Minority languages and code-switching

Code-switching in bilingual communities has been extensively discussed (e.g. Clyne 2003; Myers-Scotton 1997, 2002; Poplack 2004). Here, code-switching is examined in Irish, an endangered language. Crystal (2000) noted that a significant increase in code-switching is one of the signs that a minority language is coming under pressure from a majority language. It has been claimed that code-switching has become more significant in recent years among Irish speakers, but to date this has rested mainly on anecdotal accounts. Here, some data are presented on the frequency and type of code-switching among a key group of adult native Irish speakers: the Leaders of Irish-language preschools in Irish-speaking communities. The language use of this group in their interactions with preschool children is of particular interest, given their role in the transmission of the Irish language to the next generation. As necessary background the current position of Irish is summarised first and the contact between Irish and English is briefly reviewed.

The current position of Irish

Irish is the first official language of the Republic of Ireland, but English is also an official language, spoken by the majority most of the time. Census 2006 (Central Statistics Office 2007) found that 1.66 million people aged three years and over were ‘able to speak Irish’, representing 42 percent of the population. However, 60 percent of these reported that they never use Irish, or less often than weekly. Education is the main domain for Irish use, with almost half a million (485,000, 29.3%) reporting that they spoke Irish daily within the education system, but only about four percent (68,685) of those who can speak the language do so daily outside of education. Thus, the educational context is now a highly significant arena for the use of
Irish, and it is one such context that is studied here.

Irish is spoken as the community language only in a small number of areas, known as the Gaeltacht, mainly on the western seaboard. In Census 2006, 70.8 percent (64,265) of the population of these communities reported that they could speak Irish, but only 57 percent (36,846) of them spoke Irish daily, pointing to a perilously low number of daily speakers even in Gaeltacht areas. A recent analysis of Irish use in Gaeltacht areas (O’ Giollagáin et al. 2007) projects that it will remain a home/community language there for at most another twenty years, unless major policy changes are implemented.

Language contact between Irish and English

Irish has been in contact with English over a number of centuries, showing what R. Hickey (2007) has termed a prolonged period of shift between 1600 and about 1900. One result was an early and sustained interest in the influence of Irish on the variety of English spoken in Ireland from the eighteenth century, with collections such as those by O’ Muirithe (1977) and Dolan (1998), and a more recent burgeoning of interest (e.g. Harris 1993; Filppula 1999; R. Hickey 2007). Exploration of the influence of English on Irish, the reverse phenomenon, has been more limited. Sjoestedt-Jonval (1928) studied the effect of contact with English on the Munster dialect of Irish, and de Bhaldraithe (1953), R. Hickey (1982), and Stenson (1993) have looked at contact phenomena in other dialects. Stenson noted that Irish has been influenced almost exclusively by English since the seventeenth century, and the most dramatic changes have occurred in the last 100 years, in the period when the monolingual Irish speaker became a rarity. She found a range of contact features in Irish and contrasts the current ‘near-universal bilingualism’ (Stenson 1993: 108) with other high-contact communities, such as Spanish speakers in the U.S., which encompass greater diversity in their English ability. R. Hickey (2007) emphasises the centrality of this universal bilingualism in his consideration of the more apparent English influence on Irish in recent years.

The salience of this more obvious influence on Irish has led to growing concern about the language surviving. Ó Murchú (1988) argued that older elaborate speech forms in Irish were being replaced by an impoverished variety whose lexicon and grammar were being determined by elite urban bilingual groups. de Bhaldratite (1993) noted ‘detrimental change’ such as new loans replacing existing Irish
words, changes in tenses showing convergence with English, and loss of elements such as vocative marking. Ó hIfearnáin (2003) also noted vocabulary attenuation among young adult Irish first language (L1) speakers. High levels of contact between L1 Irish speakers and English speakers learning Irish as their second language (L2) are a significant factor in the Irish context. Muysken (2000: 270) noted that ‘massive second language learning’ can cause syntactic borrowing from the learners’ L1 into the language learned, and R. Hickey (2007) has documented this for the Irish-English that developed during Ireland’s colonisation. However, the widespread learning of a minority language as an L2 by speakers of a dominant language can also affect the minority language: Jones (1998) found Welsh L1 children in immersion schools adopting the errors of the L2 learners rather than influencing them to use the correct forms, and similar phenomena have been noted in Ireland (e.g. Nic Pháidín 2003). The fact that Irish L1 children are now in a minority in many classes even in Gaeltacht districts (O’ Giollagáin et al. 2007; Hickey 2001) results in extensive exposure to input from L2 learners of Irish in most educational settings.

