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**Voter Attitudes to Inter-Party Transfers in
Northern Ireland:
A Median-Difference Analysis of Inter-Party
Transfers in the 1982 and 1988 Assembly
Elections**

Dr. Michael O'Kelly
University College Dublin

Dr. John Doyle
Dublin City University

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**VOTER ATTITUDES TO INTER-PARTY TRANSFERS IN NORTHERN
IRELAND:
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THE 1982 AND 1998 ASSEMBLY ELECTIONS**

ABSTRACT

The impact of the 1998 peace agreement in Northern Ireland on electoral behaviour is analysed in this article by plotting median differences in inter-party transfers under the PR by Single Transferable Vote system used in 1998 and in 1982. There is clear evidence that moderate and militant nationalists have followed the lead of their party elites and have transferred lower preference votes to each other at higher levels and more consistently in 1998 than in 1982. Patterns of change within unionism are more complex. While there were some signs of a slightly increased willingness from pro-Agreement unionists to transfer to moderate nationalists and a fall in the percentage of transfers to anti-Agreement unionists, there was still considerable consistency of support between the unionist parties despite the split over the peace agreement.

INTRODUCTION

In the 1998 Northern Ireland Assembly election the Unionist parties were bitterly and openly divided on the issue of the Good Friday peace agreement, with the mainstream Ulster Unionist Party (UUP) and the small loyalist parties - the Progressive Unionist Party (PUP) and the Ulster Democratic Party (UDP) - supporting the Agreement while Ian Paisley's Democratic Unionist Party (DUP) and the small UK Unionist Party (UKUP) opposed it. Within the UUP there was a substantial bloc opposed to the recently signed Belfast Agreement, with as many as 25% of their supporters opposing the deal in the May 1998 referendum (Doyle, 1998, 15). On the other hand, the Nationalist side had more cause to unite than at any time in living memory. The 'nationalist consensus' at the heart of the peace process had produced a 'yes' vote estimated at 99% within the northern nationalist community and at 95% in the Republic of Ireland. Many commentators, therefore, analysed the Assembly election as a kind of second run of the Good Friday agreement referendum, comparing total votes for pro- and anti-Agreement parties, and even distinguishing pro- and anti-Agreement candidates within the UUP (e.g. Millar, 1998).

The election was conducted under a system of PRSTV in six-seat constituencies. An analysis of the results can, therefore, be significantly more sophisticated than a straightforward headcount, for or against the Agreement. Voters had the opportunity to rank all candidates in order, if they so wished, and could therefore transfer their lower preference votes not only outside their party but also outside their community. Pro-Agreement voters could cross the traditional community divide in Northern Ireland to assist others in election contests with anti-Agreement candidates. The focus of this paper is the extent to which the 1998 Northern Ireland peace agreement influenced voter behaviour in this way. It is possible to analyse the level of change over time as a similar voting system was used in the Northern Ireland Assembly elections of 1982.¹ 1982 has the coincidental advantage of marking the entry of Sinn Féin (SF) into electoral politics and so while the period between the elections to be compared is quite long, they do mark the beginning of the current model of electoral competition and the first post-Agreement election. While the terms pro-Agreement and anti-Agreement are politically meaningless in 1982, the party divisions were well

¹In the Forum election of 1996 voters could only indicate a single preference and Northern Ireland's Westminster elections are of course conducted on the 'First Past the Post' system.

established then and so as a summarising descriptive label to track shifts in voter behaviour these blocs offer a useful analysis.

Although the principal subject of this paper is the change in inter-party and cross-community vote transfers from 1982 to 1998, it will be useful to present briefly the overall result of the 1998 election, together with an indication of the changes from 1982 in first preference votes. Since the intervening period between the two strictly comparable elections is comparatively long, the gain/loss in percentages of votes compared to the 1996 Forum election is also presented here.

The pattern of change is clear from tables one and two. The overall unionist vote (pro and anti-Agreement) declined from 55.5% in 1982 to just over 50% in 1998. The Alliance Party (AP) vote also declined from 9.3% to 6.5% over this period as the 'cross community' bloc dispersed to the Women's Coalition and other very small parties, while the nationalist vote increased from 32% to just 40%.²

Table 1: Party votes in 1998, with changes since the Forum election of 1996 and since 1982, in percentages

-----First preference votes-----						
	%	%	Gain(loss)	%	Gain(loss)	Gain(loss)
	1998	1996	1998 vs 1996	1982	1996 vs 1982	1998 vs 1982
UUP	21.3	24.2	(2.91)	29.7	(5.57)	(8.48)
SDLP	22.0	21.4	0.59	18.8	2.59	3.18
DUP	18.1	18.8	(0.66)	23.0	(4.19)	(4.85)
SF	17.6	15.5	2.16	10.1	5.33	7.49
AP	6.5	6.5	(0.04)	9.3	(2.76)	(2.80)
UKUP	4.5	3.7	0.82	.	3.69	4.51
PUP	2.5	3.5	(0.92)	0.2	3.27	2.35
UDP	1.1	2.2	(1.15)	.	2.22	1.07
NIWC	1.6	1.0	0.58	.	1.03	1.61
Ind	1.5	2.3	(0.79)	0.4	1.86	1.07
OthU	3.0	0.4	2.64	5.5	(5.12)	(2.48)
OthN	0.3	0.6	(0.32)	3.0	(2.34)	(2.66)

² The Alliance Party is termed 'cross-community' in this article as their votes are drawn from both communities even though they are clearly a 'pro-union' party in political terms.

Table 2: Party votes in 1998, with changes since the Forum election of 1996 and since 1982, in percentages, grouped by alignment to community and to the Good Friday agreement

	-----First preference votes-----					
	%	%	Gain(loss)	%	Gain(loss)	Gain(loss)
	1998	1996	1998 vs 1996	1982	1996 vs 1982	1998 vs 1982
Un pro-agreem	24.9	29.9	(4.99)	29.9	(0.08)	(5.07)
Un anti-agreem	25.7	22.8	2.81	25.6	(2.73)	0.07
Cross-community	9.4	9.8	(0.48)	9.7	0.13	(0.35)
Nationalist	39.9	37.5	2.43	31.9	5.58	8.0
N/A	0.2	.	0.23	2.9	N/A	(2.66)

Other significant trends include the splintering of the unionist vote, with significant drops for both of the two main parties and a consolidation as well as an increase in the nationalist vote, with only 0.3% of the nationalist vote *not* going to the Social Democratic and Labour Party (SDLP) or SF, the two main nationalist parties, in 1998.

The relative impact of demographic change and differences in turnout between nationalists and unionists in explaining the increased nationalist vote is difficult to quantify precisely. The 1981 census was conducted during the Hunger Strike and in many nationalist areas census forms were burned as a form of protest with the result that an unknown number of predominantly working-class Catholics were not counted (Morris, Compton and Lukes, 1985). High levels of political tension and street violence also limited the efficiency of the census and in addition, in this context, a large number of people did not fill out the religion question on the form.³ There is no agreement on the likely breakdown of this 'no response' group.⁴ The precise growth in the Catholic population from 1981 to 1991 is therefore not quantifiable but is probably at least 3% (Jardine, 1994, 197). Indeed this might be a conservative figure. Labour force surveys and fair employment monitoring suggests that this trend has continued since 1991 driven by a larger young Catholic population (for example 52.6% of all under 16s were Catholic in the 1991 census, compared to 41.8% of 16-64s) and also by a shift in the historical emigration pattern from one which saw many

³ In 1981 18.5% did not answer this question compared to 9.4% in 1971 and a combined non-response/no religion rate of 11% in 1991.

⁴ Jardine (1994, 218-9) argues that the fertility data and knowledge of Irish of this group is closer to the non-Catholic population, with Walsh (ibid, 210-14) arguing the opposite. Eversley (1989, 70) argues that as 27.1% of the 'religion not stated' group in 1981 are unemployed - a profile nearer to the Catholic than Protestant one - this no response group is likely to include more Catholics than Protestants.

more Catholics than Protestants leaving Northern Ireland to current estimates suggesting the opposite may now be occurring (Jardine, 1994, 213).

There is also some evidence that nationalist voter turnout may have been higher than the unionist turnout in 1998. While turnout was relatively high everywhere, averaging 68.8%, solidly unionist constituencies such as Strangford and North Down had turnout figures of 62% and 60% respectively, while nationalist constituencies such as West Belfast and Foyle were at 70% and 72%, and deeply divided areas like Mid-Ulster polled as high as 85%. It is well established that turnout is a function of salience (Sinnott and Whelan, 1992, 165) and it may be that, despite the split in Unionism over the Agreement, where there was no significant competition with nationalists, unionists did not turn out in such great numbers. On the other hand, despite the new close relationship between the SDLP and SF and the increased willingness of supporters of each party to transfer to the other (as discussed below) there was still intense rivalry between the parties for dominance within the nationalist community. While nationalist-unionist contests produced the highest turnouts, the contest within nationalism seems to have motivated voters to turn out in greater numbers than the battle between pro-Agreement and anti-Agreement unionism. It is also possible that because nationalists were more enthusiastic supporters of the Agreement, and saw it as a means of ending years of political stalemate, they were highly motivated to be active voters. The increase in the nationalist vote from 1996 to 1998 also confirms the importance of differentiated turnout as a partial explanation. An increase of 2.5% in two years is unlikely to be demographically based. Nonetheless at the macro level, most of the increase in the nationalist vote between 1982 and 1998 is clearly related to the increasing nationalist population relative to unionists.

A study of transfer patterns is to some extent insulated from these macro demographic changes. By their nature transfer percentages take first preferences as a given and so shifts in the pattern of transfers from, for example, UUP to AP are statistically isolated from a decline in the overall unionist vote, though there will of course be some political impact from the demographic situation. When calculating overall percentages of transfers for an entire election, the denominator used in this article is the total number of votes to be distributed, including the votes which turn out to be non-transferrable. For percentages of transfers at each count, however, there are two differences in the denominator used. Firstly, only transferable votes for the

count are included in the denominator – non-transferable votes are ignored in this calculation. Secondly, for this paper, except of course when calculating party solidarity, transfers within a party have been omitted also. This method of calculation has the effect of clarifying the inter-party voting pattern considerably. Where the focus of analysis is on changes in vote patterns outside party loyalty, this denominator allows us to see with greater clarity the relative magnitude of transfers *other than* those within the party.⁵ An example may help to make the approach clear: for two counts in the Fermanagh and South Tyrone constituency, a similar situation arose in both 1982 and 1998. A UUP candidate's transfers (2970 and 2720 of them, respectively) were distributed at a late stage in the count (count seven and count five respectively) and the party percentages are set out in table three.

