been the norm more recently. To recapitulate, the only subsequent changes would have been (1) a simple redefinition of the Dublin City constituencies in 1930 in association with the major change in city boundaries as part of the local government reform process, (2) an even simpler amendment merging Roscommon with Leitrim-Sligo around 1971, and (3) a rather more demanding set of changes in Dublin County in 1961, 1979 and 1986 to take account of rapid population growth (the first two of these could have been carried out as part of local government reform).

Finally, the proposed set of constituencies is very stable. Instead of the 348 constituencies that have been created since 1920, there would have been a total of 35 constituencies over time.[5] Furthermore, 20 of these could have survived unchanged from the beginning, and most of the others would have had a long life. Only the constituency of Dublin County South would have been short-lived: created around 1979, it would have been divided by about 1986.

Arguments against change

The suggestions in this article regarding a new approach to constituency boundary revision may appear so radical that their chances of securing acceptance are slight. It is, however, worth discussing some of the more obvious objections to this proposal. We may consider three specific criticisms, each of them based on particular provisions of the Constitution: its insistence on equal

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[5] An earlier article (Coakley, 2007) pointed to the unique status of Laois-Offaly, which has survived without change since it was created in 1920 as Kings County-Queen's County; but the most recent (2007) electoral commission proposes ending its remarkable history as a stable entity, by transferring 10 electoral divisions from Offaly to Tipperary North.

representation, its provision for regular revision by the Oireachtas, and its specification of a relatively demanding electoral system, proportional representation by means of the single transferable vote.

Equality of representation

It could be objected in the first place that the constitutional requirement that a uniform deputy-population ratio be maintained entails painstaking revision of constituency boundaries to match the most recent census results. The meaning of the 1937 Constitution (which in this respect carries on the provisions of the 1922 Constitution) seems clear. 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, which takes precedence over this, is much more demanding; it requires conformity to this ratio '*sa mhéid gur féidir é*' ('in as far as *possible*'), thus reproducing the requirement of the 1922 Constitution, article 26 of which stipulated conformity to this ratio 'so far as possible' across constituencies.

This is one of the instances where there is a clear conflict between the Irish and English versions of the constitution – not a particularly surprising one, since, as the definitive study of the Irish language text of the Constitution points out, 'practically every section of the Constitution contains divergences between the Irish and the English texts' (Ó Cearúil, 1999: 7). This is in line with the reality that there are no two languages between which perfectly accurate translation is possible. For the courts, a literal interpretation of the Constitution would have to abandon the notion that the Irish and English texts can always be reconciled, and rest instead on the Irish language version – a singular challenge, since most judges are not fluent speakers of Irish, and there is a perception that the Irish version is a derived document, a translation of the English version that was worked

through in the Dáil.[6] Strangely, though, the High Court ruled in 1961 that 'no material discordance exists between the English and Irish texts' of the constitution in this respect.[7]

The implications of this narrower understanding of the Constitution are clear. Since 1841, the Irish census has used the townland as its basic enumeration and reporting unit. Census results were published at this level for the whole island until 1911; since then, townland data have been available on request from the Central Statistics Office; and townland data continued to be published in the Northern Ireland census until 1951. Use of this unit (the average population of which in 1911 was 58) permits the fine-tuning of constituency boundaries in such a way that near-mathematical accuracy can be obtained in the deputy-population ratio from one constituency to another.

This strict interpretation is compatible with that in another jurisdiction where the principle of equal representation is constitutionally embedded in respect of the lower house of parliament (see Huckabee, 2001). In the USA, article 1.2 of the Constitution provides that 'representatives … shall be apportioned among the several states … according to their respective numbers'. There, a two-stage process has been followed. The first is the *apportionment* stage. The Bureau of the Census, which conducts a census every 10 years – originally, primarily to apportion seats in the House of Representatives – reports to the President within 9 months on the population of each state; the President almost immediately informs the Clerk of the House of Representatives of the population and number

[6] Work on the Irish text of the Constitution proceeded simultaneously with the English version, beginning in October 1936 with translation of an earlier draft, and de Valera claimed that his own work on the Constitution rested on this; but he did not deny outright that the Irish version finally presented to the Dáil was a translation (Mac Giolla Choille, 1988). It seems clear from the Dáil debates that all major decisions on the content of the Constitution were made through the medium of English.

[7] 'John O'Donovan, Plaintiff, v. The Attorney General, Defendant', *Irish reports* 1961, pp. 114-56, at p. 132.

of representatives to which each state is entitled; and the Clerk passes this information on to state governors within 15 days. The second stage, *redistricting*, then begins: the division of states into the appropriate number of congressional districts.

In the past, the redistricting or constituency boundary revision process was carried out with uneven attention to the principle of equal representation, but a series of Supreme Court judgements brought about a radical change in the position.[8] The result has been a pattern of complete mathematical parity in most states, and of a level close to this in others. To take the example of Colorado, whose 2000 population (4,301,261) is close to that of Ireland: the census showed that it was entitled to seven congressmen, with an average population of 614,466 each. Two of the state's congressional districts (the 4th and the 6th) have precisely this population; two lie above it by one person, with a population of 614,467 (the 3rd and 5th districts); and three lie below it by the same amount, with a population of 614,465 (the 1st, 2nd and 7th districts). Some might consider this impressive; others would regard it as completely pointless. Arithmetical perfection has been achieved in applying the principle of equal representation within states, but at a terrible cost in terms of both geography, with bizarrely-shaped districts, and of political legitimacy, given the general acceptance that the process is

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[8] In Baker v. Carr, *United States reports* 369 (1962), pp. 186-349, the court held that it was appropriate for federal courts to intervene to ensure fair apportionment; in Wesberry v. Sanders, *United States reports* 376 (1964), pp. 1-51, such intervention took place in Georgia, the court ruling that 'as nearly as is practicable one person's vote in a congressional election is to be worth as much as another's'; and in Karcher v. Daggett, *United States reports* 462 (1983), pp. 725-790, it ruled against the redistricting arrangement in New Jersey, on the grounds that a deviation of 0.7 per cent between the highest and lowest ratios was excessive, in effect calling for mathematical parity in the population of congressional districts. As an indication of the kind of parameters viewed as acceptable by US experts, the American Political Science Association (1951: 154-5) had earlier recommended much more sensibly that approximate equality between congressional districts could be obtained by ensuring that deviations should remain within a 10 per cent band on either side of the mean within an individual state, and that they should in no case exceed 15 per cent.

normally driven by considerations of electoral advantage, and a lack of interest by the courts in the extent of gerrymandering.

