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UKLVC is a biennial conference that showcases international research on language variation and change, sociolinguistics, and dialectology, as well as applications of these branches of linguistics to a variety of different fields. We seek to foster diversity in theoretical and methodological approaches to the study of language variation in all of its forms and across a wide range of linguistic and cultural contexts.

This year, UKLVC13 conference is taking place online, hosted by the University of Glasgow on Zoom. Language variation and change is at the centre of research in English Language and Linguistics at Glasgow, with academic staff having directed projects such as the Scottish Syntax Atlas (SCOSYA), Sounds of the City and the Scottish Corpus of Texts and Speech (SCOTS).
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Nina Markl
PLENARY TALKS
Multicultural London English is a new urban dialect characterised by linguistic innovations in all components of language: phonetic, phonological, lexical, grammatical and discourse-pragmatic. Some innovations soon die out, others seem to be part of ‘youth language’ and may not survive into adulthood, but others stabilise in the community and become part of the new dialect. All of them provide the opportunity to witness the beginnings of a language change, and therefore to better understand how and why an innovation emerges.

For some innovations, explanations lie in well-known cognitive processes familiar from research on Creole genesis and second language acquisition; for example, to do with frequency of a feature in the ambient varieties and languages in the community, or with simplification of a structural system. For others, however – perhaps especially those that have emerged among 16-19 year old male speakers – an understanding of how and why they have developed must also take account of the interactional contexts in which they are used and the communicative and rhetorical strategies necessitated by the nature of the street culture in multicultural inner city areas of London. This will be illustrated with analyses of the emergence of utterance-final still (e.g. he was the oldest still), the man pronoun and, if time, other innovative grammatical and discourse-pragmatic features.

This offers a new perspective on (a version of) the actuation problem: why does a change begin in a group of speakers of a language at a particular time and place, but not in other groups of speakers of the same language at other times or in other places? There are implications for the methodologies typically used in studies of language variation and change, and for our understanding of language changes that have occurred in the past, as well as those that we can witness in the present.
Gradient change from below or categorical change from above? The decline of rhoticity in Blackburn, Lancashire.

Danielle Turton, Lancaster University

The towns of East Lancashire are amongst the few remaining rhotic areas of England, i.e., speakers retain the /r/ in words like car and bird. This realisation is heavily stigmatised in Anglo-English, which has led many to predict rapid loss of rhoticity in England (e.g., Trudgill 2000; Britain 2002). We can infer from such descriptions that this would constitute a change from above (Labov 2001) whereby over time speakers drop their /r/s in line with the prestigious Anglo-English standard. Indeed, the loss of rhoticity in England has been well-documented in the sociolinguistic and dialectological literature (Barras 2011; Piercy 2012; Leeman et al. 2018; Blaxter et al. 2019).

In this talk, I present contemporary data from sociolinguistic interviews with 28 white speakers (aged 17-81) from Blackburn, a traditionally rhotic area of Lancashire. Auditory analysis confirms previous accounts of a decline in apparent time. That said, speakers almost always indicate a difference in minimal pair tests between pairs like spar and spa, even the youngest generation. I refine this approach with an acoustic analysis (minimum F3 and F3-F2 difference) which, to my knowledge, represents the first-ever wide-scale acoustic analysis of rhotic Anglo-English. Results indicate that rather than simply a categorical deletion of /r/ for younger speakers, /r/ is weaker in younger speakers and women (higher F3 acoustically), demonstrating a gradient female-led change in apparent time.

Notably, speakers produce much stronger /r/s in formal speech styles (minimal-pair tests and wordlists). If this was truly a change from above, we might expect speakers to reduce the strength and presence of their /r/s when most attention is paid to speech. I present an argument whereby the mechanism behind rhoticity loss in present-day Blackburn is primarily gradient weakening from below the level of conscious awareness. This is compounded by a change from above: only when upwardly mobile speakers leave the speech community do they become aware that their realisation is different from the standard. I explore how speaker conscious awareness interplays with categoricity, gradience and variance in the mechanism of sound change. Ultimately, I argue that a range of analytic methods is required in order to truly understand the motivations of sound change, and caution against the outright application of an RP-centric barometer of stigma and prestige to regional dialects.

Blaxter, Tam, Kate Beeching, Richard Coates, James Murphy, and Emily Robinson. 2019. Each person does it their way: Rhoticity variation and the community grammar. Language Variation and Change 31:91–117.
Scholarship in language variation and change has investigated the mechanisms and outcomes of dialect contact in a number of settings around the world. In variationist work, contact-induced change is typically argued to stem primarily from prolonged interpersonal contact, rather than from short-term travel or media exposure, as regular interaction is thought to be necessary for the transmission of complex linguistic features (Androutsopoulos 2014; Trudgill 2014). In research in the world Englishes and contact linguistics traditions, however, media exposure is often pointed to as a source of language change (Poedjosoedarmo 2000; Winford 2003); moreover, the notion that speakers adopt new features as a result of short-term travel and media consumption is a commonly-circulating discourse in postcolonial societies. These discourses suggest that the distinct language ideologies held in postcolonial communities may result in key differences in contact-induced language variation and change, relative to other settings.