Table 3: Fermanagh South Tyrone, UUP transfers in count 7, 1982 and count 5, 1998

Percentage received, using all votes as denominator			
Transfer recipient	1982	1998	Change
–			
DUP candidates	407 (14%)	256 (9%)	-4%
UK unionist candidate		66 (2%)	
SF candidates	8 (<1%)	18 (1%)	<+1%
SDLP candidates	27 (<1%)	36 (1%)	<+1%
OUP/UUP candidates	2427 (82%)	2269 (83%)	+2%
Non-transferable	101 (3%)	75 (3%)	>-1%
–			
Percentage received, omitting non-transferable and within-party votes from denominator			
	1982	1998	Change
DUP candidates	407 (92%)	256 (68%)	-24%
UK unionist candidate		66 (18%)	
SF candidates	8 (2%)	18 (5%)	+3%
SDLP candidates	27 (6%)	36 (10%)	+3%
OUP/UUP candidates	2427	2269	
Non-transferable	101	75	

⁵ There is a second methodological problem in analyses of transfers under PRSTV, highlighted by Sinnott (1995, 203-8). Transfers in later counts will have been 'polluted' by votes received, so for example a UUP 'transfer' will include voters whose first preference was given elsewhere but who then transfer to the UUP. We believe that the effect of this problem is not sufficiently significant to detract from the trends highlighted by this analysis. We do however note one exception to this in the section on nationalist transfers to pro-Agreement unionists below.

The large percentage of UUP transfers to UUP in both elections would be of great interest if our primary object of study here was party solidarity. While this article does examine party solidarity and the trends in non-transferable votes as a context, its primary interest is in tracking the changes and consistencies in patterns of inter-party transfers, which are highlighted more clearly if within-party transfers and non-transferable votes are removed. However, it is important to be clear about the denominator used, lest a false picture be given which might convey an exaggerated idea of voter change. Non-terminal percentages presented in this paper estimate inter-party transfer percentages at constituency level *given that the set of voters is restricted to those crossing party lines* i.e. where we exclude transfers to their own party in the calculation. The resulting estimates give non-terminal transfers an importance they do not have in terms of getting candidates elected; but as a result allow us to weigh up the views of the voter who crosses party lines with a great deal of sensitivity. This sensitivity will of course allow us to detect proportions of votes which move across the community, but will be equally sensitive to proportions of votes which do not cross the community divide, but revert to other parties in the voters' community.⁶

Northern Ireland is notable for the large number of political parties (some with just a few candidates) which feature in elections. Party information was used for the current analysis, but with certain small parties grouped together. Parties were classified as pro- or anti-Agreement and also identified as being unionist, nationalist or cross-community. See appendix A for the classifications and abbreviations used for each party in the tables and graphs below. Note that candidates have been classified as pro- and anti-Agreement based solely on their party membership. This simple party-based rule was followed despite the declared anti-Agreement stance of six candidates for the pro-Agreement UUP - Peter Weir, Roy Beggs Jr., John Hunter Jim Clarke, Jim Rodgers and John Junkin. One reason for this is practical: gradations of adherence to the Good Friday agreement would be difficult to quantify. A second reason is that, politically, the individual candidate's stance may well have been viewed by the voters as less important than the stance of the candidate's party - and to some extent this has proved the case. However a confirmatory

⁶ This approach to the calculation of proportions differs from that of Elliott et al (e.g. Elliott and Wilford, 1983, Elliott and Smith, 1986) where in all their analyses of NI transfers (both their analyses of the election overall and of proportions at each count) the transfer proportions are calculated using as denominator the total votes to be distributed (whether they could actually be distributed or not).

analysis (not presented) was produced for all median differences used in this paper omitting the above six declared UUP anti-Agreement candidates from the data. In all cases the resulting estimates of change in transfer percentages were small. In only one case did the estimate of difference change significantly: in the absence of the six anti-Agreement candidates, the increase in transfers from pro-Agreement unionist parties to cross-community parties changed from borderline significance to significance; in no other case did an estimate of difference in transfer percentages change so as to alter any of the conclusions in the paper.

OVERALL TRANSFER PATTERNS

As a prelude to detailed analysis, it is useful to look at the crude overall transfer patterns including within-party solidarity and non-transferable votes. At a macro level a number of trends are highlighted. Unionist solidarity within both pro and anti-Agreement blocs is reduced. A more detailed breakdown (not shown) shows that on the pro-Agreement unionist side and for the UUP separately this was a general trend, possibly as a result of the splintering of the unionist vote. But among the anti-Agreement parties the decline in solidarity was, surprisingly, largely confined to DUP supporters. Pro-Agreement transfers to anti-Agreement unionist parties fell in comparison to 1982, as might be expected, but the number of pro-Agreement unionist votes going non-transferable increases much more substantially than transfers to nationalists. While the percentage of transfers going to nationalists was small, in absolute terms the shift from 1982 to 1998 was modest but clear: in 1982, there were just 368 'pro-Agreement' unionist party transfers to nationalists; in 1998 there were 4,303.

Table four shows that the percentage of non-transferable votes increased for both pro and anti-agreement unionist parties. This trend was general among pro-Agreement unionists. For the anti-Agreement parties, however, it occurred mainly in the larger, more important vote distributions. For the many instances of smaller vote distributions there was if anything a decrease in median non-transferable vote percentage. There is clearly a variety of behaviour hidden by the overall transfer percentages and this issue is analysed in more detail below.

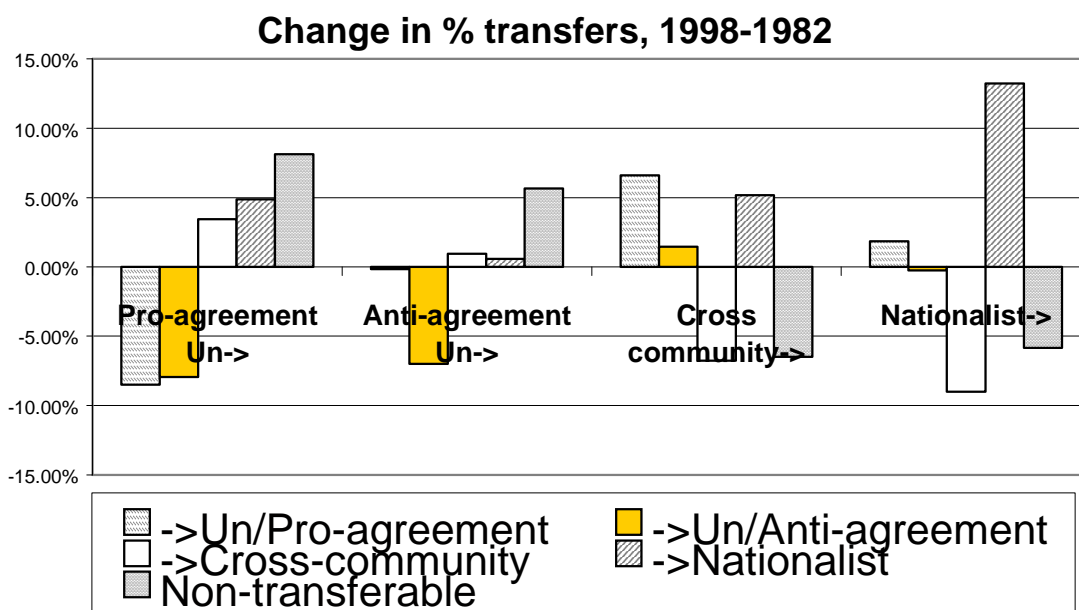
Table Four: Overall transfer percentages for each election, with the change from 1982 to 1998

NI assembly elections, 1982 vs 1998								
-----% transferred to-----								
Transfers from	Election	->Unionist		->Cross-community	-> SDLP	Nationalist Sinn Fein	% Non-transferable	Total transferred
		Pro-agreement	Anti-agreement					
Pro-agreement unionist->	1982	69.7	22.7	2.2	0.4	<0.1	5.0	87905
	1998	61.2	14.7	5.6	4.9	0.4	13.2	81387
Anti-agreement unionist->	1982	19.4	66.1	1.4	0.7	0.1	12.3	79799
	1998	19.2	59.1	2.4	1.3	0.1	17.9	84115
Cross community->	1982	21.9	3.8	26.9	24.3	1.8	21.3	21385
	1998	28.5	5.2	20.2	27.3	4.1	14.8	31122
SDLP->	1982	0.8	0.9	18.3	57.1	6.3	16.6	62684
	1998	4.2	0.8	11.2	50.3	16.2	17.3	41118
Sinn Fein->	1982	0.3	0.4	3.6	19.2	45.0	31.6	18858
	1998	1.3	0.3	2.0	25.3	59.3	11.9	54815
Change from 1982								
Pro-agreement Unionist>		-8.49%	-7.94%	3.45%	4.56%	0.30%	8.11%	
Anti-agreement Unionist>		-0.16%	-6.99%	0.94%	0.59%	-0.01%	5.64%	
Cross community->		6.60%	1.46%	-6.76%	2.93%	2.24%	-6.48%	
SDLP->		3.41%	-0.09%	-7.12%	-6.74%	9.81%	0.74%	
Sinn Fein->		0.99%	-0.06%	-1.67%	6.12%	14.31%	-19.68%	

For nationalists the number of non-transferable votes falls and this is consistent with the substantial increase in transfers from the SDLP to SF and vice versa. This is clearly a direct result of the 'nationalist consensus' strategy of the peace process and the IRA cease-fire. In line with this, transfers from the SDLP to cross-community

parties (mainly Alliance), where in the past the bulk of SDLP terminal transfers have gone, reduced dramatically. There is a fairly moderate increase in transfers from the SDLP to pro-Agreement unionists. There is a reduction in cross-community internal solidarity (no doubt due to the fact that Alliance now shares this bloc with the NIWC). Cross-community non-transferable votes also fall as there are substantial increases in transfers from the cross-community parties to pro-Agreement unionists and to the SDLP. For the percentage changes between 1982 and 1998, it may be more useful to present the data as a bar chart.

Figure 1



Both unionists and nationalists have increased their overall percentages of transfers to each other by between about 2% and about 5%, with the unionist change looking slightly more pronounced than the nationalist change. Pro-agreement unionists have increased their transfer percentage to cross-community parties by about 3%. Nationalist transfers to cross-community parties declined dramatically, by nearly 10% overall. But transfers within the nationalist party group between the SDLP and Sinn Féin, with the common pro-Agreement platform to unite the community, have shown the largest of the group-to-group increases, with the 1998 nationalist-to-nationalist transfer percentage about 13% higher than in 1982.