Focussing on the trees may have caused US legislators and judges to lose sight of the wood. Following the 2000 reapportionment, notwithstanding numerical parity *within* states, there were big disparities *between* them: the gap between the largest deviation above and below the mean was 62.5 per cent, well above any level that would be viewed as acceptable in Ireland.[9] Furthermore, there is a strong perception among observers that the pursuit of arithmetic equality has disguised a deeply partisan procedure, causing redistricting to be described as 'one of the most conflictive political activities in the United States' (Engstrom, 2002: 51). The process and its results have drawn 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), and 'outrageous', 'contorted' or 'scandalous' (Monmonier, 2001: 150, 154, 156).[10]

The contribution of the courts in Ireland to the equal representation debate has been more solidly grounded in broad considerations of democratic theory, though the initial judicial intervention in 1961 had one effect similar to that in the USA, in opening the door to large-scale gerrymandering. In this case, Mr Justice Budd held that the 1959 constituency revision Act

[9] Calculated from Mills, 2001: 2. This means that while, for example, Colorado was struggling to achieve complete equality in the range of 614,465 to 614,467, adjacent Utah was struggling to ensure that its three congressional districts were similarly equal – to each other, not to Colorado's (and they were, at 744,389 for one district and 744,390 for the other two). In view of the level of inter-state inequality, a US federal district court ruled in 1991 that the whole apportionment system was unconstitutional, but it was overruled by the Supreme Court in Department of Commerce v. Montana, *United States reports* 503 (1992), pp. 442-466, which held that the goal of equality was 'illusory for the nation as a whole' (p. 463), but not so within states.

[10] On the complexity of electoral district delimitation issues – which should be sufficient to scare off even the most determined boundary architect – see the essays in Grofman et al, 1982, and Forgette and Winkle, 2006.

was 'such as to produce substantial departures from the ratio of members of Dáil Éireann to the population of the Republic prescribed by the Constitution, causing grave inequalities of representation for which no justification or genuine administrative difficulty exists', and that it had also failed to take due account of changes in population distribution; although he adopted a quite restrictive interpretation of how closely a uniform ratio should be followed, he did not insist on mathematical accuracy.[11] This approach was developed by the Supreme Court in ruling on the constitutionality of the new Electoral (Amendment) Bill, 1961:

> Exact parity in the ratio between members and the population of each constituency is unlikely to be obtained and is not required. The decision as to what is practicable is within the jurisdiction of the Oireachtas. It may reasonably take into consideration a variety of factors, such as the desirability so far as possible to adhere to well-known boundaries such as those of counties, townlands and electoral divisions. The existence of divisions created by such physical features as rivers, lakes and mountains may also have to be reckoned with. The problem of what is practicable is primarily one for the Oireachtas, whose members have a knowledge of the problems and difficulties to be solved which this Court cannot have. Its decision should not be reviewed by this Court unless there is a manifest infringement of the Article.

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[11] 'O'Donovan v. Attorney General' (1961): 155. Justice Budd's judgement was widely interpreted subsequently as permitting a 'tolerance' level of 5 per cent above or below the average deputy-population ratio. Mr Justice Clarke has, however, noted that this interpretation (apparently based on 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) is misleading: 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 per cent and 1.7 per cent; see 'Murphy and another v. Minister for Environment and others', [2007] IEHC 185, ss. 3.12-13; available http://www.bailii.org/ie/cases/IEHC/2007/H185.html [2007-07-08].

> This Court cannot, as is suggested, lay down a figure above or below which a variation from what is called the national average is not permitted.[12]

The question whether the deviations that would arise under the scheme proposed here would be compatible with the Constitution has no clearcut answer, and would rest ultimately on the position taken by the Supreme Court. A narrow, literal interpretation would lead it to find wanting all boundary revisions to date (including all of those devised by independent boundary commissions). Fortunately, the courts have adopted a much more holistic approach, seeking to identify the principles lying behind particular constitutional formulations rather than spelling out the literal implications of specific clauses, with the 2007 judgement of Mr Justice Clarke as an effective illustration of a judge's appreciation of the broad political principles that must inform constitutional interpretation in a modern democracy.[13] Vindicating the mainstream principle of equal representation should be no more traumatic in Ireland than elsewhere in Europe, and need not violate citizens' sense of geographical identity.

Mechanics of revision

It could also be objected that the constitutional requirement that the Oireachtas revise constituency boundaries at periodic intervals precludes the transfer of this function to any other agency. This argument has weight, but need not undermine the proposal being made here. Article 16.2.4º of the Constitution

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[12] 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 per cent or over would be unacceptable and, in all probability, contrary to the provisions of the Constitution relating to equality of representation' (Ireland, 1988: 28).

[13] 'Murphy v. Minister for Environment' (2007).

requires the Oireachtas to 'revise the constituencies at least once in every twelve years'. The Oireachtas has already devolved the spadework entailed by this responsibility to a boundary commission, whose recommendations up to now have been enacted without amendment (with an important qualification in the case of the 1988 commission, whose terms of reference were allegedly politically biased, as discussed in Coakley, 2007).

The alternative procedure, calculating reapportionment based on a new census, could easily be managed by the Oireachtas – there would be little to debate, other than egregious departures from a uniform deputy-population ratio. The expression 'revise the constituencies' is clearly intended to refer to maintenance of this ratio, and this could be done by reapportionment of seats rather than by alteration of boundaries (which would take place only rarely). This is much 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.

Constituency size

Some would argue that the relatively large constituency size proposed here is incompatible with the single transferable vote system of proportional representation. This is a potentially serious issue: STV indeed implies modest constituency size, in that it is based on voters ranking individual candidates, an exercise that can have meaning only if there is some restriction on the number of candidates. In the past, though, voters in Galway have been able to cope with a nine-member constituency; large constituencies have been common in local elections; and in 1925 the electorate survived a big event, the election of 19 senators from a list of 76 candidates by STV. Furthermore, if electronic voting were to be introduced one of the major objections to large constituencies (the complexity and long duration of the count) would be overcome. If, in any event, some of the constituencies suggested here appear too large, other solutions are possible. Galway would be entitled to nine seats in

2006, for instance, but it could be disaggregated into its two component administrative counties, Galway County and the new Galway County Borough.