**Code-switching versus borrowing in Irish**

Sankoff (2001) and Mahootian (2006) comment on the controversy in the code-switching literature with regard to distinguishing between single-word switches and single-word loans. Myers-Scotton (2002) treats them as part of the continuum of code-switches, and only views single-word switches as established borrowings if they are assimilated. Poplack (2004), on the other hand, includes the criteria of recurrence and diffusion. She distinguishes between:

- established loanwords used by monolingual speakers of the language, recurrent both in individuals’ speech as well as widespread in the community, and assimilated to the recipient language; and
- nonce borrowings, which may not satisfy the conditions of recurrence and diffusion, but do tend to show (at least some) morphological and syntactic assimilation, and, in some cases, at least partial phonological integration with the recipient language.

Mahootian’s (2006) overview points to a synchronic process:

- from code-switches that retain the features of the donor language and are neither recurrent in the speaker or widespread...
in the community;
• to nonce borrowings used only by bilinguals without recurrence in individuals or diffusion in the community, but that ‘assume the morphological, syntactic and optionally, phonological identity of the recipient language’ (Poplack 2004: 590); and finally
• to established borrowings/loan words, which show high levels of morphological, syntactic and phonological integration in the recipient language, and recurrent and widespread usage by monolingual speakers as well as bilinguals. According to this analysis, loanwords are fully integrated and are used by monolinguals without any awareness of their origins.

Deuchar (2005) distinguishes between single-word code-switches and loans on the basis of their ‘listedness’ (Muysken 2000) or inclusion in established dictionaries. A problem with using this criterion crosslinguistically is that the official recognition of items as loans may be influenced by their degree of phonological integration, and, as Mahootian (2006) noted, using degree of integration to distinguish code-switches from loans is problematic. Firstly, determination of morphological integration is not possible for uninflected morphemes. Secondly, phonological integration is not always clear-cut: e.g. a bilingual who has transferred their L1 phonological system to their L2 and therefore has an accent in their L2, cannot definitively be said to be borrowing rather than code-switching on the basis of degree of phonological integration.

Using the issue of phonological integration is particularly problematic in the case of Irish, where the donor language is Irish-English. Stenson (1993) noted that while long-standing borrowings from early Anglo-Norman contact were assimilated phonologically, morphologically and syntactically into Irish, more recent borrowings do not show a level of integration that is sufficiently clear to distinguish them from code-switching. Stenson (1991) stressed the crucial fact that the source of the more recent borrowing into Irish is, in fact, Irish-English, itself the product of the influence of Irish on English at the time of the main societal shift to English. As a result, when considering the behaviour of English words in Irish, one frequently encounters a blurring of the phonological distinctions between the two languages which might be used in other bilingual settings to differentiate integrated from non-integrated forms.

Stenson 1991: 562
Significantly, Stenson also points to a change in tolerance for unassimilated English phonemes in Irish, interpreting this as a recent increase in influence from Irish-English on the Irish phonological system. She concludes that well-established and phonologically assimilated loan-words in Irish coexist with relatively more recent borrowings of words from Irish-English that are used extensively across generations, but without assimilation. She sees this as being the result of both the universal bilingualism of Irish speakers and the complex history of reciprocal influence between Irish and Irish-English. Stenson (1993) concludes that it is not possible to distinguish unambiguously between code-switching and borrowing in modern Irish on the basis of some level of greater integration for borrowings. In fact, she noted a preference for retaining English phonological features in such borrowings, rather than assimilation to Irish patterns, and again attributes this to universal bilingualism in English. Finally, Stenson notes that the highly skilled code-switching exhibited by Irish speakers represents ‘a substantively new phenomenon which is becoming increasingly widespread among speakers of various age groups’ (1993: 123).

**Code-switching and discourse markers in indigenous languages**

Analysis of the use of majority-language discourse markers in indigenous languages has become a significant strand of the code-switching literature. Maschler (1994) defined discourse markers as bracketing units of talk and framing parts of the text rather than referring to referents in the real world (see also Schiffrin 2002). Research on code-switching of discourse markers includes studies of German-English bilinguals (Salmons 1990), Dutch-French bilinguals in Brussels (Treffers-Daller 1994), and Hebrew-English bilinguals (Maschler 1994). A number of researchers have attempted to analyse the function of code-switched discourse markers. Given that indigenous languages have their own discourse marking systems, code-switching and borrowing of these forms does not usually appear to be motivated by the need to fill a gap. A significant feature of discourse markers is their tendency to be clause-initial, and their isolation and detachability from the rest of the utterance makes them occur at ‘prime switch-points’ (Mougeon and Beniak 1991). Torres (2006) claims that it is this limited effect on syntax, coupled with their highly salient marking of speakers’ attitudes or involvement, that facilitates the entry of majority-language discourse markers into the indigenous language.
These features of salience, detachability and location at prime switch-points have led to particular research interest in the code-switching of majority-language discourse markers in threatened minority languages, allowing examination of the trajectory of change in the threatened language. Myers-Scotton (2006: 245) noted that discourse markers often become established borrowings in high contact situations, citing examples from the Shona language where *because* and *but* appeared in eight percent of the uses of these forms in Shona, and are, she argued, in the process of being borrowed. Mougeon and Beniak (1991) noted a pattern of English discourse marker use in Ontarian French: entering as code-switches; being used in parallel with the forms they approximate; becoming more integrated over time and possibly established as borrowings; and eventually becoming potential replacements of the original matrix forms. Such examination of the trajectory from occasional code-switch through borrowing to replacement is a recurrent theme in studies looking at bilinguals’ use of discourse markers. The problem noted by Torres (2006: 619) is that there is a dearth of studies carrying out quantitative analyses of code-switched discourse markers in indigenous languages, and most studies rely instead on analysis of isolated examples. This lack of quantitative analysis makes it difficult to decide when a code-switched form has become a borrowing, and it is this problem that the current study seeks to address.

