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Studying Intonation in Varieties of English: Gender and Individual Variation in Liverpool

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Introduction

Much of the previous sociophonetic research in the UK has considered variation at the segmental level, but with lesser focus on prosodic variation (Foulkes et al. 2010). In this chapter, we provide an overview of sociophonetic treatments of intonation and identify directions for future research in this area. We then present results from a small-scale study of intonational variation in Liverpool English, which is widely recognised as a highly distinctive variety of British English. In his phonetic description of this variety, Watson (2007: 358) remarks that work on Liverpool

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English intonation is ‘minimal’ and that ‘more systematic investigation is required’. This chapter aims to contribute towards plugging this gap in the literature and providing a better understanding of sociolinguistic variation in the UK. In the following sections, we review previous sociolinguistic intonational work in the UK, different analysis frameworks and some suggestions for best practices. We further present the results of our analysis of Liverpool intonation, before suggesting directions and methods that could be used in future work.

Phrase-Final Rises and the ‘Urban Northern British’ Group

The intonational feature that has perhaps received most attention in UK studies is the extensive use of phrase-final rises in declaratives in the north of the country, while falls would be more common in the south (e.g. Cruttenden 1994: 133; Ladd 2008). In such instances, a sentence such as ‘They like eating cake’ might be produced with the pitch rising on or just after the final accented syllable of the phrase, which then stays at a high plateau until the end of the phrase. Another common pattern is for pitch to drift slightly downwards at the end of the phrase. In Cruttenden’s (1997) terminology, these are referred to as a ‘rise-plateau’ and ‘rise-plateau-slump’, respectively. Additionally, Cruttenden refers to a contour known simply as ‘rise’, where pitch slowly glides upwards to the end of the phrase.

The use of phrase-final rises in declaratives appears to be a dialectal feature, which is common in several urban dialects, such as Glasgow (Mayo 1996; Mayo et al. 1997; Vizcaino-Ortega 2002; Cruttenden 2007; Sullivan 2010; Nance 2013, 2015), Belfast (Jarman and Cruttenden 1976; Wells and Peppé 1996; Rahilly 1997; Grabe et al. 2000; Grabe and Post 2002; Lowry 2002; Grabe 2004; Sullivan 2010), Birmingham, Newcastle (Pellowe and Jones 1978; Local et al. 1986) and Liverpool (Knowles 1973, 1978). The broad intonational similarity between these dialects in declaratives has led Cruttenden (1997) to refer to this group of dialects as the ‘Urban Northern British’ (UNB) group.

Specific to the Liverpool context, Knowles (1973: 175) notes that Liverpool speakers employ a narrower pitch range than other dialects and also states that middle class speakers are less likely to use the traditional Liverpool rising contours compared to working class speakers. Knowles (1973) states that the rising contour in Liverpool is most likely to be of Irish origin due to the substantial numbers of Irish immigrants to the city in the nineteenth century. However, this seems unlikely for several reasons. First, as Cruttenden (1994: 133) notes, Irish immigration cannot explain all of the rising contours in the UNB group: Newcastle did not have substantial numbers of Irish immigrants until well after the first commentaries on the city's distinctive intonation. Second, there is extensive variation in Irish and Irish English intonation (Dalton and NíChasaide 2003, 2005; Dorn et al. 2011). Many dialects of Irish and Irish English do not use rising contours in the way that the UNB group do. Therefore, even if UNB rises are the result of Irish immigration, this is not a straightforward relationship and is likely to be indirect and multifaceted.

Uptalk

The rises discussed above, which are traditional dialect features of the UNB group, are qualitatively and sociolinguistically different from another kind of rise which has been widely studied in the sociophonetic literature: High Rising Terminal (HRT). Also referred to as 'Uptalk', or 'Australian Question Intonation' (AQI), HRT is an apparently recent addition to the UK intonational inventory (Bradford 1997; Shobbrock and House 2003; House 2006; Barry 2007; Levon 2015). This contour is distinguished by a contour that rises and then keeps on rising until the end of the phrase to the uppermost reaches of a speaker's commonly used pitch range (Ladd 2008: 125). Previously, HRT was thought not to occur in the UNB dialects (Fletcher and Harrington 2001; Fletcher et al. 2002, 2005; Ladd 2008), though recent work suggests that it is beginning to be used in these dialects as well (Cruttenden 2007; Sullivan 2010; Nance 2015). In terms of the sociolinguistic distribution of these two kinds of rise, the UNB rise is a feature of the traditional dialects of the cities in which it occurs. HRT, however, is an innovative feature and has been