This talk considers the impact of three major sources of transnational dialect contact — institutional exonormativity, transnational mobility, and media consumption — on variation and change in the English and Mandarin spoken in Singapore, a multilingual nation in Southeast Asia. Singapore has historically been regarded as located in the ‘periphery’ of both languages, as a so-called ‘Outer Circle’ English nation (Kachru 1985) and as a society in which Mandarin was, until recently, largely spoken as a second language that has been influenced by other Chinese varieties. With regard to English, I consider the extent to which evidence supports the parallel proposed trends of Americanization and rising endonormativity in Singapore, and how these trends intersect and manifest in both production and perception. Subsequently, I examine how Singaporeans’ orientation towards local versus non-local norms for Mandarin has been shaped by transnational contact, and contrast the ideological positionings of Singapore Mandarin and English.

The issues and findings surveyed here underscore the utility of applying variationist approaches to world English-speaking communities and other postcolonial settings. Correspondingly, they illustrate how research in such settings may shed new light on basic assumptions in the field of language variation and change.

**References**


8th of September 2021

Day 1 Talks
Schwa can participate in sound change: Evidence from New Zealand English
Sarah Tasker

Unstressed vowels have often been neglected in variationist research. This research aims to fill this gap by examining changes in schwa over time in New Zealand English. In NZE there has been a short front vowel chain shift (Hay et al, 2015), resulting in KIT backing and lowering. This has caused KIT to become closer to schwa in the vowel space, and has caused a perception that KIT and schwa sound the same (Hay et al, 2008). It is therefore of interest to see whether schwa also changes in NZE.

Acoustic measurements were taken from the ONZE corpus (Gordon et al, 2007) using automated means. Measurements were normalised (Lobanov, 1971), and analysed using GAMMs. Both non-final schwas e.g. today, and pre-pausal schwas e.g. comma# were examined.

The figures below show that pre-pausal schwa is much lower than non-final schwa. However, the way in which they vary over time and according to duration is similar. On average, schwa stays central over time, but, like KIT, it lowers (Figures 1 and 2). Additionally, a comparison of vowels at shorter durations (Figure 1), and longer durations (Figure 2) shows that both schwa and KIT are lower when longer. However, duration has a stronger effect on schwa, meaning that there are greater differences between schwa and KIT at longer durations. This suggests that schwa may have a lower target than KIT throughout.

These results suggest that schwa may be implicated in the NZE ‘front vowel’ shift. Additionally, the durational differences show that, although vowels may look similar on the surface, they can pattern differently according to duration. The results show that schwa can participate in sound change, and suggest that it is worth considering more the role that schwa plays in sound changes.

**Figure 1** Effect of birth year on normalised F1 at 30 ms  
**Figure 2** Effect of birth year on normalised F1 at 120 ms
References


Individuals vs. community and vowels vs. vowel systems: the case of Cockney diphthong shift reversal in Essex
Patrycja Strycharczuk and Amanda Cole

This paper explores the structure of variation conditioning the co-occurrence of vowel changes that together participate in a diphthong shift. We conducted a dynamic vowel analysis based on wordlist and passage readings produced by 45 speakers from Debden, a community in Essex with East London (Cockney) heritage. In Cockney, the ʊ-diphthongs, MOUTH and GOAT are rotated clockwise, compared to RP [aʊ] and [ɔː], whilst the ɪ-diphthongs FACE, PRICE and CHOICE show an anti-clockwise movement compared to RP [eɪ], [æ] and [ɔ] (Wells 1982; Labov 1994; Mott 2012). In addition, the Cockney FLEECE and GOOSE vowels are diphthongal with centralised onsets (Wells 1982: 306, 307).

We submitted dynamic vowel data to k-means clustering, which classified speakers into two clusters. Cluster 1 (N=23) is a traditional Cockney system whilst cluster 2 (N=22) is an SSBE system. We built a conditional inference tree model to determine which explanatory variables (based on social factors and identity data) led speakers to be classified as either cluster 1 or cluster 2 (Figure 1). The model correctly classified speakers with 86% accuracy. Overwhelmingly speakers born after 1992 belong to the SSBE cluster. Speakers born before or in 1992, however, vary in their production. 18 of them pattern with the Cockney cluster, and they also identify as Cockney speakers. Speakers in the same age group who don’t consider themselves to speak Cockney vary further: four of them show an SSBE system, while five have a hybrid system, in which only selected vowels participate in Cockney diphthong shift reversal.

Overall, the data show a community-level shift towards a supra-local norm at a time when wider policy changes triggered increased social mobility. This shift is precipitated by a more complex pattern of change in selected speakers, in which Cockney-descended variants are incorporated into an accent not perceived as Cockney.
Figure 1. Conditional inference tree model explaining the factors that affect the clustering, and the mean vowel systems for the major cluster and node combinations.

References


A distinction between monophthongs and diphthongs forms a dominant methodological assumption in representing and comparing vowels in variationist research. While this distinction is generally thought to have systematic articulatory, acoustic and perceptual correlates, monophthongs and diphthongs are rarely explicitly defined. In this study, we explore whether an objective acoustic-articulatory definition can be plausibly formulated, based on unsupervised clustering of phonetic exponents of vowel dynamics in two accents of British English.