Given the evidence of reciprocal influence between Irish and Irish-English, a very brief consideration of the literature on discourse markers in Irish-English is relevant. R. Hickey (2007: 371) argued that Irish-English discourse achieves its distinctive tone through the use of a number of ‘adjectives, generic references, discourse markers and fillers’, observing that the consensual nature of Irish-English discourse results in the frequent use of pragmatic markers such as *well, you know, sure*. He commented on the use of *so* in sentence-final position to indicate consent, and the use of *okay, now, yeah* to lessen social distance, mitigate disagreement or construct consensuality, respectively. Amador Moreno (2005) claimed that *sure* is a very common sentence opener in Irish-English. Finally, White (2008) found that clause-initial *now* and *so* are distinctive and established features of Irish-English, serving the functions of topic management and hedging.

Since these discourse markers are features of Irish-English, it is of interest to consider whether they have influenced speakers of Irish. O’Malley Madec (2001) examined code-switching among 10 adult Irish L1 speakers and reported that, while they appeared to code-
switch very frequently, their code-switches were restricted, with 60 percent belonging to the following limited set of discourse markers:

1. Well/bhuel, like, you know, d’ya know, I know, you see, just, so, because, but, right, alright, whatever, really, kinda, I’d say.
(While bhuel ‘well’ is the only one of these to be included in the most authoritative dictionary (Ó Dónaill 1977) and therefore satisfies Deuchar’s (2005) criterion of listedness, in current use it is not clearly phonologically assimilated in Irish, and hence it is written here as well/bhuel)

O’ Malley Madec (2007) found that these discourse markers made up 66 percent of the intrasentential switches in her data from Irish native speakers from a heartland Gaeltacht community, and that such code-switching was much higher in this group than among those living on the periphery, who simply switched to English. She cites Cotter’s (1996) study of English discourse markers by Irish speakers in the media as highlighting the choice being made by speakers who have two forms available to them, indicating that the borrowed form meets their communicative purpose in a way that transcends the propositional value of its Irish equivalent. This study seeks to explore more fully the frequency and type of code-switching found in a corpus from a particularly influential group of Irish speakers – the native speaker teachers in Irish-medium preschools in Gaeltacht areas – and to examine whether discourse markers are a significant feature of their code-switching.

Sample and setting
The data are drawn from ten Irish native speakers working as Stiúrthóirí (Leaders) in naíonraí (Irish-medium preschools) in Gaeltacht or Irish-speaking communities in the west of Ireland. These women were raised as Irish speakers (though all are proficient bilinguals), and were aged 30 to 50 years. The data were collected as part of an observational study of 60 children attending naíonraí (Irish-medium preschools) in the Gaeltacht. The data discussed here come from over 40 hours of taping of the ten Leaders. The women’s data constituted the input to children aged between three and five years, six of whom were taped and observed in each group (using the Sylva, Roy and Painter (1980) observational system, where trained observers coded the target child’s interaction type and activities every 30 seconds for two 20-minute sessions as they were engaged in their normal
playgroup activities). In order to minimise the self-consciousness of the adults and children, precautions were taken to ensure that it was not obvious to the Leader which child was being taped at any particular time, and in this way it was hoped that the interactions during observation would be as close to normal as possible. The transcribed data were analysed using the CHILDES system.

The naíonraí chosen were spread between the three main Gaeltacht areas (two in Ulster, six in Connemara, and two in Munster) and thus the three dialects are represented. The sample of ten groups was drawn to include a range of naíonra

• those where children from Irish-only homes were in the majority;
• those with a majority from Irish-English homes;
• those where children from English-only homes formed the largest group; and
• those where no home-language group reached 50 percent or more.

Given other factors such as the limits on the numbers taken in each group and the needs of parents for a naíonra convenient to their workplace, the home language composition of the naíonra is not an absolute guide to the language use of the community in which it is located, though comparison with recent studies of the Gaeltacht (O´Giollagáin et al. 2007) show a good fit.