This broad overview is important in contextualising the analysis in the rest of this study. We remove non-transferable votes from the remainder of the analysis to

increase the sensitivity of the measurement, but clearly do so in the knowledge that shifts in cross-community voting are modest. It is important that in the scrutiny of the detail the overall reluctance of voters to cross the community divide, even after they have exhausted all other possible transfers within their own community, is not lost. While there was a significant drop in transfers from pro-Agreement to anti-Agreement unionists, there was only a minor shift in the opposite direction. The decline in anti-Agreement solidarity and the continued willingness to transfer on to pro-Agreement unionists (presumably in competition with nationalists) certainly helped the UUP secure more seats than they might otherwise have done. While this was a rational response in the context of the traditional political divide, in actual fact, given the concurrent majority system of voting for First Minister and Deputy First Minister, this voting behaviour weakened the capacity of anti-Agreement unionists to veto Assembly decisions. If nationalists had won two extra seats at the expense of the UUP, unionists would still have a majority over nationalists but much more importantly when concurrent majorities are required, anti-Agreement unionists would have had a majority in the unionist bloc.⁷ Evans and O'Leary (1999, 1-25) discuss the possible logic of such behaviour and raise the possibility of all manner of tactical reasons for such transfers but it is surely most probable that voters did not realise the consequences of what was otherwise a perfectly normal and traditional voting pattern.

If the above crude percentages appear to show some post-Agreement changes, some questions remain. Are these changes distinct enough to be more than the product of chance variation? In other words, are these changes statistically significant? Rallings and Thrasher (1993, 366-384) have argued that voter variability at constituency level may be missed at the aggregate or national level. What variation exists at constituency level within the overall summary figures presented in table four? Even if the patterns and shifts are statistically significant what are the political implications of these trends? The remainder of the article examines transfers at the level of individual counts in constituencies to try to form a pattern of the degree of variation in transfers between any two parties or blocs.

⁷ This could have been circumvented if cross-community parties registered instead as unionists. While this was legally possible it might not have been politically possible for a UUP leader to survive in such

VARIATION PATTERNS IN INTER-PARTY AND INTER-BLOC TRANSFERS

Statistical Techniques

In the remainder of the article transfer percentages in 1998 are compared with percentages for the same party groupings in 1982, using plots of the transfers, and calculating the median differences between the elections and their 95% confidence intervals (CIs).⁸ The percentages of transfers are presented graphically using box-and-whisker plots (described in more detail below). These graphical displays show that in many cases, transfer percentages are not distributed symmetrically around their mean. Most of the displays of transfer percentages in this paper show a considerable number of 'outlying' percentages - often large percentages - far away from the main cluster of percentages, making the display of transfer percentages asymmetric. In statistical terms, the distribution of transfers is *skewed*. For skewed data such as these, the mean is of limited value as a summarising statistic. Because it can be highly influenced by one or two of the data which lie far away from most of the transfer percentages, the mean may not be at all typical of the data. If the difference between means is used on its own to examine change in transfers, this influence exerted on the mean by one or two outlying values can also suggest spuriously large 'differences' in mean transfers between elections.

Non-parametric measures such as the median are more informative about such skewed data, and it is the median, the median difference and its 95% confidence interval which are used in this study. The median is the 'half-way point' in a collection of data – the value of a variable above which half the observations lie and below which half the observations lie. Because it is determined by the numbers of observations rather than directly by the value of a variable, the median is a measure of centrality which is not swayed by extreme values in the same way as is the mean. Thus the median is more stable in the presence of extreme or outlying values such as we find with transfer percentages⁹.

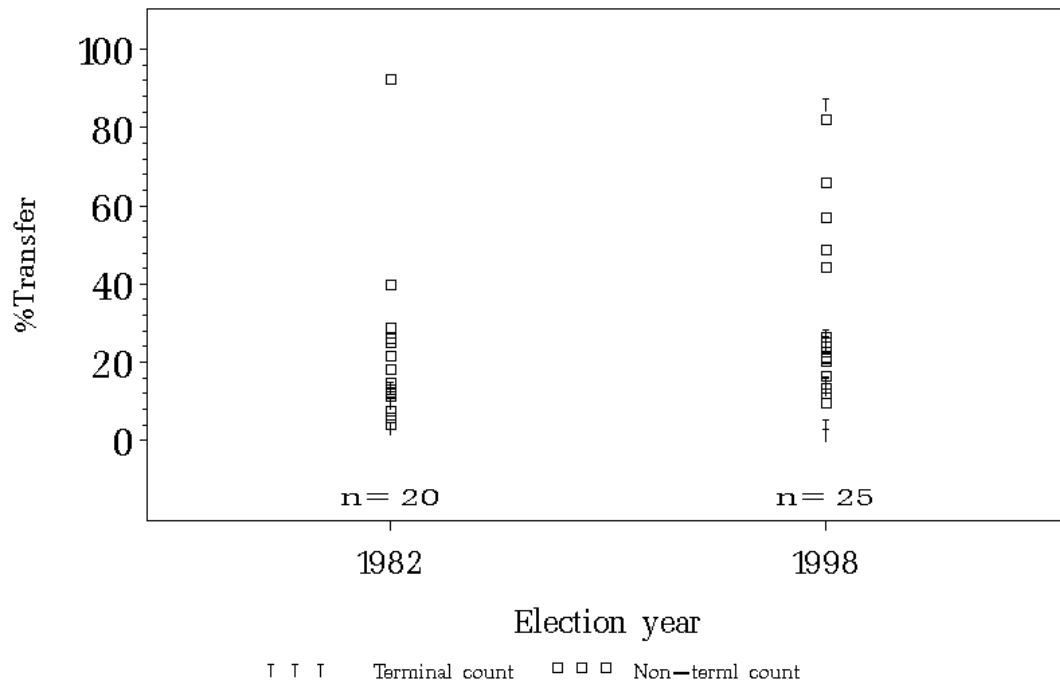
a situation.

⁸ This paper analyses transfer data for all counts in all constituencies in the 1982 and 1998 NI Assembly elections. Data for the 1982 election was taken from Elliott and Wilford (1983). Data for the 1998 election was taken from a database compiled by Radio Telefís Éireann, and kindly made available by Michael Curran of RTÉ.

⁹ The median difference between elections in these categories and its 95% CI is estimated using a method based on the rank sum test – another non-parametric technique (Lehmann, 1963).

Figure 2

Pro-agreement unionist → cross-community parties at each count
(excl own party transfers) 1982 vs 1998



The data is presented diagrammatically indicating the difference in the pattern of transfers from 1982 to 1998. For example, figure two shows the percentages transferred from pro-Agreement unionist candidates to cross community parties at each of the counts of the elections. It is difficult, however, to make much of this simple plot of the 46 counts where pro-Agreement unionists had an opportunity to transfer to cross-community parties. Many of the observations are crowded between 10% and 20%. To explore these observations further, it will be useful to replace the middle 50% of the observations with a box and to indicate the halfway mark – the median of the observations – with a line through the box. If we then extend a line to the highest and lowest observation within some agreed length above and below the box, we have what is often called a box-and-whisker plot.

For this and subsequent box-and-whisker plots, the dot symbol plots the mean (which, with more normally (or Gaussianly) distributed data, is usually within the box); the outliers – those observations which lie above or below the ‘whiskers’ - are plotted either with a “T” (for transfer percentages from terminal counts) or the square symbol

(for transfer percentages from non-terminal counts).¹⁰ Outliers are here defined as the observations which are greater than the 75th percentile plus 1.5 times the interquartile range or which are less than 25th percentile minus 1.5 times the interquartile range.

Thus the 'whisker' below the box in our box-and-whisker plot will extend down to the lowest observation greater than or equal to the 25th percentile minus 1.5 times the interquartile range; and the 'whisker' above the box in the box-and-whisker plot will extend up to the highest observation less than or equal to the 75th percentile plus 1.5 times the interquartile range. To assist the reader in assessing the difference between the transfer percentages between the two elections, a dotted line is produced across from the median of each box plot, and the difference in height between the two medians is added. This quantity is usually close to the median difference, whose CI is presented in the plot. Finally, details about the outlier transfer percentages are included in the plot of each election's results.

Pro-Agreement Unionist to cross-community parties

The box-and-whisker plot summarising the plot of pro-Agreement Unionist to cross-community parties is presented in figure three. It is clear that pro-Agreement unionist to cross-community party transfers have increased at the median level by about 11% and that apart from a greater but still small number of cases when the percentage transferred was very high the overall pattern is similar. With the clustering of most percentages around 15%, together with a substantial number of outliers beyond the 75th percentile, the differences between the elections is a little difficult to see even in the box-and-whisker plot. It is clear that the percentages are not symmetrically distributed about some mean and are not, therefore, normally distributed. The mean for the 1998 election, for example, actually lies outside the 75th percentile- it is heavily influenced by the few large observations for that election. These few large observations could lead to an estimate of difference which is misleadingly large if one used the mean as a summarising statistic.

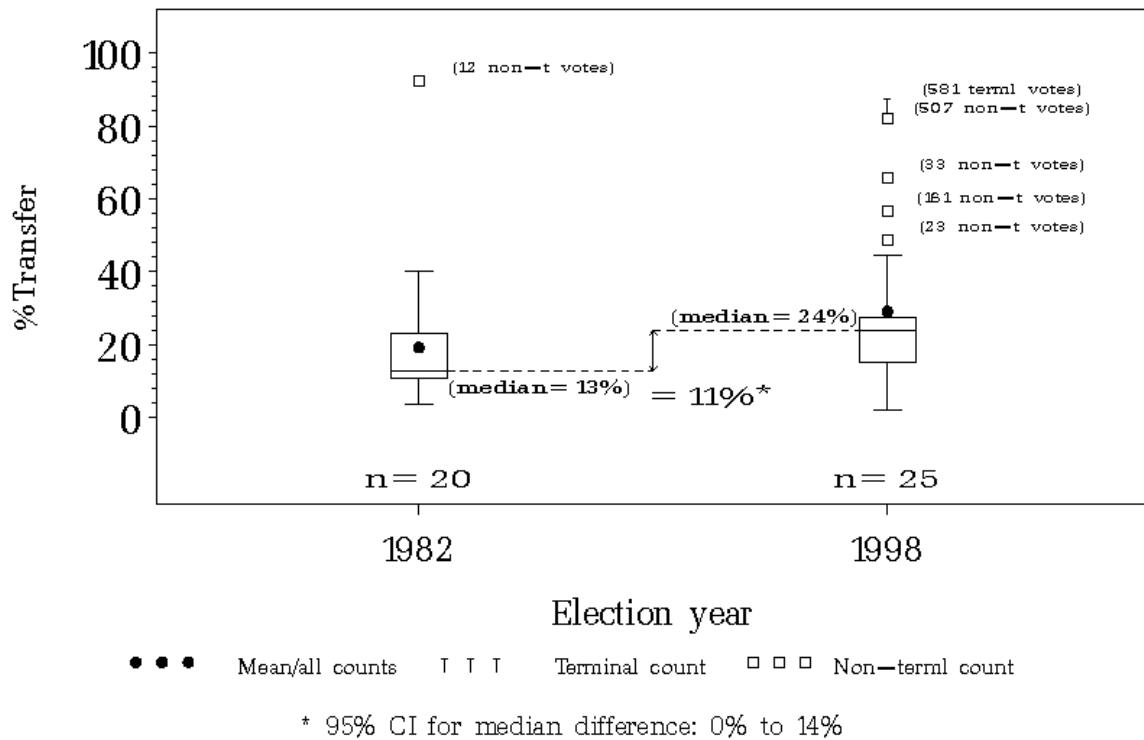
The estimate of overall median difference shows a borderline statistically significant increase in pro-Agreement unionist transfers to cross-community parties – the CI just includes zero. As noted earlier, if anti-Agreement UUC candidates are excluded from

¹⁰ A non-terminal count in this context is one where candidates from the same party remained, even though we have removed those intra-party transfers from the calculations to increase the sensitivity of

the analysis, the CI does not include zero, and the increase becomes significant at the 5% level.