But this objection could be stood on its head. The practice since 1947 of restricting maximum constituency size to five is of questionable compatibility with the Constitution. This norm was written into the terms of reference of the various boundary commissions, where it was initially described as 'traditional' – a misleading epithet for a pattern that in 1980 was still relatively recent, but which in the intervening period has come to be seen as 'normal'. One commission, that of 1988, was even required to confine itself to three- or four-member constituencies, except when five-member constituencies might have been necessary to avoid a breach of county boundaries.

The constitution, however, 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).[14] This requires moderately large constituencies, since the threshold for representation (which approximates to the Droop quota, as used in Dáil elections) will otherwise be too high: 25 per cent in a three-seat constituency, 20 per cent in a four-seater and 17 per cent in a five-seater, for example. The relationship between proportionality and constituency size is well established, with large constituencies considered important for the representation not just of smaller parties but also of other groups such as women (Shugart, 1994: 32-33).[15] 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,

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[14] 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.

[15] 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).

2005: 517).[16] This reduced level of proportionality seems particularly inappropriate at a time when Irish society is becoming more complex and diverse: in this increasingly multicultural state, proportional representation is arguably more important than ever.

The case for change

The objections considered in the last section were mainly constitutional in their thrust. Each of them, it has been argued, might in fact be presented as an argument *for* rather than *against* change. The quest for arithmetic equality may cut across other important principles, such as the need to respect local loyalties and to maintain democratic legitimacy; regular revision by the Oireachtas is made easier, not more difficult, by the proposal put forward here; and it is small constituency size, not large size, that is most likely to conflict with the constitutional requirement for proportional representation. But there are additional arguments, overlapping to some degree with these, which support the case for change. These respond to defects in the existing system: the need to accept the logic of proportional representation, to respond speedily and efficiently to population change, and to protect the legitimacy of the apportionment process.

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[16] Early studies suggested that the system was reasonably proportional (Laver and Mair, 1975; Gallagher, 1975; O'Leary, 1979: 107-10), and concluded that while constituency size was likely to have an impact, this was surprisingly small. Later research showed Ireland as being at an intermediate point in the league table of proportionality, however measured (Gallagher, 1987: 29; Gallagher, 1991: 40). It should be noted that discussion of this kind rests on the implicit assumption that first preference votes are categorical party choices, an assumption whose validity remains to be demonstrated, though in the absence of evidence to the contrary a not unreasonable one. Although constituency size clearly has big potential effects, these often cancel each other out (Gallagher, 1986: 258-60). But intention matters too; and it has been noted that 'only in the Republic of Ireland was there a marked and prolonged tendency to reduce the size of constituencies within which PR was sought; and it was only there than an apparently deliberate attempt was made, for a period between 1969 and 1977, to 'gerrymander' the size of constituencies in favour of particular parties' (Carstairs, 1980: 217).

Rectifying Irish exceptionalism

The system proposed here suggests tackling the anomalous Irish position by simply switching to the system which is normal for proportional representation. Ireland's unusual approach to constituency boundary revision is not the only instance where electoral law deviates from the norm in proportional representation systems. Casual vacancies in Dáil membership, for instance, are filled in by-elections where the whole constituency is treated as a single-member district, a clear violation of the fundamental principle of proportional representation.[17] But there is another aspect of Irish institutional exceptionalism which makes the constituency boundary revision process even more difficult: the country's peculiar one-and-a-half-tier system of local government. Half of the lower tier (rural district councils / poor law unions) was abolished in the 1920s, leaving only certain types of large town with their own system of local government. This made the identification of any recognisable units below the level of the county for purposes of constituency boundary delimitation exceptionally difficult, aggravating the challenge of creating familiar looking electoral units – a position unique to Ireland.[18]

[17] On the by-election anomaly, see Gallagher, 1996. In list-based proportional representation systems, when casual vacancies occur the next candidate on the list of the party where the vacancy occurs is given the seat; in Malta, the only other sovereign state to use STV for election of its house of representatives, casual vacancies are filled by a recount of the papers of the candidate causing the vacancy.

[18] The normal two-tier continental European system of local government juxtaposes a 'high' level (county, province or département), of which there is a small number of large units, with a 'low' level (commune or municipality), of which there is typically a very large number of small units. The populations of the latter normally range widely in size, but on average are low; in 1980, for instance, the mean population per commune was 30,000 in Sweden, 24,000 in Germany, 19,000 in Denmark, 17,000 in the Netherlands and in Belgium, 7,000 in Italy, 3,000 in Luxembourg, 2,000 in Switzerland and 1,500 in France (based on Roche, 1982: 12-13 and United Nations, 2007). In Ireland, not more than about 15 per cent of the population live in legally defined local authority areas below the level of the county or county borough; the mean population in 2006 of the main units (the 34 administrative counties and county boroughs) was 125,000. For a comparative overview, see Glassner, 1993: 143-9.

The solution proposed here allows these two eccentric features of the Irish system to cancel each other out, by replacing redistricting by reapportionment as the primary instrument for achieving equal representation, and by using larger units which are based as far as possible on local government areas in the formation of constituencies.

Delivering efficiency

The system proposed here is so simple that there would no longer be any need for 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, and it was even less impressive in earlier years when political interests dominated the process.

The track record speaks for itself. Since 1923, the average gap between the date of Irish general elections and the censuses on which the constituencies used were based has been 9.2 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). Of eight commissions to date which have recommended new Dáil constituencies, *not one saw its recommendations translated into legally defined constituencies which were used in a general election before the next census intervened.* It is true 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; but 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, this was based on preliminary census results (in 1986, these showed very large inequalities); in the fourth (the 2006 census), final results were available, and showed that the modest departure from a uniform deputy-population ratio in the 2005 Act (a gap of 15.4 per cent separating the highest from the lowest deputy-population ratio)

had already more than doubled, to 31.8 per cent (ranging from Dun Laoghaire, 10.6 per cent below the national average, to Dublin West, 21.2 per cent above it). The results of another commission (1988) were entirely set aside, and it is too early at this point to assess the role of the most recent commission.