Results

The code-switching in the speech of the ten Stiúrthóirí (Leaders) in interaction with the children was analysed. Intersentential switching to English occurred very rarely in these data (and then usually as exclamation), which might be expected in an educational setting which deliberately aims to promote Irish among L1 and L2 preschoolers. Intrasentential code-switching was found more frequently in the data, but it was very variable between individual Leaders, ranging from about 2.5 percent of observed utterances in some cases to as high as 19 percent in others, with an average of 8.5 percent of the Leaders’ total utterances containing English mixes in Irish sentences. Table 1 presents the data on the Leaders according to the predominant home language of the naíonra group.

While there was wide variation between these speakers in their rate of code-switching, there also seemed to be some effect of the
home-language background of the largest group of children in the naíonra: Leaders with the lowest average percentage (2.8%) and rate of code-switching per minute (0.20) were those in the naíonraí where the majority of children came from Irish-only homes, while the highest average frequency of code-switching by Stiúrthóirí (18.5%) occurred in naíonraí where the majority of children came from homes where both languages were normally spoken. Mougeon and Beniak (1991) had observed that it is those who make regular use of both languages in their normal lives, whom they described as ‘true bilinguals’, who are most likely to mix, noting that it was such speakers who instigated the borrowing of the core lexical item so among the Francophones they studied in Ontario. They note that Roy (1979) had also found that Francophones who spoke both French and English at home showed higher levels of so borrowing than those who spoke only French at home, though in the same community.

**Insert Table 1 here**

The higher rates of code-switching by the Leaders in groups where children from bilingual homes form the majority could be linked to more frequent code-switching by the children, but in fact analysis of the children’s output in these groups (Hickey 2001) shows that these children had low rates of intrasentential code-switching, and high rates of intersentential code-switching. Alternatively, the fact that children from bilingual homes are in the majority in a naíonra may be taken to indicate a local community where Irish is weakened or diglossia is the norm, and where the Leaders may be more likely to speak more English in their daily lives. It is also possible that this may be a dialect feature, since the two groups with a majority of children from homes where both Irish and English were spoken were in the same dialect area. Further investigation would be needed to establish whether this was an effect of group composition or dialectal variation in code-switching rates.

The rate of code-switching per minute by the Leaders is far lower than that reported by O’ Malley Madec (2001) for one adult native-Irish speaker, who produced 4.36 code-switched utterances per minute in interview with a non-native speaker, and only 1.7 code-switched utterances per minute in the formal context of a live interview with a native-speaker interviewer on the Irish-language radio station. Table 1 presents the code-switched utterances as a percentage of total utterances from the Leaders, as this gives a more accurate view of their code-switching rate, but cannot be compared as O’ Malley
Madec did not present this for her participants. It may be that the Leaders construe the *naíonra* as a context akin to the formal context in the O’ Malley Madec study, in terms of the desirability of providing the children with a good model of Irish use there.

While the *naíonra* Leaders showed a lower rate of code-switching than O’ Malley Madec’s subjects, there were striking similarities in how they code-switched. The most common English words in the data from the *naíonra* Leaders included items from the set of discourse markers noted by O’ Malley Madec (see example 1 above), with the addition of a few similar terms listed in 2:

2. High frequency: *now, c’mon, okay, sure*
   Moderate frequency: *alright, right, because, just, so, well/bhuel, but*

   Interestingly, the discourse markers *like, you know, you see, whatever, really, I know* noted in O’ Malley Madec’s participants rarely or never occurred in the Leaders’ data. Overall, 78 percent of the total English code-switches produced by the Leaders were drawn from the groups in example 2 with the addition of *no* and *yeah*. (Tokens that appeared to be fully lexical rather than discourse markers were not counted in this analysis.) Table 2 shows their position of use.

**Insert Table 2 Here**

All of the Leaders used *no* and *yeah*, some very frequently, and usually as a reinforcer to the full Irish negative (example 3) or affirmative clause. *Yeah and no* occurred most often in sentence-initial position, and most often accompanied by the Irish affirmative or negative required in the context. Such use of *yeah and no* in conjunction with Irish negation or affirmation places them in a (usually) prosodically subordinate position to the Irish clause following, so that they appear somewhat removed from the rest of an utterance, fitting with the structural definition of discourse markers and fulfilling an expressive or pragmatic function at the discourse level. While *yeah and no* retain their propositional content, it could be argued that the complementary use of the English form followed by an Irish clause expanding on it accords to *yeah and no* a role as discourse markers, since, according to Fraser (1999) discourse markers are a class of expressions which signal how the speaker intends the basic message that follows to relate to the prior discourse, and their specific interpretation is determined by the context. There is some precedent
for looking at *no* in a discourse marking framework: Wang, Tsai and Ling (2007) extended the study of discourse markers to the Chinese meiyou ‘no’, which has traditionally been treated as a negator.