We analysed combined acoustic and EMA data from 16 speakers of two accents of British English: Standard Southern British English (SSBE) and West-Yorkshire English (WYE). The two accents are known to differ considerably in their dynamic properties: WYE shows monophthongisation of several vowels that are diphthongal in SSBE. The speakers produced a full set of English vowels in monosyllabic words (5 repetitions; N=1777). We extracted vowel duration, Euclidean distance between normalised F1 and F2 at 20/80%, and tangential speed profiles of the Tongue Dorsum sensor. We reduced the variance in the tangential speed profiles to two Principal Components using Functional Data Analysis [2] (Figure 1), and submitted by-dialect and by-vowel median values of each measure to k-means clustering.

A combination of Euclidean distance, PC1 and PC2 (Figure 2) provides a grouping closest to previous dialect descriptions [1, 3, 4]. We find that CHOICE, PRICE, FACE, GOAT and MOUTH cluster together in SSBE, whereas only CHOICE and PRICE remain in this cluster for WYE. Each dialect also shows two monophthong clusters, largely along the PC1 dimension. We propose that CHOICE and PRICE are prototypical diphthongs across dialects, with a rise-fall velocity profile and larger acoustic Euclidean distance, consistent with two vowel targets. In contrast, monophthongs tend to have a U-shaped velocity profile, suggesting a single vowel target. We discuss the results in the context of methodological choices in variationist research, such as selection of time points for formant extraction.
References


Mapping the Mancunian Way: Dialectal variation and levelling in Greater Manchester
George Bailey, Danielle Turton and Laurel Mackenzie

This study investigates dialectal variation and change in Greater Manchester – a relatively new metropolitan county established in 1974 that comprises the city of Manchester and satellite towns such as Bolton, Oldham, Rochdale and Wigan. Traditionally, most of these satellite towns have had distinctively different phonological systems (Baranowski & Turton 2015). We investigate whether the region is undergoing dialect levelling, by which traditional accents lose their distinctive features and approach a supra-regional standard. We also ask whether any levelling observed is related to the creation of the metropolitan county, or simply part of the general process of dialect levelling attested across the British Isles (Williams & Kerswill 1999, Britain 2010).

Data come from 2,000 British English speakers within the Greater Manchester boundary who responded to an online dialect survey comprising phonological, morphosyntactic and lexical variables (MacKenzie et al. 2021). We use geospatial analysis in R to map present-day dialectal patterns across the Greater Manchester area, and analyse the extent to which these patterns have shifted over time by comparing speakers from different age groups (e.g. Figure 1).

We find that certain features typical of the centre of Manchester are retained, such as the north-force distinction and the rhyming of one and gone. However, more general features found throughout England, such as the cure-force distinction and the rhyming of book and spook, are on the decline and restricted to the eldest speakers or the most peripheral edges of the region. For satellite towns such as Bolton and Wigan, when comparing the responses of the youngest and oldest speakers, we demonstrate a clear swing in certain variables in the direction of the accent of the urban centre of Manchester. We discuss to what extent this can be attributed to social and geographical changes in the region.

![Figure 1: The north-force distinction is still present in the area (left; blue = distinct) but the cure-force distinction shows a marked retreat (right; blue = distinct).](image)

References


On one side or the other: Stance-taking in sign language narrative and non-narrative discourse

Rose Stamp, Bracha Nir and Shirit Cohen-Koka

The paper examines the interaction between linguistically-embodied space in sign language (SL) use, comparing how Israeli SL signers position entities as stance-subjects and stance-objects[1] in narrative and non-narrative discourse. Taking a multi-disciplinary approach we analyze personal-experience stories and expository discussions produced by 24 signers (N=48 texts) revolving around social perspectives on SL, to consider the multiple spatial planes in which signs function for stance-taking in discourse[2,3].

The use of signing space to directly represent physical spatial relations is fundamental to any SL[4], such that topographical space represents actual spatial relations among objects[5]. Moreover, signing space is used syntactically, assigning concrete locations when representing referents or topics[5]. Thus, when discussing deaf education, topics such as “oralism” and “bilingualism” can be contrastively located on either side of the signer along the horizontal plane. Furthermore, the frontal plane is used to denote hierarchical social relations, especially superiority[6,7,8].

Our comparative genre analysis shows that in narratives signers mostly exploit topographical space, while positioning countering discursive arguments in their expository texts. Moreover, we find that space along the horizontal plane is used metaphorically[9], embodying the CONCEPTUAL DISTANCE IS SPATIAL DISTANCE metaphor[10]. Furthermore, our data show how space in expository texts reflects a relativistic cline of social positioning: socially familiar entities are positioned either in the proximal space (of the signer’s body) or on the right of the horizontal plane, while distant entities are positioned on the left. However, the same entities may shift in space relative to the opposing argument or entity (Fig.2).

Our data show that positioning of topics in physical, syntactic, and discursive space is not arbitrary. Signers, like speakers, draw on physical and cultural experiences to give entities a spatial orientation which may reflect not only categorical but also relative, dynamic, and personally-situated conceptualizations based on broader societal status and perspectives.

Figure 1: Schema of signing space showing a cline of social positioning/familiarity (from right to left): deaf > interpreters > hearing – the deaf community is positioned either at the signer’s body or to their right; interpreters and the hearing community are positioned to the signer’s left, unless interpreters and the hearing community are contrasted with one another as in Fig.2b
Figure 2: Examples from our data: (a) the deaf community is positioned on the right, interpreters on the left (signer tilts her body to include herself in the deaf community); (b) the hearing community is positioned on the left and is contrasted with the interpreter on the right.