In this context, it is hard to resist the alarming conclusion that the obviously serious task of defending the principle of equal representation has been sacrificed to the apparently frivolous pursuit of a constitutional will-o'-the-wisp. The present system clearly seeks only to use an objective historical criterion, not to reflect continuing population change. Since constituency commissions have been introduced, it has taken, on average, a little more than three years 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, although the High Court ruled in 2007 that the commission is required to use final rather than preliminary census data, if the latter were used the period of delay could be shortened to three months from the date of the census.[19] Automatic reapportionment would, then, result in significant gains in speed and efficiency.

[19] 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'. In fact, the preliminary report (compiled from local enumerators' summaries immediately after the census) provides an extremely accurate estimate 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 per cent and 0.63 per cent. 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 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.

Enhancing legitimacy

Notwithstanding specific constitutional provisions regarding equal representation, any democratic constitution is driven by the broader consideration of protecting legitimacy of representation. The European-style approach suggested here may produce a nominally higher deviation from the average deputy-population ratio than a system where boundaries are continually overhauled, but it is much simpler, more flexible, more responsive to population change, more predictable in its outcome, and more likely in the long term to vindicate the principle of equal representation. Two of the constituencies suggested here would have enjoyed significant over-representation over the period to 2006: Louth (6.9 per cent, on average) and Longford-Westmeath (5.1 per cent). But all of the other constituencies would have remained within a very tight band, close to the national average, ranging from Limerick (2.7 per cent below the average ratio) to Dublin City North-inner (2.2 per cent above, 1936-2006). This proposal possesses an additional advantage: it is more congruent with notions of territorial identity and powerful local loyalties. While no such principle is specified in the Constitution, it could be inferred from article 5 that as a 'democratic state' Ireland's standing in this respect should be protected, and that the principle of equal representation should not be brought into disrepute by insistence on an excessively narrow interpretation of the need to adhere to what quickly become merely historical census data. Furthermore, there is a more persuasive way to reduce inequalities in representation while simultaneously enhancing proportionality: by simply abolishing all small constituencies, and making, say, five the *minimum* number of deputies per constituency, not, as at present, the maximum.

The longevity of Irish counties as administrative units (they have existed as stable territorial units in their present shape since the early seventeenth century) seems to have made them a powerful focus of local loyalty, extending to a range of forms of popular mobilisation from the late eighteenth century onwards. This has

been reinforced by their significance as key units for more than a century in popular Gaelic games, and perhaps also by the weakness of local democracy below the level of the county. It has been argued that changes in boundaries may have an alienating effect on the electorate, which may be confused as to the identity of their new constituency and even become politically demobilised (the frequently changing boundaries of the South West inner city of Dublin seem to offer evidence of this; Kavanagh, 2003: 95). It has also been argued that 'given the highly localised and clientelistic nature of Irish politics, a county, or area, that lacks a TD runs the risk of becoming politically marginalised and this may lead to increased levels of political disengagement and lower levels of electoral participation in these areas' (Kavanagh, 2003: 94). It is indeed likely that TDs will be tempted to give less attention to slices of neighbouring counties that have been appended to their longer-established home bases, and to second-guess future decisions of constituency commissions by concentrating instead on what they believe will be their core bailiwicks. 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

A sceptic might see the current Irish constituency boundary revision process as a spurious gesture towards equal representation, and it might be excused if it contributed significantly towards achieving this. But it does not. The process of constituency boundary revision in independent Ireland has a sad history. It has distracted and aggravated politicians, it has annoyed and demotivated voters, it has diverted officials from other tasks and wasted their time, it has been responsible for unnecessary costs, delays, uncertainties and inconveniences, and

especially from 1961 until the establishment of a boundary commission in 1979 it has opened the door to gerrymandering (even if efforts in this direction have not necessarily been effective).

The remedy offered in this article offers an unambiguous answer to the question in its title: whether or not Ireland needs a constituency boundary commission. The independent commissions have been charged with an exceptionally unappealing task. They have been asked to close a badly-designed, flimsy stable door after the horse has bolted – to design, in conformity with arguably inappropriate criteria, constituencies which would have met these criteria had a general election taken place on the same day as the census, but which are unlikely to meet them in any future election. No constituency commission is needed, because constituency boundaries should be fixed, and equal representation should be procured not by changing areas but by varying the allocation of deputies. Whether or not the excitement of the election count gives way to the dull, mechanical routine of electronic vote counting, there is a case for replacing the torture of unending constituency boundary changes by a simpler, more predicable, more consistent and more legitimate system. To achieve this, Ireland needs no more resources than any other country using proportional representation: it does not need a succession of teams of highly qualified boundary architects, but a single moderately numerate apportionment mechanic.

How might this work out in practice? Although this article has shown what might have happened had the Irish Free State chosen to follow the 'normal' (continental European) model in 1922, transition from the present system could take place at any time. A decision could be made, for example, to introduce a system like the one proposed here on the basis of the 2006 census results (the last column of each of the tables in the appendix). This would produce a very unfamiliar *pattern* of constituencies (one three-member, five four-member, nine five-member, six six-member, four seven-member and two eight- 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. They would have the great merit of predictability:
following future censuses, the Central Statistics Office could
simply recalculate the apportionment of seats and so report to,
say, the clerk of the Dáil. As the constitution currently stands,
the Oireachtas would then need to give effect to these and,
though complaints would not disappear completely, the chances
of more widespread acceptance would be greatly enhanced.