Table 3 shows that there were individual differences in the use of some of these discourse markers. Some were neither widespread nor recurrent among the sample, while others were used frequently by all or most of the sample. The data show that *no*, *yeah*, *alright*, *well/bhuel*, *just*, *now* and *okay* are used by all or by the majority of the group, and that *no*, *alright* and *now* in particular are used with high frequency. Examples of these are given in 3–8. *Alright* usually appeared clause-finally to elicit cooperation or agreement from the children, as in example 4, while *right* tended to be used clause-initially to call children’s attention, often to a transition in activities (example 5). *Now*, as an attention getter, has been noted among many English dialects, but White (2008) claims that it occurs more frequently with this function in Irish-English. It was noted that *now* had a particular function of topic management in the Leaders’ speech, particularly when recalling the children’s attention to an activity (as in example 6). It also served as a mitigated admonishment as in example 7.

3. **NO, nil tú ag iarraidh sin**
   *No, Neg-be you at wanting that*
   ‘No you don’t want that’ (Leader: 604)

4. **Gheobhaidh mé duit é láithreach, ALRIGHT?**
   *Get-FUT I for-you it immediately, alright* (Leader: 4032)
   ‘I’ll get it for you immediately, alright?’

5. **RIGHT LADS, suígí sios mar sin**
   *Right lads, sit-IMP-Pron2pl down then*
   ‘Right lads sit down then’ (Leader: 4162)

6. **NOW, tá páipéar ag gach duine**
   *Now, be paper at each person*
   ‘Now, everyone has paper’ (Leader: 4032)
   (recalling group’s attention to art activity)

7. **NOW, labhair Gaeilge an t-am seo, maith an gasúr**
   *Now speak-imp Irish the time this, good the boy*
   ‘Now speak Irish this time, good boy’ (Leader: 604)
   (mitigated rebuke for speaking English)

   Eight of the ten Leaders used *just* (example 8 below), and it appeared to signal an attempt to mitigate an impatient directive.
Hickey (2009)

*C’mon* was also used by eight Leaders, but only two (those with high numbers of bilinguals in their groups) used it frequently. Its function appeared to be to cajole children to cooperate, as in example 9. *So* occurred clause-finally (see example 10) in 37 percent of its occurrences, and appeared ‘to indicate consent or acquiescence’ as R. Hickey (2007: 371) noted. However, most (63%) of its occurrences were clause-initial (as in example 11), functioning as a hedged/polite type of topic management which White (2008) has argued is a distinctive and established feature of Irish-English. This function, in conjunction with what Bolden (2009) argues is the use of clause-initial *so* to preface sequence-initiating actions such as questions in American English, indicates the importance of this marker in ‘teacher-talk’ (as is discussed also by Rendle-Short 2003).

8. **JUST Fág  mar sin é**
   *just leave  like that it*
   ‘Just leave it like that’(604)

9. **CMON  Caoimhín, an ndéanfaidh tú  i gceart é anois?**
   *C’mon, Name, Q-Part  do-FUT  you in right it now*
   ‘*C’mon, Caoimhín, will you do it right now?’

10. **Suigh  síos SO.**
    *Sit (Imp-sg) down SO*
    Sit down *so₂* (agreeing to child’s request to start a table-top activity)

11. **SO meas tú an bhfuil cead ag Aoife spraoi libh mar sin?**
    *So, think you Q is permission at Aoife play with-you-pl then?*
    *So  do you think that Aoife has permission to play with you then?*

12. **SURE  ní  bhíonn  aon  scoil Dé Domhnaigh!**
    *SURE NEG be-Pres-HAB any school on Sunday*
    ‘Sure there is no school on Sunday!’ (disagreeing with child’s statement about being in school previous day)

Other English lexical items used as discourse markers by only a minority of the Leaders include *sure*, and *but*. In example 12 *sure* functions much as was noted by Amador-Moreno (2005) for Irish-English, as a sentence-initial emphatic to express contrast/dissent with the preceding utterance.

**TABLE 4 ABOUT HERE**
Table 4 presents the frequency data both for the English discourse markers and their Irish ‘equivalents’, in order to examine their relative use. Translational equivalence is one of the most contentious concepts in the study of translation and Halverson (2002) argues that a graded form of ‘equivalence/sameness/similarity’ is a necessary concept. The translation equivalence proposed here in linking certain Irish-English and Irish discourse markers does not seek to assert an exact equivalence, but to suggest a relationship at least of similarity of function, in the same way that the concept has been applied in other studies of code-switching of discourse markers in indigenous languages. Mougeon and Beniak (1991) for example, use the terms ‘equivalents’ and ‘variants’ without elaboration to discuss code-switching of so and alors, ca fait que and donc in Ontarian French.