References:

Within a group of speakers of the same age and sex, listeners will perceive the voices of some speakers as more similar-sounding than others. Two sources of similarity contribute to these judgements: linguistic (language, dialect, accent) and personal (an individual’s vocal tract anatomy and how they use it to produce speech). This paper reports an investigation of the phonetic underpinnings of perceived voice similarity (PVS) in six groups controlled for sex (male), age (18-30), and accent: Standard Southern British English (SSBE, three groups) and a group of speakers from each of York, Bradford and Wakefield, Yorkshire.

Each group contained 15 speakers from the DyViS (SSBE; Nolan et al. 2009), YorViS (York; McDougall et al. 2015) or WYRED (Bradford and Wakefield; Gold et al. 2018) databases. Two spontaneous speech stimuli per speaker were created, each approximately 3s in duration. 120 listeners (20 per speaker group) (first-language English speakers, aged 18-40 from England), rated the (dis)similarity of all pairings of speakers using a 9-point Likert scale. The data were reduced using Multidimensional Scaling (MDS), a technique which enables a group of speakers to be characterized in a pseudo-perceptual space whose dimensions can be further interpreted to better understand the relationships of PVS among the group.

Relationships between the perceptual dimensions produced by the MDS and measurements of phonetic variables [long-term f0, long-term formant analysis (LTF) of F1-F4, articulation rate (AR)] were tested using Pearson correlation. Preliminary results show f0 playing a key role in judgements of voice similarity in the different accent groups, different LTF formants yielding significant correlations for some groups, and AR playing less of a role. Variation among results for the three SSBE and the three Yorkshire groups will be examined to further our understanding of variability at the level of sample, individual and accent group, and their interrelationship.

References
Phonation Profile Analysis: A novel VPA-based auditory-perceptual method for analysing phonation

Joe Pearce

The laryngeal aspects of voice quality, known as phonation, vary according to social factors such as gender\(^1\) and region\(^2\), as well as within speakers according to linguistic constraints and for stylistic purposes\(^3\). While phonation can be measured acoustically, auditory-perceptual analysis is regarded as the 'gold standard' that acoustic measurements are compared against, because the auditory effect of a difference in acoustic measurement is not always clear\(^4\).

Vocal Profile Analysis (VPA)\(^5\) is an auditory-perceptual approach to analysing voice quality which treats the voice as a combination of supra-laryngeal settings that combine with phonation settings to produce a speaker’s voice. However, VPA does not allow consideration of intra-speaker variation and auditory-perceptual methods that do are often limited to a single aspect of phonation (e.g. creak).

This study presents an auditory-perceptual method of analysing phonation, called Phonation Profile Analysis (PPA), which is based on VPA, but allows consideration of intra-speaker variation. This method is demonstrated in an analysis of a sub-corpus of SCOSYA\(^6\), containing 40 speakers from five dialect areas of Scotland stratified by age and gender, of which eight speakers from both Shetland and Glasgow will be presented. Speech is divided into stretches of voicing with a near-constant phonation type, and then coded auditorily for presence or absence of whisper, falsetto and modal voice. Each stretch is then rated for whispery voice, creaky voice, breathy voice and harsh voice on scalar degrees of 0-5.

Results of this analysis will show the use of PPA for providing an overview of phonation types used by a speaker, rated on scalar degrees where relevant (Figure 1), as well as for considering intra-speaker variation. Overall, this analysis will demonstrate the use of PPA for considering how variation according to internal constraints can affect the resulting characteristic voice quality of a speaker or an accent.

![Figure 1: A representation of part of a phonation profile for a young female speaker from Glasgow, showing use of whispery voice, creaky voice, harsh voice and breathy voice, which have been rated auditorily on scalar degrees.](image.png)
degrees of 1-5. The width of the boxes represents the proportion of tokens with that phonation type, and the height of the boxes represents the proportion of tokens rated with that scalar degree.

References


Automatic accent classification has been shown to be a useful tool for grouping accents and for identifying accent features (Brown & Wormald, 2017). However, there are many methodological choices involved in this type of research that have potential consequences for the results. This paper aims to inform decision making in automatic sociophonetics by providing a systematic comparison of four machine learning approaches applied to the same dataset.

The study reanalyses the data originally published by Strycharczuk et al. (2020), who used random forests to quantify accent variation in the North of England. The data are first two formant measurements for a representative set of 23 vowels, pronounced by 105 speakers from Liverpool, Newcastle upon Tyne, Manchester, Sheffield, and Leeds. They were extracted from the EDAC corpus (Leemann et al., 2018). These measurements are used to perform accent classification, following a procedure that includes under-sampling, bagging, and leave-one-out cross validation to handle some internal challenges in the dataset like unbalanced data and small sample size. We applied the same procedure using three other machine learning approaches: logistic regression, Multiple Layer Perceptron (MLP) and Recurrent Neural Network (RNN).