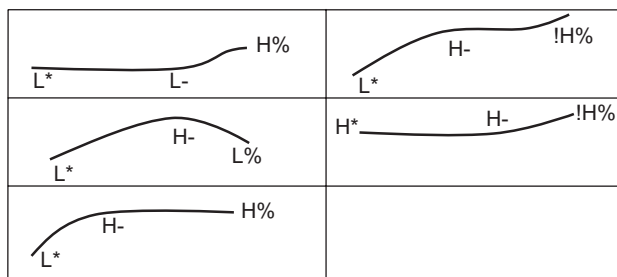


Fig. 11.1 Comparison of different kinds of rising contour in our notation. UNB rises are shown on the left and HRT rises on the right

observed as occurring most frequently in upper middle class and female speakers (Bradford 1997; Barry 2007; Levon 2015; Warren 2016). A schematic diagram showing the comparison between contours considered as UNB rises and contours considered as HRT is shown in Fig. 11.1.

Sociophonetics of Intonation

The most commonly investigated intonational feature with reference to sociolinguistic variation is the use of HRT. Previous studies have found that the use of HRT tends to be more prevalent among young females; however, it is still used by male speakers (Guy and Vonwiller 1984; Guy et al. 1986; Fletcher et al. 2005; Ritchart and Arvaniti 2014). There is also evidence of the relation of variation to ethnicity, such as the use of greater HRT amongst ethnically Maori people in New Zealand (Britain 1992). Warren (2005) notes gender and age differences in the phonetic realisation of HRT, with young females starting their rises later in the phrase. Studies not focusing on the use of HRT also note sociolinguistic differences in pitch and intonation more generally; for example, Daly and Warren's (2001) study of New Zealand English find that women may use a greater pitch range and dynamism than men.

A parameter along which intonation has been found to vary is speech context, or *style* in the Labovian sense. For example, Cruttenden (2007) finds intonational *diglossia* in the speech of a young Glaswegian woman: in conversational speech, she uses the rise-plateau and rise-plateau-slump

contours typical of Glaswegian, but in read speech she uses more falls which are typical of southern British English. Similarly, Lowry (2011) describes differences between males and females and finds that females are likely to style-shift, using different proportions of rising and falling contours across read sentences, story-telling and an interactive task. Taking a slightly different approach, Podesva (2011) demonstrates how the frequency of specific intonation patterns and their phonetic realisation are used by three gay professionals to construct different personae in different social contexts.

A complicating factor in a sociolinguistic treatment of intonation is that this prosodic feature is often used to convey subtle pragmatic meanings (see House 2006 for a review), which must be accounted for before a sociolinguistic analysis of the data can be put forward (Milroy and Gordon 2003: 185; Foulkes et al. 2010: 721). It is for this reason that many of the studies cited here (as well as our own) choose to investigate intonation using carefully controlled read sentences or map tasks rather than sociolinguistic interviews or more naturally occurring data.

If data have been collected in the form of read sentences, then the pragmatic function of the sentence can be predefined and different functions easily compared. This is the approach taken in recent surveys of British English and Irish Gaelic dialects (e.g. Grabe et al. 2000; Grabe and Post 2002; Dalton and NíChasaide 2003; Grabe 2004; Dalton and NíChasaide 2005; Dorn et al. 2011). Another possible way of accounting for pragmatic function is to code for it within existing data and use this coding information in statistical modelling to account for any pragmatic effects. For example, Stirling et al. (2001) developed a framework for coding discourse events, which was then used in later studies (Fletcher and Harrington 2001; Fletcher et al. 2002, 2005; McGregor and Palethorpe 2008). Similarly, Ritchart and Arvaniti (2014) classified each sentence type as one of the following: question, statement, holding the floor and confirmation request. Using a coding scheme developed for analysing different discourse events in sociolinguistic interviews (Gregersen et al. 2009), Nance (2013, 2015) and Jespersen (2015) chose to compare a subset of discourse functions within interview and conversational data.