A new system of this kind might be seen as conflicting with a
literal interpretation of article 16.2.3° of the constitution, and
especially with its authoritative Irish wording; but in this respect
it is in the same position as *all boundary revision acts since 1923*.
On the other hand, it should be seen as compatible with the
principle which the constitution seeks to defend, that of equality
of representation, so there is a case for introducing it without
constitutional amendment. If the courts were to rule this
impossible, then constitutional amendment could be
contemplated. In that event, there would be a case for
considering an issue that has been ignored in this article: whether
equality should be measured in respect of the population, or
only, as in several other jurisdictions, in respect of the
electorate.[20] Whatever the outcome of any such debate, it is hard

[20] Consideration of this issue raises important questions in political theory regarding
the nature of political representation, and the debate as to whether this should reflect
people's interests or the people's will. Although distribution of parliamentary seats in
proportion to population is common in continental Europe, there are countries (such
as Portugal and Sweden) where it is the electorate that is used, while in Finland it is
the citizen population that counts. Whatever the outcome of the theoretical debate,
data on the electorate have the merit that they are available annually rather than, as
in the case of population, quinquennially. This is not to say that they are
unproblematic: although it has been argued that the electoral register can be used as
a basis for estimating population in intercensal years (Whelan and Keogh, 1980),
there was a known issue of systematic over-inclusion in the 1920s (Sinnott, 1995: 85-
87), and a study of more recent data showed that the electoral register contains
significant errors arising mainly from changes in address, though measures to correct

to argue that Ireland should continue to hold out against an apportionment system which other countries using proportional representation take for granted: there is a case for acknowledging that in this respect public policy embarked down the wrong route in the 1920s (the one signposted 'British system', rather than 'Proportional representation'), and that it is time to try to get back on a less arduous and more appropriate path.

References

American Political Science Association (1951) 'The reapportionment of congress', *American political science review* 45 (1): 153-7

Cain, Bruce E (1984) *The reapportionment puzzle*. Berkeley: University of California Press

Carstairs, Andrew McLaren (1980) *A short history of electoral systems in Western Europe*. London: George Allen and Unwin

Coakley, John (2005) 'Ireland's unique electoral experiment: the senate election of 1925', *Irish political studies* 20 (3): 231-69

Coakley, John (2007) 'Revising Dáil constituency boundaries: Ireland in comparative perspective', *Administration* 55 (3): 1-29

Engstrom, Richard L (1987) 'District magnitudes and the election of women to the Irish Dail', *Electoral studies* 6 (2): 123-32

Engstrom, Richard L (2002) 'The post-2000 round of redistricting: an entangled thicket within the federal system', *Publius: the journal of federalism* 32 (4): 51-70

Forgette, Richard, and John W Winkle III (2006) 'Partisan gerrymandering and the Voting Rights Act', *Social science quarterly* 87 (1): 155-173

Gallagher, Michael (1975) 'Disproportionality in a proportional electoral system: the Irish experience', *Political studies* 23 (4) 1975: 501-13

Gallagher, Michael (1986) 'The political consequences of the electoral system in the Republic of Ireland', *Electoral studies* 5 (3): 253-75

Note 20 continued
for these are available (Keogh and Whelan, 1986). There are typically big variations in the ratio of registered electors to population. In 2006, for instance, the extremes were represented by Donegal South-West (where 87 per cent of the population was entitled to vote) and Dublin South-East (where the corresponding figure was only 57 per cent). Variations of this kind are to be explained by such factors as the distribution of immigrants and of the population of third-level colleges, hospitals and prisons.

Gallagher, Michael (1987) 'Does Ireland need a new electoral system?', *Irish political studies* 2: 27-48

Gallagher, Michael (1991) 'Proportionality, disproportionality and electoral systems', *Electoral studies* 10 (1): 33-51

Gallagher, Michael (1996) 'By-elections to Dáil Éireann 1923-96: the anomaly that conforms', *Irish political studies* 11: 33-60

Gallagher, Michael (2005) 'Ireland: the discreet charm of PR-STV', pp. 511-532 in Michael Gallagher and Paul Mitchell, eds, *The politics of electoral systems*. Oxford: Oxford University Press

Glassner, Martin Ira (1993) *Political geography*. New York: John Wiley

Grofman, Bernard, Arend Lijphart, Robert B McKay and Howard A Scarrow, eds (1982) *Representation and redistricting issues*. Lexington, MA: Lexington Books

Hacker, Andrew (1963) *Congressional districting: the issue of equal representation*. Washington, DC: The Brookings Institution

Huckabee, David C (2001) *The House of Representatives apportionment formula: an analysis of proposals for change and their impact on states*. Washington, DC: Congressional Research Service, Library of Congress; also available www.rules.house.gov/archives/RL31074.pdf

Ireland (1980) *Dáil Éireann Constituency Commission: Report* (Prl. 8878) Dublin: Stationery Office

Ireland (1988) *Dáil Constituency Commission: Report* (Pl. 5984) Dublin: Stationery Office

Ireland (2007) *Constituency Commission: Report on Dáil and European Parliament constituencies 2007* (Prn. A7/1347) Dublin: Stationery Office

Kavanagh, Adrian (2003) 'The constituency commission', *Irish political studies* 18 (2): 89-99

Keogh, Gary, and Brendan J Whelan (1986) *A statistical analysis of the Irish electoral register and its use of population estimation and sample surveys*. Dublin: Economic and Social Research Institute

Laver, Michael, and Peter Mair (1975) 'Proportionality, PR and STV in Ireland', *Political studies* 23 (4): 491-500

Mac Giolla Choille, Breandán (1988) 'I dtaobh an tsaothair sin na Gaeilge ar an mBunreacht' [On the project of the Irish version of the constitution], *Feasta* 41 (1): 63-8

McManus, Ruth (2002) *Dublin, 1910-1940: shaping the city and suburbs*. Dublin: Four Courts Press

Mills, Karen M (2001) *Congressional apportionment: census 2001 brief*. Washington, DC: US Census Bureau. Available www.census.gov/prod/2001pubs/c2kbr01-7.pdf

Monmonier, Mark (2001) *Bushmanders and bullwinkles: how politicians manipulate electronic maps and census data to win elections.* Chicago: University of Chicago Press

Ó Cearúil, Micheál (1999) *Bunreacht na hÉireann: a study of the Irish text.* Dublin: Government Publications, for the All-Party Oireachtas Committee on the Constitution

O'Leary, Cornelius (1979) *Irish elections, 1918-77: parties, voters, and proportional representation.* Dublin: Gill and Macmillan

Roche, Desmond (1982) *Local government in Ireland.* Dublin: Institute of Public Administration

Samuels, David, and Richard Snyder (2001) 'The value of a vote: malapportionment in comparative perspective', *British journal of political science* 31 (4): 651-671