As discussed by Stenson, these forms do not show clear phonological integration with Irish. On the basis of the distribution shown in Table 4 of these English discourse markers with their Irish equivalents in this sample of adult speakers of Irish, a pattern of code-switching, borrowing and established borrowings or potential replacements is suggested (and summarised in Table 5). ‘But’ and ‘because’ seem to be competing only weakly with their Irish equivalents, and are used infrequently by a small number of the Leaders. Thus, they appear in these data to be occasional code-switches among a minority of speakers. C’mon was used frequently by just two Leaders, but shows greater penetration of function (57%) than but and because; there may be some preference for c’mon use with groups of young children which include non-native speakers, compared to its more complex Irish equivalents which offer a wide range of dialect variants (goile/goitse/téanam/seoigi). In these data, c’mon appears to be a nonce borrowing, occurring in some speakers but not yet widespread or established in the community. Sure shows both low recurrence and diffusion among these speakers: while six Leaders used it at least once, more than half of its occurrences were in the data from just one speaker. Thus, while this is considered a significant feature of Irish-English by Amador Moreno (2005), it looks more like a nonce borrowing in these data, rather than an established one. However, it may be that more sustained conversation is needed to elicit use of this form.

Now/right and alright/okay show recurrence and diffusion among this group of speakers, the former appearing to function to get the children’s attention utterance-initially, and the latter to elicit
agreement/compliance at the end of an utterance. The English forms may seem more salient to the Leaders, but there may have been additional subtle differences in function that contributed to their use. While use of both *now* and *anois* ‘now’ appears to have been elevated in these data due to the frequent need to recall the attention of a group of preschoolers, or to offer mild rebukes to them, there were some indications that *now* had a slightly higher admonishment loading than *anois*. Further analysis would be required to investigate the subtle differences between *now* and *anois*. Similarly, *alright* may have been perceived to function as a more effective appeal for cooperation to a recalcitrant child, with the Irish version being used for less fraught interactions. Overall, these forms appear to be frequent and widespread borrowings, but like the others, show little evidence of any phonological integration, and they seem to coexist with frequent Irish marking of these functions. Thus, here they are categorised as ‘recurrent borrowings’, which are widespread, and coexisted with their Irish equivalents at the time of data collection at least. *So* also falls into this category, as a recurrent and widespread borrowing, appearing in the data of eight of the Leaders, and again ambiguous with regard to morphological or phonological integration. *So* has a number of phrasal equivalents in Irish, but only one, *mar sin*, was found to occur fairly frequently in these data, and *so* and *mar sin* appear to be in complementary distribution in the Leaders’ data.

*Just* was used by eight of the ten Leaders, and thus appears to be widespread, if not as frequent as some of the other items. O’Malley Madec (2001) argued that there was no evidence that *just* was competing any longer with a directly translatable Irish form in her Irish data, and concluded that it has replaced its complex periphrastic Irish equivalents. Analysis of the Leaders’ data shows reliance on *just* rather than any of the more complex periphrastic equivalents in Irish, and it is proposed that *just* is now an established loanword in Irish, showing some displacement of the native variants. *No* and *yeah* were recurrent and widespread among all of the Leaders, both preceding an Irish negative or affirmative response, but also sometimes alone, and it is argued here that they are now established borrowings into Irish, used in parallel with the Irish forms to emphasise the Irish phrasal negative and affirmatives. Finally, *well/bhuel*, the only one of these forms to be formally treated as a loan word by inclusion in an authoritative dictionary, was found to be widespread and recurrent in these data, and is treated here as an established borrowing.
Discussion

These data show an overall average of 8.5 percent of the utterances of these adult female speakers contained code-switches (though with individual variation). While it is possible that Irish-speaking adults in other contexts would show higher rates of English code-switching than was noted here, the type of code-switching found was similar to that found by O’Malley Madec (2001), as well as other studies of threatened languages. More than three-quarters of the total code-switches of these women were made up of a limited number of English discourse markers plus no and yeah. Thus, their code-switching appears constrained, just as Torres (2002) found to be the case among Puerto Ricans in New York who were alleged to speak ‘Spanglish’ but in fact had code-switches in no more than 10 percent of their clauses, and who also made heavy use of a limited number of English discourse markers. This raises the question of whether claims of increasing code-switching in Irish may be influenced by the very large number of L2 learners of the language, rather than being based only on native-speaker adults as in this sample. Studies by Mac Fhlanachadha (1999) and Nic Pháidín (2003) noted that pupils in Irish-immersion schools produce frequent and far less constrained code-switching than was documented here, going so far as to suggest that they are developing a creole with a higher status outside of the Gaeltacht than the language of native speakers.