Analysing Intonation

Two main approaches are used in sociolinguistic approaches to intonational variation. The first uses an Autosegmental Metrical (AM) framework (e.g. Pierrehumbert 1980; Ladd 2008) to transcribe contours into phonological units. The second compares the phonetic realisation of contours that are phonologically identical or similar (e.g. the timing of the start of a rise, or the pitch range used a rise; see Warren 2005). Some studies use a combination of both, identifying phonological differences between speakers and sentence types, but also analysing phonetic differences within phonological categories. AM approaches to intonation claim that an intonational contour can be broken down into a series of significant pitch events, which are the phonological building blocks of intonational meaning. For example, *pitch accents* are contrastive pitch events, which occur on stressed syllables, but not every stressed syllable receives the extra prominence associated with a pitch accent. Pitch accents are usually notated by * in AM notation. A pitch accent associated with low pitch is shown as L*, and a pitch accent associated with high pitch is notated as H*. Breaking down a continuous intonational contour into phonological units is analytically useful for a variety of reasons. We have found this approach convenient for sociophonetic analysis as it allows us to make meaningful comparisons of similar elements, such as pitch accents or how phrases are ended.

The most commonly used AM framework is ToBI (Tones and Break Indices), which was originally developed to transcribe American English intonation (Beckman and Elam 1997; Beckman et al. 2006). Early studies conducted using ToBI quickly realised that it was often necessary to adapt transcription systems such as ToBI for the language or dialect under study (for applications of this principle see Jun 2005, 2014). Using ToBI, or another widely used AM framework such as IViE (Grabe et al. 2001), the proportion of different contour types can be compared across sociolinguistic categories or discourse functions and sentence types.

In ToBI, the final pitch accent in the phrase is known as the *nuclear accent*, while in IViE *nuclear accent* refers to the most prominent pitch accent in the phrase. Generally speaking, the most prominent pitch accent is also the last one and seems to be an important location for intonational meaning (Ladd 2008: 131). The accent preceding the nuclear

accent is known as the *pre-nuclear accent*. In AM approaches, intonational contours can be divided into large units known as Intonation Phrases (IPs). A boundary tone occurs at the end of an IP and is notated with the ‘%’ symbol. Pierrehumbert (1980: 19) states that IP boundaries can be found where a speaker makes a non-hesitation pause, or at a point where they could pause without disrupting the flow of discourse. However, as pointed out by Cruttenden (1997: 29) and Nolan (2008: 440), there may be little or no pause between IPs in spontaneous speech. Instead, these authors suggest looking at a combination of prosodic features, which taken together may be indicative of an IP boundary. Such prosodic features can include lengthening of the final syllable, a large pitch excursion (up or down), a change in loudness (usually quieter at the end of an IP) and a general slowing down of speech rate (Cruttenden 1997: 29–37). Phrase accents mark the boundary of smaller prosodic units, known as ‘intermediate phrases’ (ips). Phrase accents are usually notated with a ‘-’, i.e. a low phrase accent would be ‘L-’ and a high phrase accent would be ‘H-’. Some AM approaches, such as IViE, do not recognise the existence of ips; see Grabe (1998) for discussion on this topic.

Similar to sociophonetic studies of segmental variation, the phonetic influence of surrounding material must also be accounted for in intonational analysis. The majority of intonation studies measure f_0 as an estimate of pitch, yet f_0 can only be measured in voiced sounds. For this reason, many studies choose to compare read sentences where the material can be closely controlled in order to include mainly voiced sounds. The amount of unaccented material preceding and following pitch accents may also affect their realisation: first, nuclear accents are susceptible to *truncation* (Erikson and Alstermark 1972) and/or ‘compression’ (Bannert and Bredvad 1975). These terms refer to strategies adopted by speakers when there are not enough syllables after the nuclear accent to fully realise a boundary tone contour. Speakers can adopt two strategies: either end their contour abruptly and not produce a full rise or fall, *truncation*, or compress the full contour into a short space of time, *compression*. In order to allow for potential compression or truncation effects, sociolinguistic studies of uncontrolled material should account for the number of syllables after the nuclear accent (see Warren 2005; Nance 2015). Secondly, pitch accents are also susceptible to the effects of *tonal*

crowding (e.g. Arvaniti et al. 2006), which refers to a process by which pitch accents occurring in close succession are affected by the proximity of other pitch accents. In order to account for this possibility, studies of uncontrolled materials could avoid IPs where there is no unaccented material between pitch accents and label the number of syllables between each pitch accent to include in the modelling.