Our results suggest that overall classification accuracy is best for MLP and RNN, followed by logistic regression and random forests, although the differences are small (Table 1). Out of these four approaches, only two allow for feature extraction: logistic regression and random forests. The features identified by the two approaches are in Table 2. All the vowels were visualized to check the interpretability of classification models. Some of the features from the logistic regression model show a poor fit with the raw data, potentially due to high degree of multicollinearity. Random forests fare better in this respect. Overall, our results highlight that there is a trade-off between classification accuracy and linguistic interpretability.
APPENDIX

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<thead>
<tr>
<th>City</th>
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Table 1: By-city models' classification accuracy

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<td>NEAR onglide F1</td>
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<td>FOOL midpoint F2</td>
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<td>FOOL midpoint F2</td>
</tr>
<tr>
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<tr>
<td></td>
<td>PRICE onglide F2</td>
<td></td>
<td>GOAT onglide F1</td>
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Table 2: Highest ranked features for each city under both models

Bibliography


The BATH-TRAP split in the East Midlands
Sandra Jansen and Natalie Braber

While the BATH-TRAP split is described for the south-east of England, its absence is notable in the north. However, the status of these vowels in the East Midlands, which is often described as linguistic transition zone, has not been studied in detail.

In this paper we want to address the following research questions:

1. What are the acoustic properties of BATH and TRAP in the East Midlands? How much overlap exists between the vowels?
2. What is the geographical and apparent time distribution of BATH and TRAP in the East Midlands?
3. Is a diffusional pattern of the split observable in the East Midlands?

Sixty speakers from the East Midlands were recorded stratified according to county, age and gender. Bhattacharyya's Affinity was used as overlap measurement method to investigate the state of the split in the three counties.

The results suggest a large overlap between BATH and TRAP and a gradual geographical change. The overlap is highest in Derbyshire and lowest in Nottinghamshire. In apparent time BATH F2 is decreasing somewhat in Derbyshire and Leicestershire which indicates some backing of the vowel. A further apparent time change is the slight raising of TRAP in all three counties. This change increases the split between BATH and TRAP, however not in a way that was expected.

Duration measurements show that BATH tokens align between TRAP and PALM/START, confirming the status of the region as a transition zone. The density of lexical items with following nasal varies extensively between the counties in a similar way as the overlap measurements. The duration distribution of the individual lexical items shows a clear hierarchy in vowel length. Overall, the data confirms the linguistic transition zone status of the East Midlands with a comparatively stable distribution of the variation.
Implicit and explicit evaluations of the competence and warmth of Northern English and Southern English speakers in England
Robert M. McKenzie and Andrew McNeill

In addition to measuring explicit (deliberative, self-report) attitudes towards linguistic diversity - to uncover more deeply embedded and enduring linguistic prejudice – sociolinguists have also begun to investigate implicit (automatic) language attitudes. For example, in a recent foundational study, McKenzie and Carrie (2018) uncovered significant implicit-explicit attitude discrepancy (IED) in English nationals’ evaluations of Northern English and Southern English speech. However, the extent to which implicit and explicit language attitudes converge or diverge in relation to speaker competence (status) and speaker warmth (social attractiveness) dimensions is currently unknown.

This talk details the preliminary findings of an ongoing British Academy-funded project (McKenzie and McNeill, under contract) investigating English nationals’ implicit and explicit attitudes towards Northern English [a] and Southern English [ɑː] in the BATH lexical set. Study 1 (N=308) incorporated competence-associated traits within a specially constructed auditory Implicit Association Test (IAT) and a self-report magnitude estimation scale. Initial multivariate analysis of the data obtained in Study 1 found, in terms of competence, both northern and southern English participants were significantly more positive towards the Southern English speaker at implicit as well as explicit levels of evaluation. Complex interaction effects between the English participants’ level of Social Dominance Orientation (SDO), strength of regional affiliation, age and gender upon their automatic and self-reported attitudes were also found. By contrast, Study 2 (N=200) employed warmth-related traits in the IAT and self-report measures. Preliminary analysis suggests a different pattern of implicit and explicit evaluations for the Northern English and Southern English speakers.

The project findings are discussed in relation to the potential value of employing both implicit and explicit measures to provide a more comprehensive understanding of language attitudes towards Northern English and Southern English in England and relatedly, to help determine any language attitude change and micro-level language change underway within specific communities.

References


* The financial support provided by a 12-month British Academy Mid-Career Fellowship awarded to Robert McKenzie (Reference: MD20\200009) to fund this study is gratefully acknowledged.
Education vs. Region: Investigating variation in Received Pronunciation (RP)

Caitlin Halfacre

This study approaches RP as a spoken variety of English, attempting to understand the current speech community. In order to avoid circularity that comes from pre-defining RP speakers, it takes speakers who can otherwise be defined as upper-middle class, namely have been privately educated (Trudgill, 2008).

To investigate interactions between region and education, speakers who have been privately educated in the North East are compared with similar speakers from the South East, and to north-eastern state-educated speakers (30 speakers). Data includes sociolinguistic interviews, word lists, and a minimal pairs task. Speech was aligned with MFA (McAuliffe et al., 2017) and static and dynamic formant measurements for 3 variables taken (Rosenfelder et al., 2014; Warburton, 2021).