Shugart, Matthew S (1994) 'Minorities represented and unrepresented', pp. 31-41 in Wilma Rule and Joseph F Zimmerman, eds, *Electoral systems in comparative perspective: their impact on women and minorities.* Westport, CT: Greenwood Press

Sinnott, Richard (1995) *Irish voters decide: voting behaviour in elections and referendums since 1918.* Manchester: Manchester University Press

United Nations (2007) Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World population prospects: the 2006 revision and world urbanization prospects: the 2005 revision*; available http://esa.un.org/unpp [2007-07-08]

Whelan, Brendan J, and Gary Keogh (1980) 'The use of the Irish electoral register for population estimation', *Economic and social review* 11 (4): 301-18

White, Timothy J (2006) 'Why so few women in Dáil Éireann? The effects of the single transferable vote election system', *New Hibernia review* 10 (4): 71-83

Appendix

Possible automatic distribution of Dáil seats by constituency, 1922-2007

The four tables which follow are based on hypothetical constituencies that might have been created on the foundation of the state, and later modified slightly, as discussed in the text. Except as indicated below, constituencies correspond to administrative counties (with Limerick and Waterford county boroughs included in the counties of the same name, and the two ridings of Tipperary merged as a single constituency). Cork East comprises the rural districts of Cork, Fermoy, Mallow, Midleton, Mitchelstown and Youghal, and the urban districts of Cobh, Fermoy, Mallow, Midleton and Youghal; Cork West comprises the rest of the county. The two original divisions of Dublin City comprise the dispensary districts of Dublin North and Dublin South respectively; the two 'inner' constituencies comprised originally six inner-city wards in the North and 10 in the South, and corresponding areas subsequently; the 'outer' constituencies comprise the old outer suburbs, plus the new suburbs added in 1930. The constituencies of Dun Laoghaire, Fingal respectively and Dublin South comprise the territories of the corresponding counties (though these were defined only in 1994). The constituency of Clondalkin consists of 12 electoral districts (seven in Clondalkin, three in Lucan and two in Palmerston); Tallaght consists of the rest of South Dublin County.

Table (a) reports raw population figures for each constituency, as derived from Census of Ireland, volume 1, for the years in question. Table (b) shows how these would have been converted into a distribution of the total number of deputies (140 initially, rising to 166 in 1979) according to the Sainte-Laguë (Webster) highest average system. Table (c) reports the resulting population – deputy ratios. Table (d) indicates how far each of these ratios deviates, as a percentage, from the overall ratio.

Data for certain census years (1951, 1961, 1971, 1981, 1991 and 2002) have been omitted to save space. Since they are not reported, the following points may be made about the impact that these 'missing' years might have had on the summary data at the bottom of the tables. In table (b), the mean sizes in the 'missing' years remained within the limits of the years described in the table, except that in 1971 the maximum number of seats in any constituency (second row from the bottom) would have been only seven. In table (c), the differences between the largest and smallest ratios (bottom row) would have remained within the limits of the years described here, except that they would have been higher than these limits in 1951 (6,090), 1961 (5,388) and 1971 (6,232), and lower in 1981 (4,082) and 1991 (3,591). In table (d), the deviations would have remained within the limits of the years described here (bottom three rows), except that there would have been a bigger deviation below the average in 1971 (-11.9 per cent), and there would have been bigger deviations above the average in 1951 (17.5 per cent), 1961 (18.3 per cent) and 1971 (17.4 per cent); and bigger overall differences would have occurred in 1951 (28.8 per cent), 1961 (26.8 per cent) and 1971 (29.3 per cent).

Table (a): *Population by hypothetical constituency*

Constituency	Population at selected census years									
	1911	*1926*	*1936*	*1946*	*1956*	*1966*	*1979*	*1986*	*1996*	*2006*
Carlow-Kilkenny	111,214	105,466	103,066	100,793	97,977	94,056	107,824	114,174	116,952	137,907
Cavan-Monaghan	162,628	147,583	137,959	127,570	113,804	99,754	104,096	106,344	104,257	120,000
Clare	104,232	95,064	89,879	85,064	77,176	73,597	84,919	91,344	94,006	110,950
Cork City	76,673	78,490	80,765	75,595	80,011	122,146	138,267	133,271	127,187	119,418
Cork East	118,633	109,939	109,415	112,416	113,280	83,260	115,575	134,231	149,052	195,758
Cork West	196,798	177,318	165,777	155,657	143,372	134,297	142,276	145,233	144,271	166,119
Donegal	168,537	152,508	142,310	136,317	122,059	108,549	121,941	129,664	129,994	147,264
Galway	182,224	169,366	168,198	165,201	155,553	148,340	167,838	178,552	188,854	231,670
Kerry	159,691	149,171	139,834	133,893	122,072	112,785	120,356	124,159	126,130	139,835
Kildare	66,627	58,028	57,892	64,849	65,915	66,404	97,185	116,247	134,992	186,335
Laois-Offaly	111,461	104,132	101,417	103,383	99,057	96,312	107,278	113,119	112,062	137,927
Limerick	143,069	140,343	141,153	142,559	137,881	137,357	157,407	164,569	165,042	184,055
Longford-Westmeath	103,806	96,665	92,553	91,167	87,091	81,889	90,670	94,875	93,480	113,737
Louth	63,665	62,739	64,339	66,194	69,194	69,519	86,135	91,810	92,166	111,267
Mayo	192,177	172,690	161,349	148,120	133,052	115,547	114,019	115,184	111,524	123,839
Meath	65,091	62,969	61,405	66,232	66,762	67,323	90,715	103,881	109,732	162,831
Tipperary	152,433	141,015	137,835	136,014	129,415	122,812	133,741	136,619	133,535	149,244
Waterford	83,966	78,562	77,614	76,108	74,031	73,080	87,278	91,151	94,680	107,961
Wexford	102,273	95,848	94,245	91,855	87,259	83,437	96,421	102,552	104,371	131,749
Wicklow	60,711	57,591	58,569	60,451	59,906	60,428	83,950	94,542	102,683	126,194
Dublin City-North	*161,551*	*172,196*	–	–	–	–	–	–	–	–
North inner			125,734	106,320	191,860	174,470	136,789	115,363	113,509	128,866
North outer			90,926	122,079	57,589	112,406	179,710	192,451	173,707	165,663
Dublin City-South	*143,251*	*144,497*	–	–	–	–	–	–	–	–
South inner			146,278	126,672	174,355	155,335	122,006	106,643	114,523	132,613
South outer			105,165	150,980	115,650	125,591	106,081	88,292	80,115	79,069
Dublin County	*172,394*	*188,961*	*118,822*	*130,142*	*166,327*	*105,628*	–	–	–	–
Dun Laoghaire							121,617	169,116	180,675	189,999	194,038
Fingal							123,638	138,479	167,683	239,992
Dublin-South							*146,343*	–	–	–
Clondalkin								60,186	74,210	93,252
Tallaght								139,360	144,518	153,683
Leitrim-Sligo	*142,627*	*127,295*	*118,355*	*106,966*	*93,906*	*81,835*	–	–	–	–
Roscommon	*93,956*	*83,556*	*77,566*	*72,510*	*63,710*	*56,228*	–	–	–	–
Connacht East							136,643	137,673	132,853	148,612
Total	3,139,688	2,971,992	2,968,420	2,955,107	2,898,264	2,884,002	3,368,217	3,540,643	3,626,087	4,239,848