Figure 3

Pro-agreement unionist → cross-community parties at each count
(excl own party transfers) 1982 vs 1998

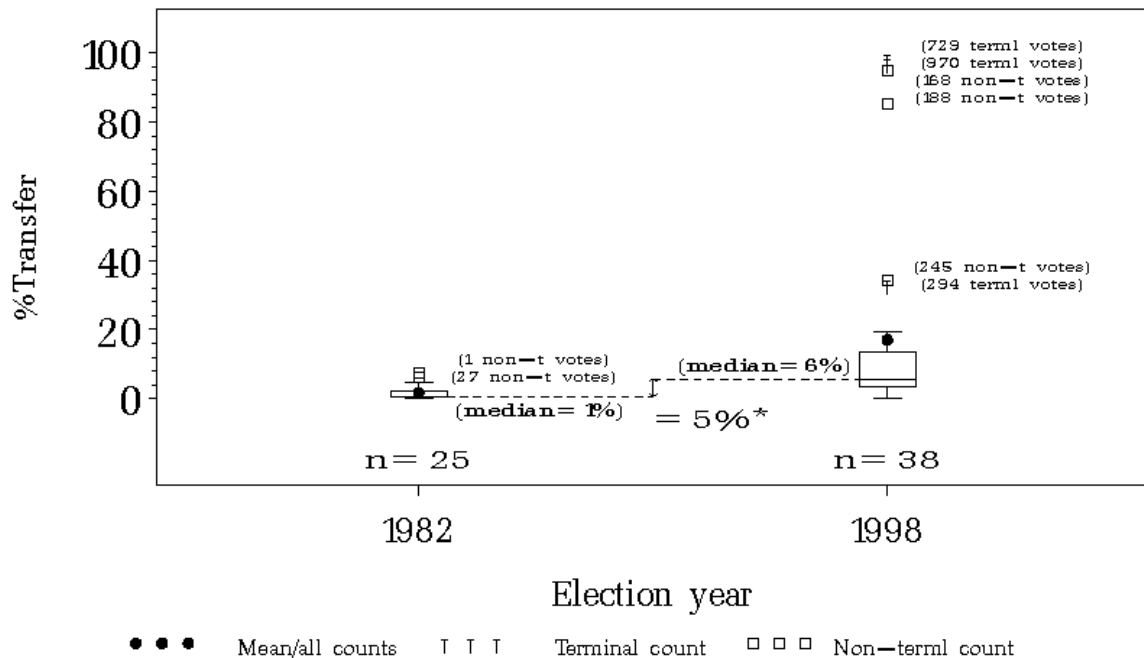


Pro-Agreement Unionist to nationalist

In figure four the box-and-whisker plot shows a modest increase of about 5% in the median percentages of transfers from pro-Agreement unionists to the SDLP for 1998 when compared with those of 1982.

Figure 4

Pro-agreement unionist transfers to SDLP at each count
(excl own party transfers) 1982 vs 1998



There are four instances of high unionist to SDLP transfer percentages which have no precedent in 1982. These instances are, in all cases, late counts when the only choice is SF or the SDLP. Even in these cases more than 60% of the votes are actually non-transferable (Remember we have removed non-transferable votes in calculating the percentages in the plot diagrams). These outliers lead to a mean (plotted with the dot symbol in the box-and-whisker plot) outside the 75th percentile. The overall pattern of pro-Agreement unionist to SDLP transfers is one of a low overall transfer rate with a modest but statistically significant increase between 1982 and 1998.

In an analysis of pro-Agreement unionist to Sinn Féin transfers (not presented) it was possible to detect a statistically significant increase in unionist to SF transfers, but the actual number of votes was extremely small - the highest single transfer amounting to 32 votes out of 4,800. Nonetheless despite the low absolute figure in this single case it represented nearly 15% of all transfers outside the UUP (with the balance going to the SDLP). The median transfer for pro-Agreement unionists to SF was, however, only 1%.

A separate analysis of pro-Agreement terminal transfers when both the SDLP and SF remained (10 cases), showed an increase in the non-transferable vote of 5%.

Therefore even when pro-Agreement unionists had the opportunity to influence the outcome as between SF and the SDLP, there was no increased tendency to support the more moderate nationalist party on tactical grounds, even if not on pro-Agreement principle. For example, in Newry-Armagh and in West Tyrone less than 40% of UUP surpluses transferred to the SDLP, when only SF and the SDLP remained and were fighting for the last seats.

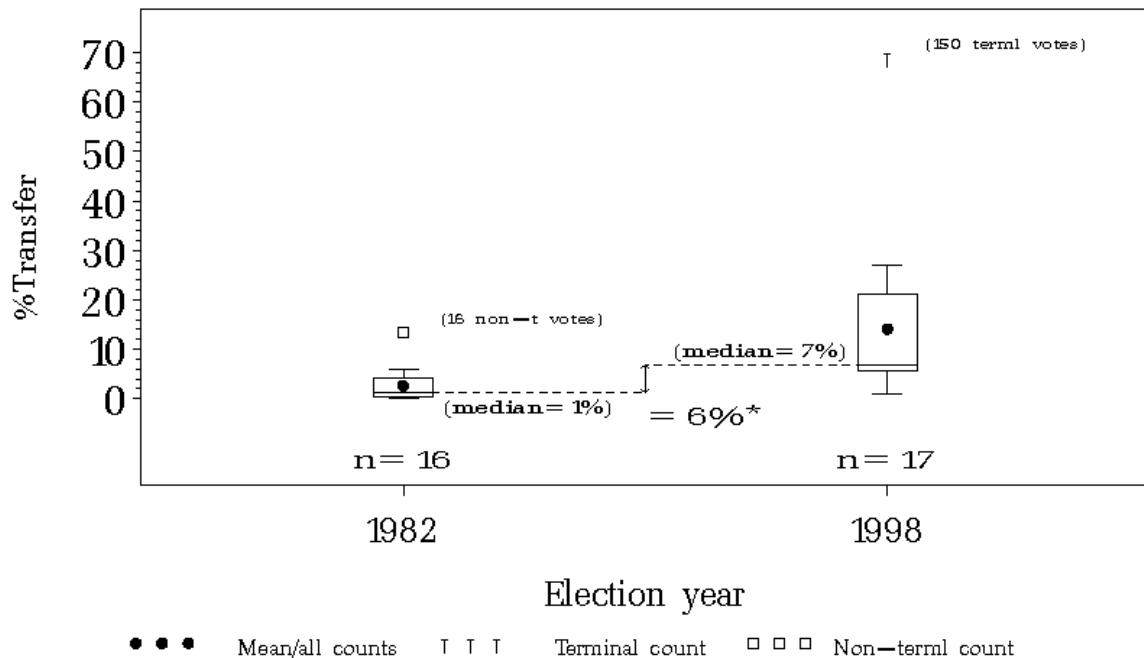
Nationalist to pro-Agreement unionists

SDLP transfers to pro-Agreement unionists follow a similar pattern to transfers in the reverse direction and are presented in figure five. Overall median transfer percentages increased by 6%, a statistically significant increase, but were still very low. The data is slightly more dispersed than the unionist to SDLP pattern as shown by the longer boxplot diagram. Nonetheless the median transfer percentage is still only 7%. One significant outlier with a percentage of nearly 70% exists in Derry East. However this was the last count, when the UUP was fighting two anti-Agreement candidates for the last seat. While 150 transferred votes represented nearly 70% of transfers, over 30% went to the anti-Agreement candidates and of the total vote nearly 90% was non-transferable. The overall pattern of change is therefore quite muted. It is nonetheless statistically significant at the 95% confidence interval.

There was no evidence, as might be expected, of any increase in Sinn Féin to pro-Agreement unionist transfers. The only noteworthy statistic is a lone 90% transfer in the Fermanagh & South Tyrone constituency in the 1998 election. However, on closer examination, the Sinn Féin candidate had just received a large SDLP transfer and under the counting regulations only the 'last bundle received' is re-checked when calculating surpluses after the first count. Therefore, these were voters who gave their first preference to the SDLP and then transferred first of all to SF and then to the UUP, and even then 57% of the surplus was non-transferable.