The foot~strut split is significant (linear mixed effects modelling Bates et al. 2018) in all privately educated speakers (1a). However, the trap~bath distinction shows regional variation (1b). The goat vowel, particularly the split with pre-/l/ position (hope, hole) is ideally suited to further comparing these speakers due to the complex variation found in North East speakers (Warburton, 2021), and the more recent appearance of the split attested in RP speakers (Hannisdal, 2006). GAMMs (Wood, 2003) in 2 show a significant split in both regions, but further models show that there is regional variation in both environments. Further work will investigate the effect of the pre-/l/ environment deeper into the grammar (Bermúdez-Otero, 2015) by taking other morpho-phonological environments (e.g. holy, goalie) to both understand the progress of this change in the speech community and enable more comparison between the regions.

Together these analyses demonstrate that interactions between region and education affect each variable differently, and the classic model of British class variation Wells (1982), which would predict that regional differences would reduce up the socio-economic spectrum, cannot be applied across the board. Instead comparing multiple variables can show both similarities and variation between regions (Trudgill, 2008) giving a better understanding of the speech community.
References


Hannisdal, B. R. (2006), Variability and change in Received Pronunciation A study of six phonological variables in the speech of television newsreaders, PhD thesis, University of Bergen.


Choral singing in Glasgow: Singing RP since the 1920s?
Edward Marshall

Previous sociolinguistic work on singing has focused on popular styles (e.g., [10], [1], [9]), however, little is known about the sound of choral singing, or classical singing more broadly. Do choirs have accents? Is there evidence of variation and change over time in acoustic vowel quality of choral singing?

An electronic, automatically-segmented, corpus was constructed in LaBB-CAT [5] of commercially-released recordings of the Glasgow Orpheus choir (1906-1951) and the Glasgow Phoenix choir (1951-present, formed from Orpheus members). All monophthongs FLEECE, KIT, DRESS, TRAP, BATH, STRUT, LOT, THOUGHT, FOOT and GOOSE (8825 tokens) were extracted. Mean first and second vowel formants were measured in LaBB-CAT using Praat (manual-correction for FOOT and GOOSE) and were analysed with Bayesian linear mixed models using brms in R with weakly informative priors.

Results suggest that, despite the Scottish English context, choral singing in Glasgow has used Received Pronunciation (RP) vowel contrasts since at least the 1920s. The vowel pairs TRAP/BATH, LOT/THOUGHT and FOOT/GOOSE are distinct in every timeperiod (1925-1951, 1959-1975, 1987-2017). Results also show KIT, DRESS and TRAP lower and retract in the late timeperiod compared to the early timeperiod (Fig.1), with TRAP lowering and retraction [median 0.51, 95% CI 0.29, 0.77; median -0.32, 95% CI -0.48 to -0.15] reflecting a well-evidenced change in RP (e.g., [11], [7], [4], [3] and [2]).

The appearance of RP vowel contrasts in these Glasgow choirs suggests the potential existence of a General British choral accent with roots in RP. However, other factors may also play a role: GOOSE is truly a back vowel at all timeperiods, which may be due to singing production and influence of choir directors. How did singers in Glasgow acquire these vowel realizations? TRAP height in the early period could also be related to the Kelvinside accent [8]. The next step is to investigate other UK choirs with a long recording history to substantiate the possibility of General British choral sound.


Age effects on sociolinguistic perception of (ing) in Tyneside English

Johanna Mechler

While variation and change in the production of Tyneside English are well described (Watt 2002; Buchstaller & Corrigan 2015; *inter alia*), the variety has only been subject to relatively few perception experiments (Buchstaller & Levon 2015; Levon, Buchstaller & Mearns 2020). To date, no research examines the relevance of speaker and listener age in sociolinguistic perception. The present study addresses this gap by exploring the age-graded perception of (ing) in Tyneside English.

To test perceptions regarding speaker age, the experimental setup relies on recordings of the same individuals at different stages in their lives. The sound samples consist of naturally occurring, stimuli-rich speech from sociolinguistic interviews of four female Tyneside speakers who were originally recorded in 2007 for the DECTE corpus (Corrigan et al. 2012). These speakers were re-recorded in 2021 and produced the same text with variable realisations of (ing):

- 2007: text A, high /in/ guise
- 2021: text A, high /in/ guise
- 2021: text A, low /in/ guise

The experiment uses a within-subject design, with each respondent rating all guises. Informants were asked to evaluate a speaker on a “professionalism scale” in the context of a job application for a radio broadcaster. They also filled in an attitude survey on North East varieties and the diagnostic questions of the BAPQ (Hurley et al. 2007), which allows us to examine the impact of cognitive factors.

Mixed effects regression modelling was used to explore the socially constrained nature of (ing) perception, including the effect of speaker and listener age as well as listeners’ genders, attitudes, and results of the BAPQ. Initial results suggest that both speaker and listener age influence the perception of /in/, a well-documented vernacular linguistic feature. These findings allow us to further our understanding of the relevance of maturation in the perception of stimuli-rich speech samples.

References


Nonbinary speakers’ rates of (ING) stable across conversation topics
Jack Rechsteiner and Betsy Sneller

Sociolinguistic research on trans speakers has tended to view them through the lens of adherence to cisgendered binary norms (Goldberg & Kuvalanka 2018). Speakers with identities outside the trans-and-cis-normative gender binary have, in turn, received very little attention (Bradford et al., 2019; Garmpi 2020, c.f. Zimman 2017).