Table (b): *Seat allocation by hypothetical constituency*

Constituency	Seat distribution (Sainte-Laguë)									
	1911	*1926*	*1936*	*1946*	*1956*	*1966*	*1979*	*1986*	*1996*	*2006*
Carlow-Kilkenny	5	5	5	5	5	5	5	5	5	5
Cavan-Monaghan	7	7	6	6	5	5	5	5	5	5
Clare	5	4	4	4	4	4	4	4	4	4
Cork City	3	4	4	4	4	6	7	6	6	5
Cork East	5	5	5	5	5	4	6	6	7	8
Cork West	9	8	8	7	7	6	7	7	7	7
Donegal	7	7	7	7	6	5	6	6	6	6
Galway	8	8	8	8	8	7	8	8	9	9
Kerry	7	7	6	6	6	5	6	6	6	6
Kildare	3	3	3	3	3	3	5	6	6	7
Laois-Offaly	5	5	5	5	5	5	5	5	5	5
Limerick	6	7	7	7	7	7	8	8	7	7
Longford-Westmeath	5	4	4	4	4	4	4	5	4	4
Louth	3	3	3	3	3	3	4	4	4	4
Mayo	9	8	7	7	6	6	6	5	5	5
Meath	3	3	3	3	3	3	5	5	5	6
Tipperary	7	7	6	7	6	6	7	6	6	6
Waterford	4	4	4	4	4	4	4	4	4	4
Wexford	5	4	4	4	4	4	5	5	5	5
Wicklow	3	3	3	3	3	3	4	4	5	5
Dublin City-North	*7*	*8*	–	–	–	–	–	–	–	–
North inner			6	5	9	8	7	5	5	5
North outer			4	6	3	5	9	9	8	7
Dublin City-South	*6*	*7*	–	–	–	–	–	–	–	–
South inner			7	6	8	8	6	5	5	5
South outer			5	7	6	6	5	4	4	3
Dublin County	*8*	*9*	*6*	*6*	*8*	*5*	–	–	–	–
Dun Laoghaire						6	8	9	9	8
Fingal							6	7	8	9
Dublin-South							*7*	–	–	–
Clondalkin								3	3	4
Tallaght								7	7	6
Leitrim-Sligo	*6*	*6*	*6*	*5*	*5*	*4*	–	–	–	–
Roscommon	*4*	*4*	*4*	*3*	*3*	*3*	–	–	–	–
Connacht East							7	7	6	6
Total	140	140	140	140	140	140	166	166	166	166
Smallest no. of seats	3	3	3	3	3	3	4	3	3	3
Largest no. of seats	9	9	8	8	9	8	9	9	9	9
Mean constituency size	5.6	5.6	5.2	5.2	5.2	5.0	5.9	5.7	5.7	5.7

Table (c): *Population per deputy by hypothetical constituency*

Constituency	Population per deputy									
	1911	*1926*	*1936*	*1946*	*1956*	*1966*	*1979*	*1986*	*1996*	*2006*
Carlow-Kilkenny	22,243	21,093	20,613	20,159	19,595	18,811	21,565	22,835	23,390	27,581
Cavan-Monaghan	23,233	21,083	22,993	21,262	22,761	19,951	20,819	21,269	20,851	24,000
Clare	20,846	23,766	22,470	21,266	19,294	18,399	21,230	22,836	23,502	27,738
Cork City	25,558	19,623	20,191	18,899	20,003	20,358	19,752	22,212	21,198	23,884
Cork East	23,727	21,988	21,883	22,483	22,656	20,815	19,263	22,372	21,293	24,470
Cork West	21,866	22,165	20,722	22,237	20,482	22,383	20,325	20,748	20,610	23,731
Donegal	24,077	21,787	20,330	19,474	20,343	21,710	20,324	21,611	21,666	24,544
Galway	22,778	21,171	21,025	20,650	19,444	21,191	20,980	22,319	20,984	25,741
Kerry	22,813	21,310	23,306	22,316	20,345	22,557	20,059	20,693	21,022	23,306
Kildare	22,209	19,343	19,297	21,616	21,972	22,135	19,437	19,375	22,499	26,619
Laois-Offaly	22,292	20,826	20,283	20,677	19,811	19,262	21,456	22,624	22,412	27,585
Limerick	23,845	20,049	20,165	20,366	19,697	19,622	19,676	20,571	23,577	26,294
Longford-Westmeath	20,761	24,166	23,138	22,792	21,773	20,472	22,668	18,975	23,370	28,434
Louth	21,222	20,913	21,446	22,065	23,065	23,173	21,534	22,953	23,042	27,817
Mayo	21,353	21,586	23,050	21,160	22,175	19,258	19,003	23,037	22,305	24,768
Meath	21,697	20,990	20,468	22,077	22,254	22,441	18,143	20,776	21,946	27,139
Tipperary	21,776	20,145	22,973	19,431	21,569	20,469	19,106	22,770	22,256	24,874
Waterford	20,992	19,641	19,404	19,027	18,508	18,270	21,820	22,788	23,670	26,990
Wexford	20,455	23,962	23,561	22,964	21,815	20,859	19,284	20,510	20,874	26,350
Wicklow	20,237	19,197	19,523	20,150	19,969	20,143	20,988	23,636	20,537	25,239
Dublin City-North	23,079	21,525	–	–	–	–	–	–	–	–
North inner			20,956	21,264	21,318	21,809	19,541	23,073	22,702	25,773
North outer			22,732	20,347	19,196	22,481	19,968	21,383	21,713	23,666
Dublin City-South	23,875	20,642	–	–	–	–	–	–	–	–
South inner			20,897	21,112	21,794	19,417	20,334	21,329	22,905	26,523
South outer			21,033	21,569	19,275	20,932	21,216	22,073	20,029	26,356
Dublin County	21,549	20,996	19,804	21,690	20,791	21,126	–	–	–	–
Dun Laoghaire							20,270	21,140	20,075	21,111	24,255
Fingal							20,606	19,783	20,960	26,666
Dublin-South							20,906	–	–	–
Clondalkin								20,062	24,737	23,313
Tallaght								19,909	20,645	25,614
Leitrim-Sligo	23,771	21,216	19,726	21,393	18,781	20,459	–	–	–	–
Roscommon	23,489	20,889	19,392	24,170	21,237	18,743	–	–	–	–
Connacht East							19,520	19,668	22,142	24,769
Overall ratio	22,426	21,229	21,203	21,108	20,702	20,600	20,290	21,329	21,844	25,541
Smallest ratio	20,237	19,197	19,297	18,899	18,508	18,270	18,143	18,975	20,029	23,306
Largest ratio	25,558	24,166	23,561	24,170	23,065	23,173	22,668	23,636	24,737	28,434
Difference	5,321	4,969	4,264	5,271	4,557	4,903	4,525	4,661	4,708	5,128