In this section, we have spent some time reviewing the AM approach to intonation in the hope that it will be more widely used in sociophonetic research.

Summary and Research Questions

To summarise the relevance of this previous work to the current study, Liverpool is claimed to belong to the UNB group of dialects where phrase-final rising intonation contours are common, but this dialect has been subject to little modern intonational study. The most detailed description was conducted in Knowles (1973) before the advent of widespread digital speech recording and analysis. Although data from Liverpool were collected in the Intonational Variation in English project (e.g. Grabe 2004), this was not fully analysed or compared to the other dialects. In this chapter, we aim to provide a descriptive account of Liverpool intonation to fill this gap in our understanding of variation in one of the UK's major urban centres. We also aim to investigate how intonation varies along two social dimensions in Liverpool: speaker gender and individual variation. The research questions investigated here are as follows:

1. What are the characteristic features of Liverpool intonation?
2. Is there evidence to suggest sociolinguistic variation in Liverpool intonation?

Method

The participants for this study were five male speakers and four female speakers aged 20–22 years. All were born and raised in Liverpool and had spent the majority of their lives in the city and its suburbs. Four partici-

pants had spent some time away at university in Lancaster and one had attended university in Leeds. The speakers were all of lower middle class or upper working class background. Participants were recorded by the third author in their own home, or in a quiet room at the University of Liverpool or Lancaster University. Recordings were made on laptops using a Beyerdynamic Opus 55 headset microphone, and a Sound Devices USBPre2 preamplifier and audio interface.

The data collection consisted of (1) read sentences and (2) a task designed to elicit more natural speech within a structured context. The sentences were presented to each participant twice on the computer screen in random order, interspersed with 12 distracter sentences. The sentences included eight declaratives (e.g. They are drawing the library), four questions without morphosyntactic markers (e.g. He's running the relay?), four inversion questions (e.g. Will you live near the building?), four wh-questions (e.g. Why are we drawing?) and four coordination questions (e.g. Did you say yellow or mellow?). These particular contexts were chosen to reflect the data collection method used in the IViE project for later comparison with other varieties (see Appendix for a list of sentences). We changed the lexical content of the sentences from the IViE materials to make them more relevant to a northern speech community; for example, we altered sentences referring to London suburbs. The second speech task required participants to watch a silent two-minute cartoon featuring the well-known British fictional character *Mr. Bean*. They were then asked to watch the video again and provide a commentary on the events as they unfolded. In this study, we only analysed data from the sentences part of the experiment and did not report any further information on the video description task. In total, we analysed 419 nuclear pitch accents and boundary tones. Sixteen utterances were excluded as unsuitable for analysis, mainly due to the presence of substantial creaky voice among some female speakers. The data presented represent the first stage in a wider project, comparing intonational variation in Liverpool with that of Manchester, a city around 50 miles away from Liverpool that is not reported as part of the UNB intonation group.

In this chapter, we concentrate on the pitch events at the end of IPs: nuclear pitch accents, phrase accents and boundary tones. Our analysis has two aspects: a categorical phonological analysis using ToBI labelling

and a phonetic analysis of pitch height and range within phonologically similar contours. In order to conduct this analysis we used a version of ToBI adapted for Glaswegian English—GlaToBI (Mayo 1996; Mayo et al. 1997). We selected this labelling system as Glasgow English, similar to Liverpool English, is reportedly part of the UNB group of dialects. GlaToBI removes the intrinsic up-step cuing property of an H phrase accent such that H-L% represents a falling pitch, rather than a level pitch in conventional ToBI. Additionally, contra Mayo (1996), we have retained the more conventional L* and L*+H labels rather than their suggested L*H. Figure 11.2 shows a schematic representation of each contour, its GlaToBI label and a description of the contour. In this initial description we combined some tonal categories for clarity: Down stepped !H* accents were combined with H*; H+L* accents were combined with L*. We also allowed for the possibility of no discernable pitch movement.