Figure 5

SDLP transfers to pro-agreement unionist at each count (excl own party transfers) 1982 vs 1998



* 95% CI for median difference: 3% to 10%

Nationalist to Cross Community Parties

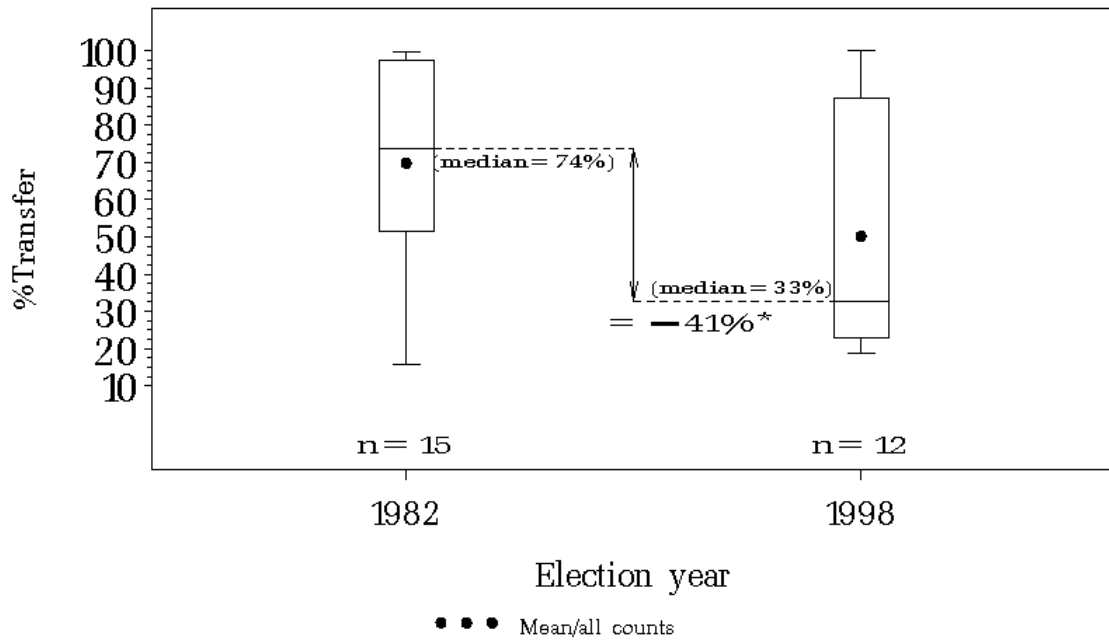
In the past, for terminal transfers (i.e. transfers in counts where there was no SDLP candidate left to receive votes) SDLP supporters had consistently transferred in greater percentages to the AP than to their fellow-nationalists in SF (Elliott et al, 1983, 52, 56 and 61 and Elliott et al, 1986, 36). In Elliott et. al's figures, which include non-transferable votes in the denominator, the percentages for SDLP terminal transfers to AP are 58%, 37%, 79% and 51% in local council elections and assembly election in 1977, 1981, 1982 and 1985 respectively. (The last, reduced figure of 51% came "after warnings from the SDLP leadership to voters about transfers" (Elliott et al, 1986, 36)).

Figure six shows a box-and-whisker diagram for SDLP to cross community parties. We can see that, despite the rather wide dispersion of observations as evidenced by the relatively long boxes in the box-and-whisker plot, the plot does suggest a pronounced decrease in transfers to cross-community parties from SDLP voters, in the order of 41%. When transfers to the Alliance Party alone are analysed (in figure

seven) there is an even larger drop of 61%. The 95% CI for the median difference in transfers to the Alliance Party is -76% to -19%, the interval does not include zero and therefore the drop in SDLP transfers is statistically significant.

Figure 6

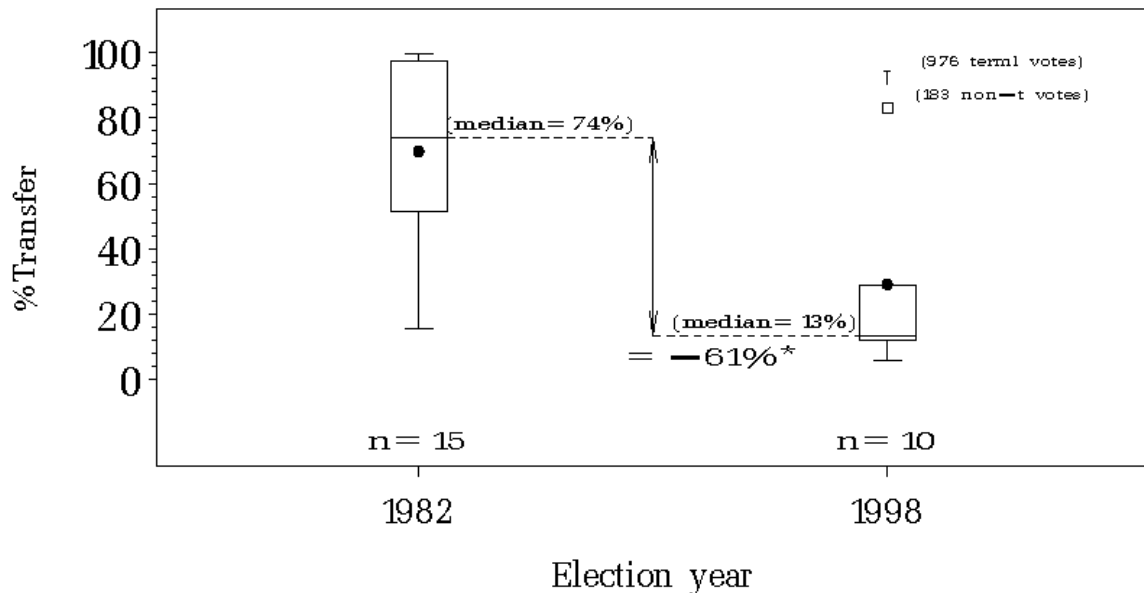
SDLP → cross-community parties at each count
(excl own party transfers) 1982 vs 1998



* 95% CI for median difference: -52% to 4%

Figure 7

SDLP → Alliance at each count (excl own party transfers) 1982 vs 1998



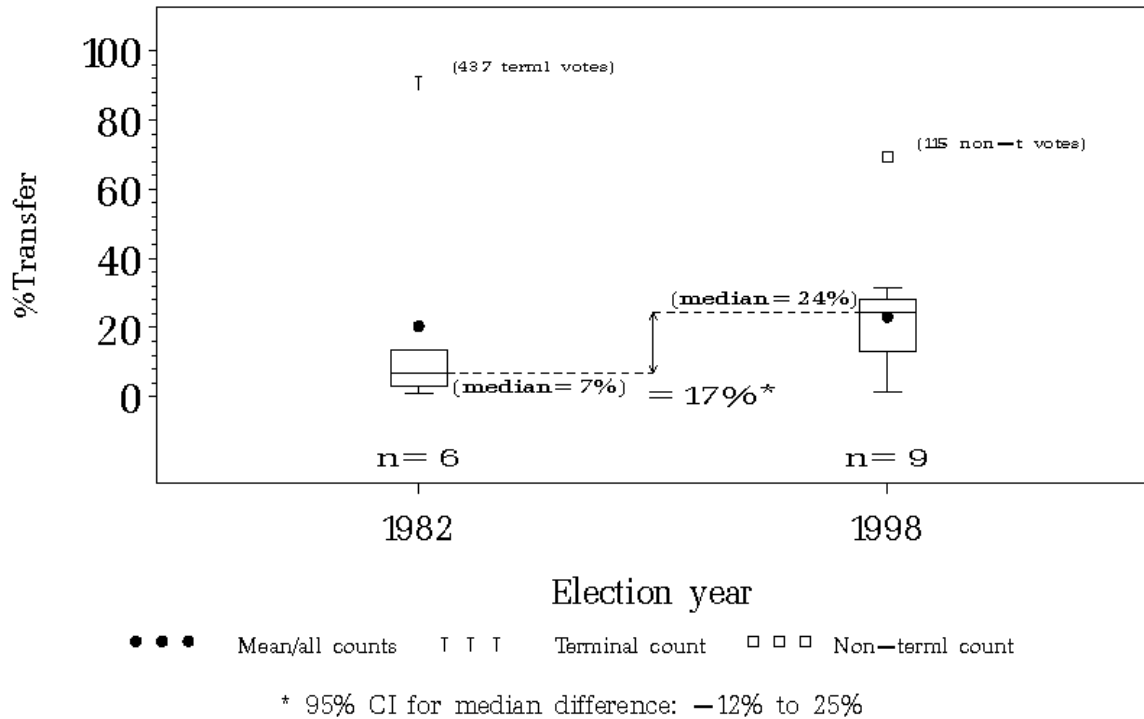
• • • Mean/all counts T T T Terminal count □ □ □ Non-terminal count

* 95% CI for median difference: -76% to -19%

The comparison with the position of Sinn Féin voters is interesting here. Although the number of counts where SF supporters had the opportunity to transfer to cross-community parties was small, there appears to be (if anything) an increase in SF transfers to them. Figure eight suggests a 17% increase in SF transfers to cross-community parties. In fact, however, the estimates for median difference show us that we do not have enough evidence from the two elections to say that the increase is statistically significant. Many of the transfers seem to go to the Women's Coalition rather than Alliance but the change does not appear to hold for the four terminal counts we have and the data is too sparse to make a conclusion here. Furthermore the single biggest transfer in this data was on the elimination of Joe Cahill in North Antrim. While nearly 70% of all inter-party transfers went to Alliance this was based on an inter-party transfer of only 115 votes out of 2496, as another SF candidate remained. Even this figure is likely to be related to the fact that Cahill had received over 600 SDLP transfers in two earlier counts, presumably due to his high personal profile and reputation.

Figure 8

SF → cross-community parties at each count
(excl own party transfers) 1982 vs 1998



Overall, this result was a blow for the cross-community parties, who saw their difficult role in the negotiations rewarded with what looks very like a change in the SDLP vote pattern away from them - a statistically significant one in the case of transfers to Alliance. In contrast the cross community parties gained a significant increase in the level of transfers they attracted from pro-Agreement unionist parties. Overall therefore the median differences suggest that, with the rise in unionist support and the fall in nationalist transfers, there was overall no change in support for the cross-community parties from other pro-Agreement parties. It remains to be seen however what the political effect will be of the shift in the transfer based support for cross-community parties, especially the Alliance Party. If Alliance perceives that an important element of their support base, from the point of view of having people elected, comes increasingly from the moderate end of traditional unionism rather than both unionism and nationalism, this could change the basis of their political position.

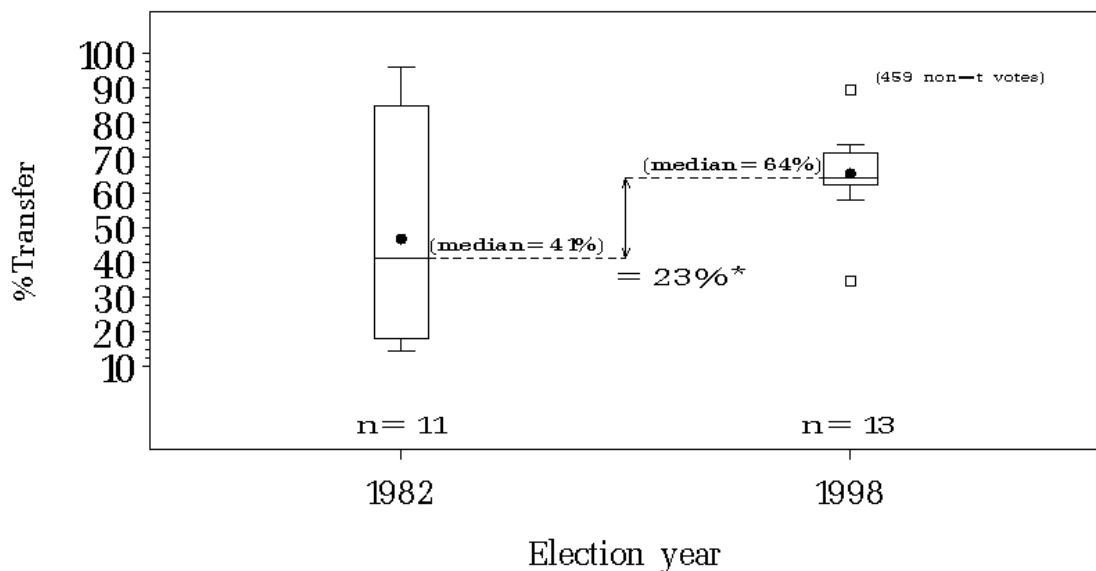
SDLP to Sinn Féin Transfers

SDLP transfers show a strong tendency to shift towards SF, with figure nine suggesting an increase in the median transfer percentage of 23%. The box-and-whisker plot is interesting not only because it shows the large increase in SDLP transfers to SF, but also because it suggests that the pattern in 1998 was consistent throughout Northern Ireland. The box-and-whisker plot for 1982 is quite extended, because the middle 50% of the counts span a wide range of percentages, with from under 20% to over 80% of transfers going to SF. By comparison Elliot et al. (1983; 1985) calculate SDLP transfers to SF at 22.4% in 1982 and 34% in the 1985 local elections. The picture in 1998, in contrast, shows transfers from SDLP to SF concentrated with remarkable consistency around the 64% mark. This change in pattern looks very strong and could cause difficulties for the relationship between the cross-community parties and SDLP in the future.