This quantitative study of code-switching in Irish allows us to consider the anecdotal reports of code-switching in the language in the context of crosslinguistic data from other endangered languages, and may shed some light on the ‘trajectory of change’ (Torres 2006) in Irish. The frequent code-switching of discourse markers among adult native speakers may be due to their positioning at prime switch-points (Mougeon and Beniak 1991), or higher salience (de Rooij 2000) or represent ‘emblematic forays’ into the more prestigious language (Brody 1995) to remind the listener of the speaker’s proficient bilingualism. The data fit with a continuum from occasional code-switches by individuals, through nonce borrowings, to established (or at least recurrent) borrowings by a larger number of speakers which coexist with the native forms, possibly with some differentiation of function (e.g. now as admonishment in these data). While Torres (2006) cited studies supporting such coexistence of discourse markers in indigenous languages, Goss and Salmons (2000) found that English discourse markers replaced German ones in Texan English after a period of coexistence in complementary distribution. Similarly, de
Rooij (2000) noted that French discourse markers appear to be replacing the Shaba Swahili marking system. Torres (2006: 622) claims that there is not, as yet, evidence of complete replacement of indigenous discourse marking systems, but that this remains a possibility over time in high-contact situations in languages facing obsolescence. According to this analysis, the long contact between Irish and English, and Irish-English and Irish, plus the extensive bilingualism of these minority-language speakers offer some explanation for the widespread use of code-switched discourse markers. Torres stresses that for these indigenous languages, the donor language represents both the language of power and the threat to their authenticity, and indeed, survival. Charting the move from occasional switch to borrowing to replacement is difficult, and relies on factors such as replacement of native language forms, integration, and acceptability within a speech community (Poplack and Sankoff 1984), as well as frequency of use. Phonological integration is particularly problematic in Irish, since the donor language is Irish-English, itself the outcome of contact between Irish and English, and because of the universality of Irish-English bilingualism – both of which, Stenson (1991) has noted, lead to lower levels, or absence, of integration. The perception of the degree to which a language is endangered also influences how contact phenomena are viewed, and Dorian (1981) noted that borrowing becomes more unacceptable in communities aware that they are in increasing danger. She suggested that such change speeds up in fluent younger speakers when the older speakers of a less converged variety of the language die out. Mougeon and Beniak (1991) suggested that some language changes affect even fluent speakers of an endangered language when they become a small group compared to the population of less fluent speakers, as is typical in language death situations.

Maschler (2000) stressed the importance of the study of discourse markers in bilinguals in illuminating the study of language contact and change. What these data show is that the input offered to young native speakers of Irish in preschool by adult Irish native speakers contains a type of code-switching and recent borrowings which may be acquired as loanwords or replacements by these young children. Paradis and Nicoladis (2007) argued that code-switching in preschool Canadian bilingual children (of similar age to the children in the naíonra) shows them to be both young enough to codemix (their term) in response to the linguistic limitations they have in one or both of their languages, and old enough to reflect the code-switching
patterns of their community. The language used by Leaders in input to young native speakers is likely to be particularly influential given the Irish sociolinguistic context and the limited number of fluent Irish interlocutors available to young children in their communities.

Sankoff (2001) noted that the changes resulting from language contact are driven by change at the individual or small-group level, with individual practices in bilingual discourse adding up to community-level change. These teachers of young children in Irish-speaking preschools are highly influential in terms of their potential influence on the language acquired by their Irish L1 charges, as they model a particular kind and frequency of code-switching and borrowing from English. For low-status minority languages, Mougeon and Beniak (1991) argued that levels of language contact within speakers is as relevant as community contact in influencing code-switching and borrowing, with speakers who use both languages most frequently acting as catalysts for change. Thus, substantial datasets from even relatively small numbers of speakers can help to throw light on the process of change. As its older speakers die out and as the number of Irish native speakers declines compared to the L2 learners whose variety of the language has acquired a particular cachet among the young, there is a possibility of accelerated change in the language, and a pressing need for more study of these changes in Irish.

NOTE
1. The author would like to thank the editors and reviewers for their very helpful comments, as well as Nancy Stenson, Diarmuid O´ Sé and Thea Cameron-Faulkner for their insights and suggestions. Ba mhaith liom buíochas ó chroí a ghabháil leis na Stiúrthóirí naíonra a chuidigh liom go fial, le hÚdarás na Gaeltachta agus le hInstitiúid Teangeolaíochta Éireann, chomh maith leis na Comhairleoirí agus leis na páistí a ghlac páirt sa staidéar seo.
REFERENCES


1. While there was some variation between Leaders in their number of utterances, some of the differences in utterance totals are due to audibility, since the Leader herself was not wearing a microphone, and was less audible in groups with larger numbers of children or if not close to the target child.

2. Incidence per minute in presented here mainly for comparison with O’ Malley Madec’s (2001) results but should be interpreted cautiously because of the difference in setting.

3. While children from Irish-English homes were the largest grouping (9) in this large *naionra*, they did not reach the 50% criterion. Its inclusion of 6 children from Irish-only homes and 5 from English-only homes highlights its location in a populous area between a strongly Irish-speaking area and a large urban English-speaking area.
Table 2. Sentence position of codeswitched discourse markers

<table>
<thead>
<tr>
<th>Sentence position</th>
<th>Marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clause-initial</td>
<td>Sure, right, but, just, c’mon, because, well/bhuel</td>
</tr>
<tr>
<td>Clause-initial</td>
<td>Yeah + Irish affirmative verb or clause</td>
</tr>
<tr>
<td>Clause-initial</td>
<td>No + Irish clause in positive (290)</td>
</tr>
<tr>
<td>Clause-initial</td>
<td>No + Irish negative verb or clause (340)</td>
</tr>
<tr>
<td>Clause-final</td>
<td>Alright</td>
</tr>
<tr>
<td>Initial/Final</td>
<td>Okay, now, so, yeah</td>
</tr>
</tbody>
</table>
Table 3. Distribution of English discourse markers