Previous descriptive work on Liverpool suggests that speakers exploit a small pitch range in their intonation, leading to the perception that they are somewhat monotone (Knowles 1973: 175). In order to investigate this phonetic aspect of intonation, we obtained measures of f0 at the turning points in pitch, which were manually identified during the ToBI labelling. The pitch range for each speaker was calculated as the median f0 of their L*, L- and L% values subtracted from the median of their H*, H- and H% values. Values were reported in semitones using the formula

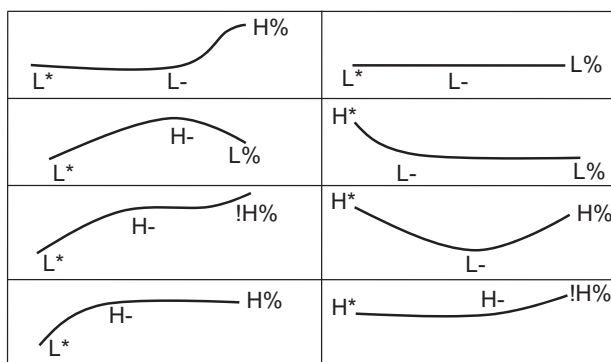


Fig. 11.2 Schematic representation of each contour and its GlaToBI labelling

$12 * \log_2(f/127.09)$, where f refers to the frequency in Hertz (Traunmüller and Eriksson 1995), in order to compare pitch excursions in a perceptually meaningful way.

Results and Discussion

Characteristics of Liverpool Intonation

This section shows the results of the ToBI labelling of different sentence types (discourse functions) according to each speaker's productions. The contours used by each speaker in each discourse function are shown in Fig. 11.3.

Overall, the most commonly occurring contour was $L^* L-H\%$ (shown in purple in the figure), which in Knowles' (1973) terminology is a *rise*. In these contours, f_0 rose gradually from the final pitch accent onwards and reached an H target right at the end of the IP. This H was not especially high in pitch, so we did not consider these as related to the HRT phenomenon. The widespread use of the *rise* is somewhat in contrast to the previous literature on the UNB group of dialects. Studies of Belfast

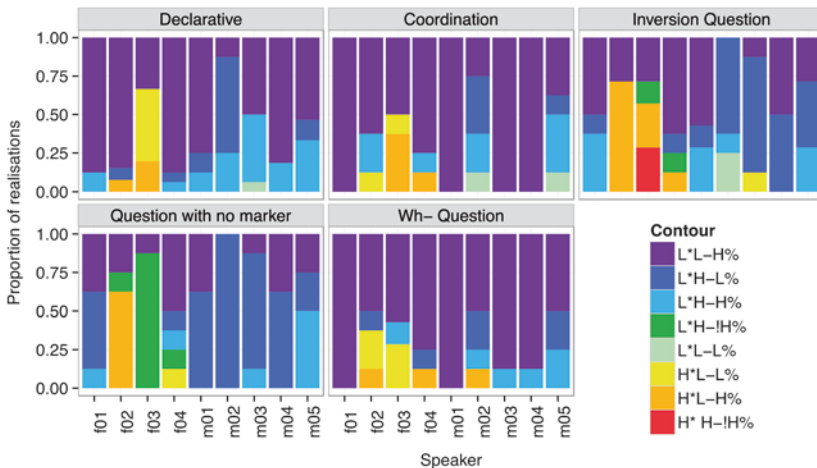


Fig. 11.3 Contours used in each sentence type by each speaker

and Glasgow report widespread use of the *rise-plateau*, which Knowles refers to as a *step* (e.g. Mayo 1996; Grabe 2004; Cruttenden 2007; Sullivan 2010; Lowry 2011). In these contours, pitch rises to its final high target on the accented syllable and remains there on a plateau. These contours, represented here as L* H-H% (light blue in the figure), were fairly common in our data, but not as widespread as L* L-H% (purple in the figure; 12.6% and 55.3% of the data, respectively). High rises were only used by one speaker in one context: inversion questions. This suggests that HRT is not used in declaratives by our speakers and we have no evidence suggesting that it is used by speakers in Liverpool.