Figure 9

SDLP transfers to SF at each count

(excl own party transfers) 1982 vs 1998



* 95% CI for median difference: -11% to 46%

It certainly seems that SDLP voters have endorsed the closer working relationship between the two nationalist party elites which was at the heart of the peace process

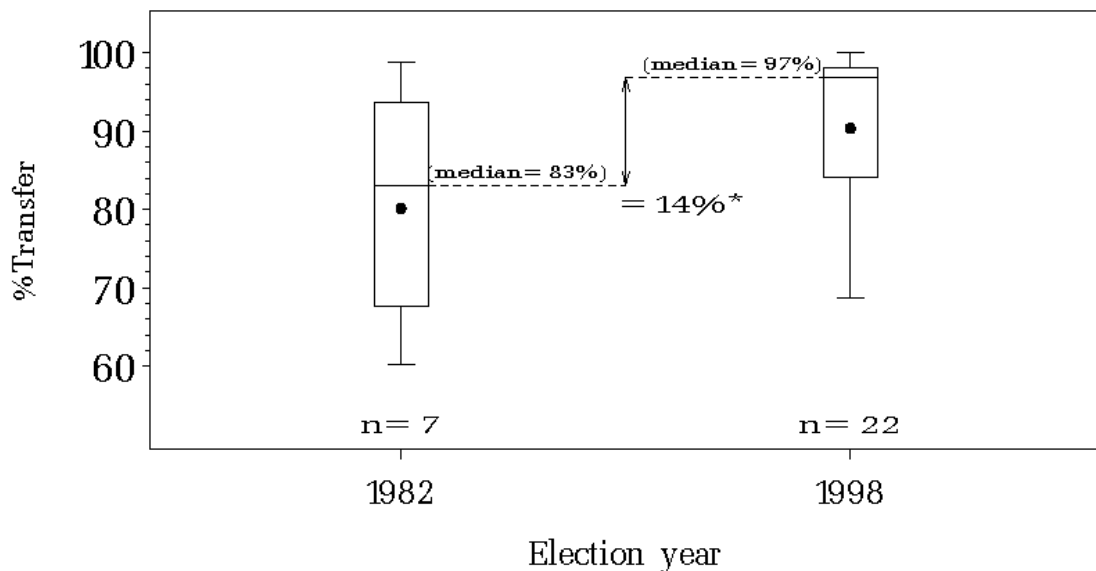
and have responded to this with a high and consistent level of transfers. This may be a long term electoral problem for the cross-community parties, who have in the past benefited from their appeal to both sides of the community (Elliott et al, 1993, 52), while numerically they gained a much greater proportion of transfers from the SDLP as can be seen in table four. While the pattern of change seems clear from figure nine, the confidence interval for median difference does not show the increase in SDLP transfers to SF as statistically significant at the 5% level. This may be because of the large variation in the 1982 results.

Sinn Féin to SDLP Transfers

The shift in transfer pattern from the SDLP to SF is replicated in the opposite direction. Although in 1982 transfers from SF tended to be at a higher level than those of SDLP to SF, with a median percentage of over 80%, they did have a reasonably wide range.

Figure 10

SF transfers to SDLP at each count (excl own party transfers) 1982 vs 1998



* 95% CI for median difference: -1% to 26%

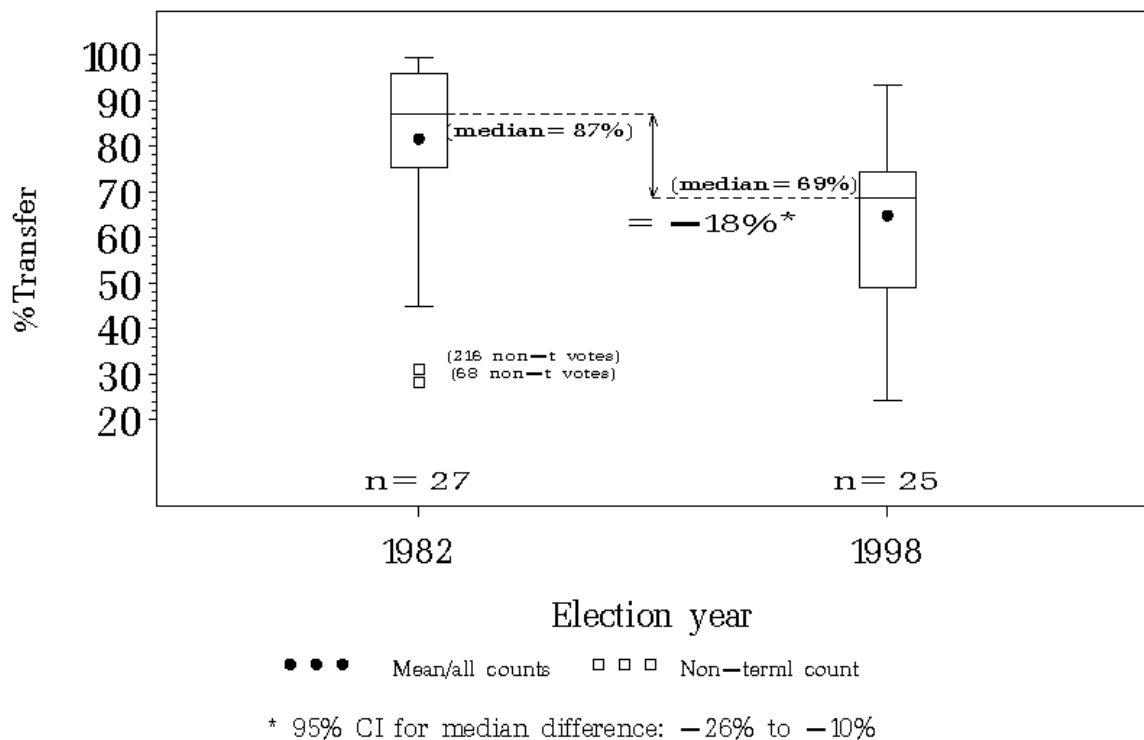
In 1998 the median percentage increased to over 95% and the spread narrowed considerably. While there is certainly still a degree of polarisation within the nationalist community, voters do seem to have responded to the peace process with a considerable increase in the level of mutual support in transfers, although neither change reaches statistical significance.

Pro and anti-Agreement unionist transfers to each other

A more detailed analysis of transfers between pro and anti agreement unionists reveals some patterns hidden by the overall percentages of table four.

Figure 11

OUP/UUP → anti-agreement unionist parties at each count (excl own party transfers) 1982 vs 1998



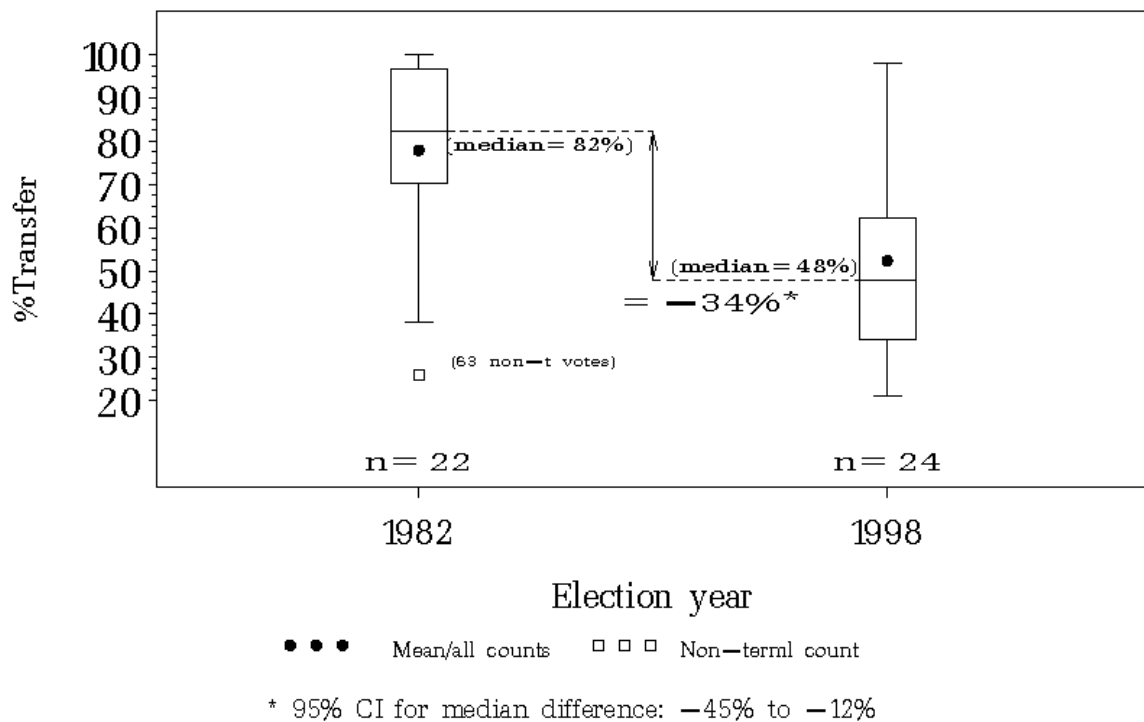
As indicated in figure 11, the drop in median difference of 18% for UUP to anti-Agreement parties reflects the drop in table four. However, we can also see from the boxplot that transfers in 1982 were clustered tightly around the median of 87% with just a few low outliers, while in 1998, in addition to the median drop, there was a much wider spread of behaviour with the lower quartile dropping much lower (while retaining high percentages at the other end). If all pro-Agreement parties are taken

together (not presented) the drop and spread is even more pronounced, with median difference falling by 22% and a longer central box in the diagram. This indicates that pro-Agreement unionists were much more divided in their attitude to the anti-Agreement unionist parties than in 1982.