Gratton (2016) provided an analysis of variation in nonbinary speakers’ use of English suffixal (ING) (workin’ vs. working). (ING) typically shows gendered production, with cis women producing higher rates of –ing than cis men (e.g., Trudgill 1974, Labov 2001). Additionally, (ING) is metalinguistically salient, making it a prime target for agentive sociolinguistic work. Gratton (2016) compared two nonbinary speakers’ use of (ING) across two contexts: speaking with a friend vs. a stranger, and found that in the public setting, both speakers increased their rates of the variant not typically associated with their gender assigned at birth. Gratton analyzed this as an agentive “resistance to cis-normative femininity and masculinity”, in response to a perceived threat of being misgendered as binary.

The present study builds on this work, by asking whether nonbinary speakers similarly change their rates of (ING) across conversation topic. 6 nonbinary speakers (3 AFAB and 3 AMAB), ranging from 21 to 27 years old, participated in sociolinguistic interviews (conducted by a familiar, nonbinary speaker) which were specifically designed to obtain participants’ history of gender identity and expression in addition to traditional narratives. Interviews were coded for topic (gender vs. other). Results are shown in Figure 1 and Table 1.

We find that despite a markedly more deliberative style during gender topics, participants do not shift rates of (ING), supporting Gratton’s (2016) argument that perceived threat of misgendering, rather than something like attention paid to speech, is a major motivating factor for shifting rates of (ING). We further find that speaker assigned gender at birth plays no predictable role in rates of (ING), suggesting that nonbinary speakers form their own linguistic community that operates outside of the gender binary.
Table 1: Results of mixed-effects model in glmer, with Speaker and Topic as main effects (reference levels: AnR and “non-gender topic”) and a random intercept by word

|          | Est  | SE   | df  | t value | Pr>|t| |
|----------|------|------|-----|---------|-----|
| (Intercept) | 0.92 | 0.04 | 707.8 | 22.9 | <2.00E-16 |
| Style     | -0.01 | 0.08 | 825.7 | -0.18 | 0.85 |
| AnR       | -0.005 | 0.05 | 833.8 | -0.11 | 0.91 |
| GW        | -0.11 | 0.05 | 832.2 | -2.344 | 0.02* |
| JB        | -0.02 | 0.06 | 830.5 | -0.205 | 0.88 |
| JC        | 0.02 | 0.08 | 833.2 | 0.319 | 0.75 |
| MS        | -0.21 | 0.05 | 832.4 | -4.179 | <0.001*** |
| Style:AnR | 0.01 | 0.17 | 816.2 | 0.044 | 0.96 |
| Style:GW  | 0.06 | 0.09 | 830.9 | 0.591 | 0.55 |
| Style:JG  | -0.04 | 0.14 | 828.0 | -0.286 | 0.78 |
| Style:JC  | -0.07 | 0.12 | 833.9 | -0.576 | 0.56 |
| Style:MS  | 0.01 | 0.10 | 827.5 | 0.061 | 0.95 |

References


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The North East of England is home to the Geordie dialect, spoken in the Newcastle area, but the region has many other local identities, including ‘Mackem’ (Sunderland) and ‘Smoggie’ (Middlesbrough). As Beal (1999: 34) notes, ‘anybody mistaking a person from Sunderland or Middlesbrough for a Geordie has made an unforgivable social gaffe’. These local identities map onto linguistic variation, which has been investigated most thoroughly for accent (Beal et al. 2012; TUULS 2016–19) – less so for grammatical variation.

Our current project aims to identify new dialect boundaries/continua within the North East. Here, we focus on pronoun exchange, which is thought to vary within the region (Beal et al. 2012). Aside from Snell (2008), little is known about its frequency/constraints on use. The three main types are:

1. ‘us’ for 1SG object ‘me’, e.g. give us it (“give me it”)
2. ‘we’ for 1PL object ‘us’, e.g. give we it (“give us it”)
3. ‘wor’ for 1PL possessive ‘our’, e.g. that’s wor car (“that’s our car”)

We analyse sociolinguistic interviews (originally recorded for the TUULS project) and questionnaires which asked participants from Newcastle, Sunderland and Middlesbrough whether they would hear particular sentence types locally. (1) was consistently recognised as a common dialect feature and was used across all three communities. (2) was considered common only in Newcastle and, indeed, only Newcastle speakers used it. All Newcastle respondents considered (3) a common dialect feature, but much fewer in Middlesbrough (<30%) and Sunderland (<10%). Most tokens of (3) in the interviews were from Newcastle, in-keeping with the idea that Sunderland speakers see this as a ‘Geordie’ feature (Beal et al. 2012). The paper will offer new insights into the relationship between perception and production, and our analysis will demonstrate whether these reflect a pan-North-Eastern system of pronoun exchange, or dialect-specific tendencies.

References


Want to catch a change, love? Study vocatives!
Jeremy Needle and Sali Tagliamonte

Vocatives are nouns that refer to addressees: “Buddy, how’re you doing?”. Vocatives are “relationship management” devices used for interpersonal positioning, topic movement, endearments, and insults (McCarthy & O’Keeffe 2003). The choice of forms encodes social and expressive meanings (Davies 1986; Murphy 1988), and can vary substantially by variety (Rendle-Short 2010; Formentelli 2014): for example, buddy is considered North American, mate is British and Australian. The importance of vocatives has been demonstrated for gender, ethnicity, and social position (Kiesling 2004; Heyd 2014; Martínez 2018), but vocatives are frequently described as under-studied.