Since Liverpool speakers use rising contours in declaratives, an interesting question is how they distinguish questions and statements. In the case of inversion questions (e.g. Will you live near the building?) and wh-questions (e.g. Why are we drawing?), there are clear lexical or syntactic cues to the phrase being a question. However, in the case of questions without morphosyntactic markers (e.g. He's running the relay?), cues must come from elsewhere. In Liverpool, there appears to be a clear intonational difference between these questions and declarative statements: our speakers use mainly *rises* (L* L-H%) for declaratives (62.59%, 87/139 tokens) and L* H-L% for questions without markers (43.06%, 31/72 tokens). In these L* H-L% contours, pitch dropped markedly at the end of the phrase, almost to the speaker's minimum pitch. The difference between the use of these two different contours was significant ($\beta = -3.68$, $p < .001$; logistic mixed effects regression model with contour variant as outcome variable, sentence type and gender as fixed effects, and speaker and accented word as random intercepts).

Our analysis also considers the pitch range used by speakers. The pitch range of each speaker in semitones is shown in Fig. 11.4 (absolute values). This was calculated as the difference between each speaker's value for H tones and each speaker's value for L tones. Liverpool speakers do indeed appear to exploit a fairly narrow pitch range. For some speakers, the range used is between 1 and 2 semitones. The range that humans can distinguish is typically around 1 Hz—less than 1 semitone (Kollmeier et al. 2008). In comparison to the values, which are just perceivable, the ranges employed by our speakers are not vastly different; thus, we would agree with Knowles' (1973) observation that small pitch ranges are used in Liverpool.

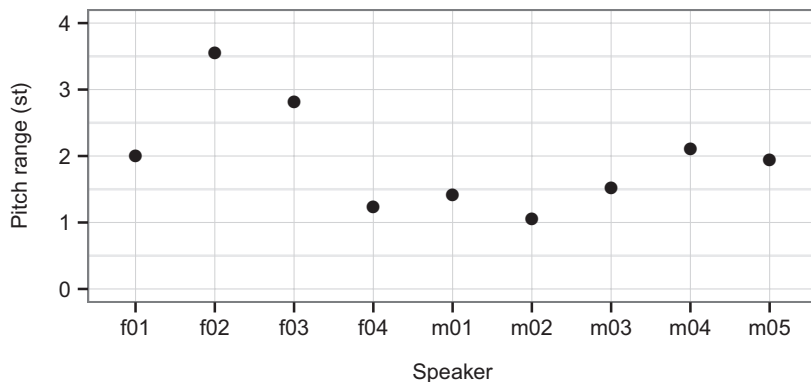


Fig. 11.4 Median pitch range used by each speaker (absolute values; semitones)

Variation in Liverpool Intonation

In this section, we consider differences across the dataset in order to suggest avenues for future sociolinguistic work on intonation in Liverpool. There are two possible sociolinguistic parameters along which our data might vary: gender and across individuals. In terms of gender-based variation, we found significant differences between male and female speakers in the proportion of L* H-L% contours ($\beta = -2.58$, $SE = 1.12$, $p = .02$; logistic mixed effects regression model with contour variant as outcome variable, sentence type and gender as fixed effects, and speaker and accented word as random intercepts). We also considered the possibility of gender variation in the pitch range data. In this case, there were no significant differences between the male and female speakers in our sample (t -test, ns.).

Although there were no significant gender differences in the pitch range exploited, Fig. 11.4 clearly depicts that f02 and f03 behave somewhat differently from the other two female speakers and the male speakers in the sample: f02 and f03 use a much larger pitch range than the other speakers. Similarly, data in Fig. 11.3 show that f02 and f03 again behave differently from the rest of the dataset, using more falling contours (H* L-L% and H* L-H%). In particular, f03 used a large number of H* L-L% contours in declaratives, which would be more typical of southern British English than

Liverpool English. We collected data about the social background of our speakers through their postcode, which was used to evaluate the level of social deprivation in their area, and we also collected information as to whether they had moved house or city, but found no substantial differences in the backgrounds of f02 and f03 when compared with the other speakers. Our study is small scale, but these data provide insight into future possibilities for research in sociolinguistic variation in Liverpool. It appears that there may be some influences from other varieties in the speech of two female speakers, which may hint at change in Liverpool and/or gender-based variation within the community.