Table (d): *Deviations from mean deputy-population ratio, by hypothetical constituency*

Constituency	Deviation from average ratio									
	1911	1926	1936	1946	1956	1966	1979	1986	1996	2006
Carlow-Kilkenny	–0.8	–0.6	–2.8	–4.5	–5.3	–8.7	6.3	7.1	7.1	8.0
Cavan-Monaghan	3.6	–0.7	8.4	0.7	9.9	–3.2	2.6	–0.3	–4.5	–6.0
Clare	–7.0	12.0	6.0	0.7	–6.8	–10.7	4.6	7.1	7.6	8.6
Cork City	14.0	–7.6	–4.8	–10.5	–3.4	–1.2	–2.7	4.1	–3.0	–6.5
Cork East	5.8	3.6	3.2	6.5	9.4	1.0	–5.1	4.9	–2.5	–4.2
Cork West	–2.5	4.4	–2.3	5.3	–1.1	8.7	0.2	–2.7	–5.6	–7.1
Donegal	7.4	2.6	–4.1	–7.7	–1.7	5.4	0.2	1.3	–0.8	–3.9
Galway	1.6	–0.3	–0.8	–2.2	–6.1	2.9	3.4	4.6	–3.9	0.8
Kerry	1.7	0.4	9.9	5.7	–1.7	9.5	–1.1	–3.0	–3.8	–8.8
Kildare	–1.0	–8.9	–9.0	2.4	6.1	7.4	–4.2	–9.2	3.0	4.2
Laois-Offaly	–0.6	–1.9	–4.3	–2.0	–4.3	–6.5	5.7	6.1	2.6	8.0
Limerick	6.3	–5.6	–4.9	–3.5	–4.9	–4.7	–3.0	–3.6	7.9	2.9
Longford-Westmeath	–7.4	13.8	9.1	8.0	5.2	–0.6	11.7	–11.0	7.0	11.3
Louth	–5.4	–1.5	1.1	4.5	11.4	12.5	6.1	7.6	5.5	8.9
Mayo	–4.8	1.7	8.7	0.2	7.1	–6.5	–6.3	8.0	2.1	–3.0
Meath	–3.3	–1.1	–3.5	4.6	7.5	8.9	–10.6	–2.6	0.5	6.3
Tipperary	–2.9	–5.1	8.3	–7.9	4.2	–0.6	–5.8	6.8	1.9	–2.6
Waterford	–6.4	–7.5	–8.5	–9.9	–10.6	–11.3	7.5	6.8	8.4	5.7
Wexford	–8.8	12.9	11.1	8.8	5.4	1.3	–5.0	–3.8	–4.4	3.2
Wicklow	–9.8	–9.6	–7.9	–4.5	–3.5	–2.2	3.4	10.8	–6.0	–1.2
Dublin City-North	*2.9*	*1.4*	–	–	–	–	–	–	–	–
North inner			–1.2	0.7	3.0	5.9	–3.7	8.2	3.9	0.9
North outer			7.2	–3.6	–7.3	9.1	–1.6	0.3	–0.6	–7.3
Dublin City-South	*6.5*	*–2.8*	–	–	–	–	–	–	–	–
South inner			–1.4	0.0	5.3	–5.7	0.2	0.0	4.9	3.8
South outer			–0.8	2.2	–6.9	1.6	4.6	3.5	–8.3	3.2
Dublin County	*–3.9*	*–1.1*	*–6.6*	*2.8*	*0.4*	*2.6*	–	–	–	–
Dun Laoghaire						–1.6	4.2	–5.9	–3.4	–5.0
Fingal							1.6	–7.3	–4.0	4.4
Dublin-South							*3.0*	–	–	–
Clondalkin								–5.9	13.2	–8.7
Tallaght								–6.7	–5.5	0.3
Leitrim-Sligo	*6.0*	*–0.1*	*–7.0*	*1.4*	*–9.3*	*–0.7*	–	–	–	–
Roscommon	*4.7*	*–1.6*	*–8.5*	*14.5*	*2.6*	*–9.0*	–	–	–	–
Connacht East							–3.8	–7.8	1.4	–3.0
Biggest deviation below average	–9.8	–9.6	–9.0	–10.5	–10.6	–11.3	–10.6	–11.0	–8.3	–8.8
Biggest deviation above average	14.0	13.8	11.1	14.5	11.4	12.5	11.7	10.8	13.2	11.3
Difference	23.7	23.4	20.1	25.0	22.0	23.8	22.3	21.9	21.6	20.1