<table>
<thead>
<tr>
<th>Marker</th>
<th>Leaders using item</th>
<th>Diffusion</th>
<th>Recurrence</th>
<th>Range of occurrence</th>
<th>Mean Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>but</td>
<td>4</td>
<td>X</td>
<td>X</td>
<td>4 - 2</td>
<td>2.7</td>
</tr>
<tr>
<td>because</td>
<td>3</td>
<td>X</td>
<td></td>
<td>3 - 1</td>
<td>2</td>
</tr>
<tr>
<td>c’mon</td>
<td>8</td>
<td>✓</td>
<td>X</td>
<td>20 - 1</td>
<td>6.4</td>
</tr>
<tr>
<td>sure</td>
<td>6</td>
<td>✓</td>
<td>X</td>
<td>11 - 2</td>
<td>4.5</td>
</tr>
<tr>
<td>alright</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>102 - 2</td>
<td>27.2</td>
</tr>
<tr>
<td>ok</td>
<td>7</td>
<td>✓</td>
<td>✓</td>
<td>65 - 3</td>
<td>16.4</td>
</tr>
<tr>
<td>now</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>123 - 16</td>
<td>54.9</td>
</tr>
<tr>
<td>right</td>
<td>6</td>
<td>✓</td>
<td>✓</td>
<td>27 - 3</td>
<td>11</td>
</tr>
<tr>
<td>so</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>24 - 1</td>
<td>9.1</td>
</tr>
<tr>
<td>just</td>
<td>8</td>
<td>✓</td>
<td>✓</td>
<td>10 - 2</td>
<td>4.7</td>
</tr>
<tr>
<td>no</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>144 - 22</td>
<td>34</td>
</tr>
<tr>
<td>yeah</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>88 - 2</td>
<td>18.7</td>
</tr>
<tr>
<td>well/bhuel</td>
<td>10</td>
<td>✓</td>
<td>✓</td>
<td>26 - 1</td>
<td>4.5</td>
</tr>
</tbody>
</table>

1. Diffusion is operationally defined here as use by more than half of the sample.
2. Recurrence is here defined as at least 4 occurrences by at least half of its users.
Table 4. Leaders’ Discourse Markers in English and Irish

<table>
<thead>
<tr>
<th>Leader Switches</th>
<th>Frequency in English$^1$</th>
<th>Irish Equivalent Discourse Marker</th>
<th>Frequency in Irish</th>
<th>Frequency in English as % Total frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>But</strong></td>
<td>9</td>
<td>Ach</td>
<td>160</td>
<td>5</td>
</tr>
<tr>
<td><strong>Because</strong></td>
<td>6</td>
<td>Mar</td>
<td>119</td>
<td>5</td>
</tr>
<tr>
<td><strong>C’mon</strong></td>
<td>51</td>
<td>Goile/Téanam/Se oigí/Ar aghaidh leat/linn</td>
<td>31</td>
<td>57</td>
</tr>
<tr>
<td><strong>Sure</strong></td>
<td>18</td>
<td>go deimhín + periphrastic others (nach..)</td>
<td>5</td>
<td>~78</td>
</tr>
<tr>
<td><strong>Alright/OK</strong></td>
<td>238</td>
<td>Ceart go leor + Tag questions</td>
<td>257</td>
<td>59</td>
</tr>
<tr>
<td><strong>Now</strong></td>
<td>707</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Right</strong></td>
<td>46</td>
<td>Anois</td>
<td>1705</td>
<td>29</td>
</tr>
<tr>
<td><strong>So</strong></td>
<td>73</td>
<td>Mar sin/ + Other phrasal</td>
<td>94</td>
<td>~44</td>
</tr>
<tr>
<td><strong>Just</strong></td>
<td>31</td>
<td>~(go) díreach + Other phrasal</td>
<td>6</td>
<td>~84</td>
</tr>
<tr>
<td><strong>No</strong></td>
<td>483</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Yeah</strong></td>
<td>188</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Well/bhuel</strong></td>
<td>65</td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Only the discourse functions of these forms are included in these analyses.
Table 5. Proposed Trajectory of Change

<table>
<thead>
<tr>
<th>Marker</th>
<th>Proposed Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>But, Because</td>
<td>Codeswitches</td>
</tr>
<tr>
<td>C'mon, Sure</td>
<td>Nonce Borrowings</td>
</tr>
<tr>
<td>Alright/Ok, Now, Right So</td>
<td>Recurrent &amp; Co-existing Borrowings</td>
</tr>
<tr>
<td>Just No, Yeah Well/bhuel</td>
<td>Established Borrowings/Loan words</td>
</tr>
</tbody>
</table>