Conclusions

This chapter has presented some of the methods used and common parameters analysed in sociolinguistic treatments of intonation. Foulkes et al. (2010: 721) state that the paucity of sociophonetic studies on prosody may be due to the difficulties surrounding controlling for pragmatic function. Recent research initiatives attempt to address this, especially in the area of intonation (e.g. Warren 2016). Our own analysis also aims to show how controlled materials can be used to produce interesting and sociolinguistically meaningful data, especially as a starting point for conducting an initial dialect description and sociolinguistic investigation.

Our study has provided some initial analysis of Liverpool intonation within a modern phonological framework: AM phonology (Pierrehumbert 1980; Ladd 2008). We have demonstrated that Liverpool is a member of the UNB group, commonly employing rising contours in declaratives as claimed in previous literature, such as Cruttenden (1997) and Ladd (2008), but now explicitly investigated. These contours are similar to other UNB dialects, such as Glasgow and Belfast, in the sense that the rise takes place over a narrow pitch range and starts from low in the speaker's range, unlike HRT contours (Ladd 2008). However, Liverpool is slightly different from previous descriptions of Belfast and Glasgow, as the most common kind of declarative rise is a very gradual drift upwards in pitch until the end of the IP, unlike the step up in pitch and plateau of Belfast and Glasgow.

Although our study so far is small scale in nature, we have provided some possible insight into variation in the community: two female speakers behaved somewhat differently from the rest of the sample and used a wider pitch range overall as well as fewer rising contours in declaratives. Also, they produced some declaratives that were more typical of non-UNB varieties. There are several possible explanations for this finding: first, as a result of dialect contact, young women in Liverpool no longer use the intonation which is distinctive of their dialect. Secondly, these young women were reacting to the fairly formal context of reading sentences from a computer screen. It is also possible that their behaviour was speaker-specific and not reflective of any kind of wider trend. Out of these three explanations, we find the second one most convincing. Research on Liverpool English suggests that the city's dialect is resisting some of the changes sweeping across other British varieties, such as /t/-glottalling (Watson 2006, 2007; Clark and Watson 2016). We therefore find it unlikely that intonation is changing in such a radical fashion. However, it seems probable that these young women may have been able to style-shift and produce sentences in a formal southern-influenced manner for the purposes of our experiment. Our ongoing analysis of the video retelling data will allow us to better answer this question.

Future research could consider these possibilities in more detail. Liverpool is an interesting context because of Watson's (2006) claim that the city is resisting many diffusing features and because the dialect of the area is so distinctive. We plan to continue this analysis in more detail with a larger dataset and also compare Liverpool to a non-UNB area, Manchester, which is a geographically proximal but linguistically distinct city. This raises an interesting question regarding where an isogloss between a UNB variety such as Liverpool and a non-UNB variety such as Manchester might lie. Is there a sudden divide? Or is there a border zone, which is intonationally varied? In addition to this, our data suggest some possibility of gender variation in intonation. But how widespread is such variation in the community? Are there differences according to social class? Questions such as these have been addressed through sociophonetic treatments of segmental features, but greater analysis of prosodic features is necessary in order to provide more comprehensive accounts of sociophonetic variation and change. We hope to inspire future research in this area.

Appendix

List of sentences used for eliciting contours:

1. Simple statements:

1. He was bringing some dinner.
2. You were stirring the pudding.
3. We were driving in a limo.
4. They are drawing the library.
5. We were wearing some goggles.
6. He was running in the relay.
7. She was drowning in the river.
8. We were living near the building.

2. Questions without morphosyntactic markers:

1. He's running the relay?
2. You were stirring the pudding?
3. She's drowning in the river?
4. They're drawing the library?

3. Inversion questions:

1. Can I drive in a limo?
2. Were you drawing the library?
3. Will you live near the building?
4. Are they wearing some goggles?

4. Wh-Questions:

1. Where is my dinner?
2. When are you running?
3. Why are we drawing?
4. Who'll be the driver?

5. Coordinations:

1. Are you growing limes or lemons?
2. Did you say mellow or yellow?
3. Are we going bowling or running?
4. Did he say lino or lilo?

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