The median difference analysis of anti-Agreement to pro-Agreement unionist transfers reveals a pattern almost entirely hidden by the relatively unchanged overall percentages of table four. There is a significant drop of 25% in the median transfer and when the DUP is treated separately (in figure 12) the median transfer percentage drops by 34%.

Figure 12

DUP → pro-agreement unionist parties at each count
(excl own party transfers) 1982 vs 1998



The static overall figures in table four can be explained by high percentages of transfers in a small number of cases which involved large absolute numbers of votes. The drop in the median has a significant impact in reducing the number of occasions in which anti-Agreement unionists help to elect pro-Agreement unionist candidates, as discussed in the next section. It is not a consistent drop however. Like pro-

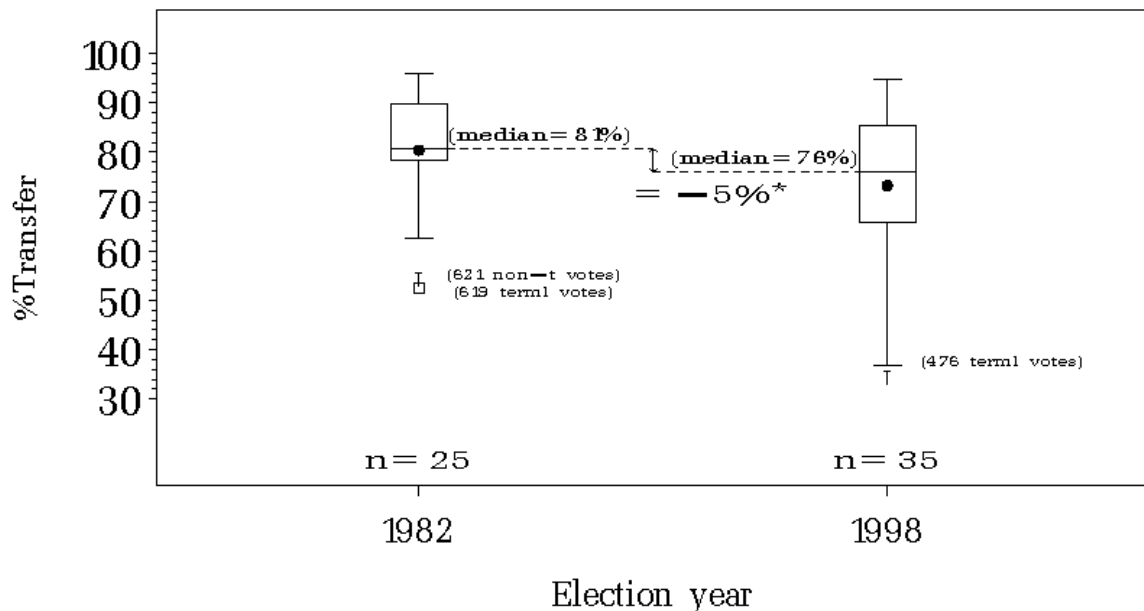
Agreement unionists, the anti-Agreement party supporters are divided in their views on transfers to fellow unionists. The box plot shows that examples of transfer percentages at very high levels continued, helping to explain some of the success of the UUP in winning marginal seats.

It is worth returning to the issue of unionist solidarity in this context and analysing it in more detail, using the median and the box plots rather than a simple percentage as in table four.

Figure 13

Pro-assembly unionist solidarity at each count

1982 vs 1998



* 95% CI for median difference: -13% to 1%

The boxplot of pro-Agreement unionist solidarity shown in figure 13 indicates that the median drop in within-party transfers is not as dramatic as the percentage in table four. This is because the mean is heavily influenced by a few outliers of very low percentages, whereas the median is less influenced in this way. This along with the relatively high variability shown by the greater spread in 1998 helps explain why the pro-unionist bonus of seats over votes increased, despite the drop in solidarity indicated in table four. Anti-agreement unionist solidarity shows no median change

from 1982 despite a drop in overall solidarity. Transfers are however more concentrated around the median, with a fall off in the number of cases of low solidarity. Much of the drop in solidarity seems to be within the DUP. When the DUP is analysed separately, their median solidarity drops by 9%. For anti-Agreement parties excluding the DUP there is in fact a (non-significant) increase in anti-Agreement solidarity of 22%, highlighting again the variability of behaviour among unionist voters.

THE IMPACT OF TRANSFERS ON THE ELECTION OUTCOME

An initial assessment of the impact of transfers can be carried out by looking at the level of proportionality of seats won to first preference votes achieved, by parties and blocs. Table five shows that the SDLP and the Anti-Agreement unionists achieved a number of seats very close to the proportion predicted by their first preference support in 1998. Sinn Féin were however under-represented by 1% and cross-community parties by 1.9%. Pro-agreement unionists were the main beneficiaries with a bonus of 2.9% of seats over first preference votes. The UUP on its own achieved a 4.7% bonus of seats over first preference result, despite the election of two 'pro-Agreement candidates' from the PUP. While the DUP's 1998 result is broadly proportionate, this is in contrast with a seats bonus of 3.9% in 1982.

Table 5 Bonus of percentage seats won over first preference vote; 1982 and 1998 by party and bloc.

Party / Bloc	% Bonus 1982	% Bonus 1998
UUP	3.6	4.7
SDLP	-0.8	0.3
DUP	3.9	0.4
SF	-3.7	-1.0
AP	3.5	-0.9
UKUP	N/A	0.1
PUP	-0.2	-0.7
UDP	N/A	-1.1
NIWC	N/A	0.3
IND	-0.4	-1.5
Other unionist	-2.9	-0.2
Other nationalist	-3.0	-0.3

Pro-agreement unionist	3.4	2.9
Anti-agreement unionist	2.6	0.3
Cross-community	3.1	-1.9
Nationalist	-7.5	-1.0

A comparison with 1982 provides stark evidence of the impact of changing transfer patterns on the cross-community parties, especially Alliance. Even though the loss of nationalist transfers to cross-community parties was largely compensated by an increase in UUP transfers, they lost their comparative advantage in securing transfers. Alliance are over-represented in 1982 by 3.5% and win twice as many seats as SF with fewer first preferences. In 1998 Alliance are underrepresented by 0.9% and the cross-community bloc in total by 1.9%.

This shift in transfer bonuses away from Alliance has largely benefited nationalists, who had a highly proportionate outcome overall, with an underrepresentation of just 1%. Again this can be contrasted with 1982. In 1982 SF ran very few candidates as it was their first modern electoral contest. There was also relatively low levels of transfers and a wide range of experiences across the different constituencies, between the SDLP and SF. This ultimately led to the SDLP being underrepresented by 0.8%, SF by 3.7% and the nationalist bloc in total by 7.5%. The large increase in SF-SDLP transfers in both directions is enough to give the SDLP a proportionate outcome in 1998 and bring SF to within 1%. The near monopoly of the SDLP and SF within the nationalist bloc and the high level of solidarity leads to a 14.2% increase in the number of seats won, off a 8% increase in the total nationalist vote. The SDLP in 1998 also gains slightly from pro-Agreement unionist and cross-community transfers but the number of such transfers are too small to give the SDLP the sort of bonus often achieved by larger parties under PRSTV in the Republic of Ireland (Gallagher, 1975, p. 512) and achieved by the UUP in Northern Ireland in 1998.

The unionist experience, by contrast, is not as easily extrapolated from the overall transfer patterns because of the variability in unionist voter behaviour. While there is a drop in pro-Agreement unionist solidarity it is not as marked at the median level (displayed in figure 13) as for the overall percentages (outlined in table four). There were still many incidents of high UUP solidarity. Likewise while there is a significant drop in the median of anti-Agreement to pro-Agreement unionist transfers, the overall

percentages did not change to the same extent. This may be because in 1998 the instances of higher transfer percentages, though fewer, tended to occur in the important cases when the number of votes being transferred was large. Pro-agreement unionists also benefited from a considerable increase in the overall cross-community transfer percentage to them. There was actually a slight decline of 6% in the median difference but the spread was much wider with examples of very high percentages (over 70%) which simply did not occur in 1982. There was also, as indicated above, a small increase in SDLP transfers. Collectively this was sufficient to give the UUP the edge in marginal seats. The DUP performance is more easily analysed. There was a drop of median party solidarity of 9% and a drop in pro-Agreement transfers of 22%. Together they can explain the DUP's loss of their seats bonus

An aggregate level analysis such as this, while offering some capacity to measure the impact of transfers, is also influenced by other factors such as vote management and the number of candidates. While a specific causal relationship cannot be proven, the patterns of gains and losses on seats won compared with first preference votes achieved are consistent with the patterns of transfers seen in this article.

It is also possible to analyse the political impact of transfers by looking at the number of cases where inter-party transfers had a significant influence on a candidate's overall performance. While there are many ways of quantifying such an impact, in this study a candidate is counted as having substantially helped to elect someone if that candidate's transfers lie in the top half of the elected candidate's transfers – i.e. if the number of votes transferred by the candidate is at least as large as the median transfer received by the elected candidate. Thus if a candidate from the UUP is elected and in the course of five counts receives 10, 500, 2, 25 and 122 transfers, the candidates transferring 500, 25 and 122 transfers will all be considered as having helped the candidate substantially. If the above three transfers came from the UUP, SDLP and DUP respectively, each of these parties would be counted as having contributed substantially to the election of the UUP candidate. If the three transfers came from the UUP, SDLP and again from the UUP respectively, the SDLP would be counted once as having contributed to the election of the UUP candidate, and the UUP would be counted twice.

Note that the use here of the median as the cutoff point in the definition of 'substantial' support means that some quite small quantities of votes will be counted as substantial. For example, in 1998, North Antrim UUP candidate Rev Robert Coulter received nine separate transfers of amounts varying from eight votes (from SDLP's McCamphill) to 1,100 votes (from fellow UUP candidate Campbell). The median transfer consisted of 37 votes and turned out to be from SF's Joe Cahill. This is one of the cases counted as a substantial contribution from SF to the UUC in table six.

Table 6: Electoral impact of transfer patterns

Individual transfers which helped substantially to elect someone							Total Number of Such Transfers
Transfers to	Election	From Unionist		from Cross- community	from Nationalist		
		Pro-agreement	Anti-agreement		SDLP	Sinn Fein	
Pro-agreement unionist	1982	32 (40%)	32 (40%)	13 (16%)	3 (4%)	1 (1%)	81(100%)
	1998	42 (46%)	26 (28%)	17 (18%)	5 (5%)	2 (2%)	92(100%)
Anti-agreement unionist	1982	29 (40%)	35 (49%)	3 (4%)	4 (6%)	1 (1%)	72(100%)
	1998	32 (40%)	35 (44%)	9 (11%)	3 (4%)	1 (1%)	80(100%)
Cross community	1982	5 (12%)	7 (17%)	7 (17%)	21 (51%)	1 (2%)	41(100%)
	1998	10 (42%)	4 (17%)	6 (25%)	2 (8%)	2 (8%)	24(100%)
SDLP	1982	4 (8%)	6 (12%)	8 (16%)	25 (51%)	6 (12%)	49(100%)
	1998	12 (26%)	1 (2%)	8 (17%)	10 (22%)	15 (33%)	46(100%)
Sinn Fein	1982	1 (10%)	1 (10%)	2 (20%)	5 (50%)	1 (10%)	10(100%)
	1998	5 (11%)	3 (7%)	4 (9%)	11 (24%)	23 (50%)	46(100%)

Using the mean as a cutoff point for the definition of 'substantial support' would avoid many instances of such apparently small numbers of votes being counted as substantial. It should be born in mind, however, that half of the transfers which occur in the two elections of 1982 and 1998 consist of 28 votes or less; and that a quarter of the candidates elected beat the runner-up by less than 450 votes. In this context, SF's 37-vote contribution to the UUC candidate above might be regarded as politically useful, and numerically substantial.

There were a total of 253 instances of individual transfers which contributed substantially to electing a candidate in 1982, and 307 instances of this in 1998 and these are set out in table six. Instances of pro-Agreement Unionist candidates substantially helping Nationalist candidates to get elected more than triple from five in 1982 to 17 in 1998. Both SF and SDLP benefit from pro-Agreement Unionist transfers. When it comes to substantial Nationalist support for pro-Agreement Unionists the change is less striking: there are four instances of this in 1982 and seven in 1998.

We can see that the overall decline in pro-Agreement Unionist solidarity did not prevent an increase in the number of pro-Agreement Unionist candidates who substantially helped each other to get elected. The number of these increased from 32 in the 1982 election to 42 in 1998. This self-help represented 40% of substantial support for pro-Agreement unionists elected in 1982, but 46% in 1998. For the anti-Agreement grouping the percentage of within-group instances of substantial support is in line with the drop in overall solidarity suggested by table four. Nevertheless, the analysis at constituency/count level shows that the decline in anti-Agreement solidarity was far from universal.

Despite the fact that the overall percentage of anti-Agreement unionists transferring to pro-Agreement unionists continued at the same level, there is at constituency level a significant drop in the median difference and this is reflected in a drop in the number of times they helped to elect pro-Agreement candidates (26 times in 1998 compared to 32 in 1982). The substantial seat bonus for the UUP is generated, when you measure impact in our terms, by effective, if diminished, solidarity within pro-Agreement unionism, significantly increased transfers from cross-community parties, and marginally increased support from nationalists. Furthermore, despite the overall drop in transfers from pro-Agreement unionists to anti-Agreement unionists as shown in table four, when it came to electing people, pro-Agreement unionists actually helped substantially to elect anti-Agreement candidates at similar rates in 1998 and in 1982. Ironically, cross-community voters helped elect anti-Agreement candidates more often in 1998, with nine such cases compared to three in 1982. It is clear that using simple Northern Ireland wide percentages hides the complexity of the impact of transfers. Pro-agreement unionist solidarity seems to have been high where it mattered, even if the overall average shows a decline. While anti-

Agreement unionist transfers helped to elected pro-Agreement candidates less often than in 1982 they still helped 26 times. (A significant level even allowing for a single candidate being helped more than once, given that only 30 pro-Agreement unionists were elected). There is still great continuity in unionist transfers across the political divide within unionism but clearly greater divisions in attitudes as evidenced by the greater variation in boxplots.

Transfers within the Nationalist grouping (both within-party and between-party) increased overall in 1998 compared with 1982 (table four). In line with this, the number of incidents when Nationalist candidates were elected with substantial help from transfers from fellow Nationalists also increased from 37 in 1982 to 59 in 1998. But it is also clear from table four that while overall Nationalist solidarity increased, this occurred largely among SF candidates. Table six shows the effects of this at a practical level. Sinn Féin candidates received substantial help in the form of transfers from their own party 23 times in 1998, while this occurred only once in 1982. This is largely if not entirely explained by the fact that 1982 was Sinn Féin's first electoral contest in the modern period, they ran very few candidates and were only beginning to establish their electoral support base. In contrast to this, the decline in SDLP solidarity overall is reflected in the fact that for the SDLP instances of substantial intra-party support decline from 25 in 1982 to only 10 in 1998. This is balanced by the substantial increase in transfers to SF, which sees SF gain seats in much closer proportion to their vote in 1998. However there are substantial increases in the number of candidates helped by transfers between the SDLP and SF in both directions, but with SF in particular seeing a very large rise (again partly explained by the relatively low number of candidates in 1982). Again the effect of this is clear in seats won, with nationalists much more proportionately represented in the Assembly in 1998 compared with 1982, without any loss for the SDLP.

Consistent with the overall increase in pro-Agreement Unionist transfers to cross-community parties, there were 10 instances of substantial support for cross-community candidates elected in 1998 from pro-Agreement Unionist transfers, where there were only 5 in 1982. On the Nationalist side, the opposite trend holds. Again in line with the overall trend suggested by table 4 of the paper and the boxplots, SDLP transfers give substantial help to elect just two cross-community candidates in 1998, where it had helped to elect 21 in 1982. Similarly, there were two instances where SF helped substantially to elect a cross-community candidate in 1998. This represented

almost no change from 1982, where it helped just one cross-community candidate substantially.

CONCLUSION

On a macro level the most significant electoral impact of the peace process has been to increase substantially electoral solidarity within nationalism by increasing transfers in both directions between the SDLP and SF. One effect of this has been to end the previous overrepresentation of the Alliance Party, as they have lost their comparative advantage in securing substantial SDLP transfers. There has been a modest but borderline significant increase in pro-Agreement unionist transfers to Alliance but not enough to compensate for the loss of support from SDLP voters. 1998 also saw a decrease in DUP solidarity and the erosion of the DUP's previous overrepresentation.

The detailed analysis of transfers at constituency level gives us a much more sophisticated picture of the pattern of transfers across Northern Ireland. The box-plots show the extent to which average figures hide a wide variety of voting behaviour and also cases where voters displayed similar transfer patterns across various counts and constituencies. These diagrams indicate a small increase in most cases in inter-bloc voting among the pro-Agreement parties, with the fall in SDLP support for Alliance being the main exception. We can detect a statistically significant 5% increase in pro-Agreement unionist transfers to the SDLP and a similar increase in the opposite direction. The pattern of transfers is reasonably consistent, but both sets of transfers include isolated cases of much higher transfers much more frequently in 1998 than in 1982. The numbers are still very small, the situations isolated and the majority of voters are much more likely to go non-transferable than cross the community divide, but a greater number of voters are making that choice.

The analysis of inter-party voting within nationalism shows that the pattern has shifted as well as the average. The wide spread of behaviour by SDLP voters in 1982 has shifted to a much more uniform behaviour with almost two thirds of SDLP voters transferring to SF. Likewise, transfers from SF to SDLP show less variation as well as a higher median. The evidence within the unionist bloc is more varied. At a macro level pro-Agreement unionist transfers to anti-Agreement unionists drop, while anti-Agreement transfers to pro-Agreement unionists stay at the same level as 1982. A more detailed analysis reveals a wide variety of behaviour at constituency level. In

fact pro-Agreement unionist help to elect anti-Agreement candidates at similar rates in both elections. Overall despite its variability at constituency level it is the UUP which benefits most from transfers in the contest for marginal seats.

The extent to which voters crossed the traditional political divide to support pro-Agreement candidates in the other community has increased with statistical significance, but remains very limited based on this analysis of the 1998 election. Within nationalism however, the impact of the peace process is clear with a substantial increase in inter-party solidarity and representation in terms of seats, further boosting the demographic gains of the past 20 years.

APPENDIX A

Party name (as of 1998)	Abbreviated name	Grouped party	Community	Attitude to agreement (as of 1998)
Ulster Unionist Party	UUP/OUP	UUP/OUP	Unionist	Pro-agreement
Social Democratic and Labour Party	SDLP	SDLP	Nationalist	Pro-agreement
Democratic Unionist Party	DUP/UDUP	DUP/UDUP	Unionist	Anti-agreement
Sinn Féin	SF	SF	Nationalist	Pro-agreement
Alliance Party	AP	AP	Cross-community	Pro-agreement
UK Unionist Party	UKUP	UKUP	Unionist	Anti-agreement
Progressive Unionist Party	PUP	PUP	Unionist	Pro-agreement
Ulster Democratic Party	UDP	UDP	Unionist	Pro-agreement
Women's Coalition	NIWC	NIWC	Cross-community	Pro-agreement
Labour	Lab	Ind	Cross-community	Pro-agreement
Green Party	GP	Ind	Cross-community	Pro-agreement
Conservative	CON	Ind	Unionist	N/A
Workers Party	WP	OthN	Nationalist	Pro-agreement
Natural Law Party	NLP	Ind	Cross-community	Pro-agreement
Socialist Party	SP	Ind	Cross-community	Pro-agreement
Independent Unionist	IndU	OthU	Unionist	Anti-agreement
E106	E106	Ind	Cross-community	N/A
Independent	Ind	Ind	Cross-community	N/A
Independent Labour	IndL	Ind	Cross-community	N/A
Independent Nationalist	IndN	OthN	Nationalist	N/A
NL	NL	Ind	Cross-community	Pro-agreement
United Ulster Unionist Party	UUUP	OthU	Unionist	Anti-agreement
Independent Democratic Unionist	IndDU	OthU	Unionist	Anti-agreement
Independent SDLP	IndSDLP	OthN	Nationalist	Pro-agreement
Communist Party of Ireland	CPI	Ind	Cross-community	N/A
Vanguard Unionist	VanU	OthU	Unionist	N/A
United Loyalist Democratic Party	ULDP	OthU	Unionist	N/A
Peoples Democracy	PplsD	OthN	Nationalist	N/A
Ecology Party	Ecol	Ind	Cross-community	Pro-agreement
Liberal Party	Lib	Ind	Cross-community	Pro-agreement
Ulster Popular Unionist Party	UPUP	OthU	Unionist	N/A

N/A=Not available/not applicable

Parties whose orientation towards the 1998 agreement was unclassifiable, mainly those who contested in 1982 but not in 1998 or who no longer existed, are included in the broad summary of voting patterns in table two but not elsewhere in the calculations.

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