We investigate spoken English data from UK communities for individuals born from the 1900s to the 2000s to test broad social and areal patterns. We focus on a set of ‘familiarizers’—man, mate, love, buddy, dude, fella—based on frequency, diffusion, and potential gender neutralization. Vocatives are rare in corpus data: for similar familiarizers, we found 340 uses in a corpus of 10 million words of North American English.

We analyzed patterns of vocative use by gender, year of birth, education, occupation, and community using Conditional Inference Tree and Random Forest modeling (Tagliamonte & Baayen 2012). This modeling approach is appropriate for multiple variants, and handles the imbalances inherent in complex data with interacting linguistic and social correlates.

The most common familiarizers in the data are man, mate and love. We observe significant gender contrasts (Figure 1): women lead for love, but avoid mate. In northern dialects (e.g. York), man is used less, love more, and mate rises relatively late.

We see generational and areal influences on vocatives, consistent with change from above. UK and North American varieties differ in vocative choices and in 20th-century trends of change, though both show localized patterns and cultural associations—vocatives are an ideal choice for tracking historical trends and understanding societal patterns.

Figure 1. Frequency of vocatives by gender and decade of birth.
References:


Tagliamonte, S., & Baayen, R. (2012). Models, forests, and trees of York English: Was/were
variation as a case study for statistical practice. *Language Variation and Change, 24*(2), 135-178. doi:10.1017/S0954394512000129
This paper reexamines an iconic feature of African American English (AAE), zero copula in present tense copula/auxiliary be, in a corpus of some 30,000 copula/auxiliary forms. It reevaluates (1) the range of structures that should be included in the envelope of variation for zero; (2) the set of predictor variables that affect zero; and (3) changes in that set over time and the implications of these changes for the grammar of AAE.

The study uses data from fieldwork with 61 African Americans done over the last 33 years in the rural village of Springville, Texas, and with informants born as early as 1894 and as late as 2002, it provides an apparent time perspective of a century. The data is analyzed using the binary logistic regression procedure in SPSS to estimate the effects of predictor variables (or constraints) on dependent variables and to estimate statistical significance and effect size (Nagelkerke’s R2) for the overall model. An all-possible-regression procedure with backward elimination is used to determine how much variance in the data each of the predictor variables explains independently and how much they explain when grouped in all possible combinations.

The analysis shows that the envelope of variation for zero should be expanded to include negatives, questions, and tokens after what’s, it’s and that’s (Blake, 1997; Rickford et al., 1992). Doing so increases the corpus to comprise 98.5% of all zeros, and the variance explained (R2) increases from 25.7% in the traditional envelope to 52.7% in the revised one. Further, the analysis shows that the set of predictor variables should be modified to treat adjective subcategories (stative, nonstative, and participial) as separate predictor variables. Doing so makes it clear that non-stativity is increasingly the primary predictor of zero during the second half of the 20th century.

References


The English adverb *anymore* is standardly a negative polarity item (NPI), which occurs only when licensed by an NPI trigger such as negation (e.g., “I don’t travel anymore”). However, some speakers use *anymore* in positive-polarity clauses (e.g., “I travel frequently anymore.”) "Positive-anymore" has been researched as a syntactic feature of some Englishes.

Linguists have posited that positive-*anymore* carries a feature of negative affect, representing a unique case of syntactic negativity transferring to semantic negativity (e.g., Labov et al. 2006:293; Horn 2014:338-339). However, because positive-*anymore* occurs infrequently in natural-language corpora built from sociolinguistic interviews and edited texts, the claim that positive-*anymore* is associated with negative affect has been largely based on consciously elicited acceptability judgments. Linguists have warned that respondents cannot reliably assess whether positive-*anymore* is part of their grammar (e.g., Labov 1972:309, 1973:66; Youmans 1986:73), casting doubt on claims based on such judgments.

We present a novel approach to resolving this issue of validity. We examine the relationship between positive-*anymore* and negative affect by applying sentiment analysis to a large corpus collected from Twitter. We coded the NPI trigger (or lack thereof) in 79,717 tweets containing *anymore*. We then assigned ratings based on Osgood’s semantic differential (Osgood, May & Miron 1975) to 794,679 words in these tweets to quantify the affect of language occurring with positive-*anymore* and NPI *anymore*.

We find that positive-*anymore* is associated with reduced valence, increased arousal, and reduced dominance. This suggests that positive-*anymore* is indeed associated with emotional negativity. Additionally, we find inter- and intra-regional differences, showing that the negative affect feature is not a uniform trait of positive-*anymore*, but rather subject to dialectal variability.

Our findings demonstrate sentiment analysis to be a useful tool for sociolinguistic, semantic, and micro-syntactic approaches, particularly for examining low-frequency features that have traditionally been difficult to study in natural-language corpora.

References


“Well, he was on smack, weren’t he? But he’s not on smack no more”: Understanding the social meaning of grammatical variation by comparing the phonetic realisations of syllable-initial /h/ in negative concord and tag questions

Emma Moore

Whilst some studies have looked at the distribution of phonology and morphosyntax within one speech community (Guy 2013; Smith & Durham 2019; Beaman 2021), few studies have exploited the moment-by-moment co-occurrence of phonetic and grammatical detail. This paper will explore the social meaning of grammatical variation by comparing the phonetic realisations of syllable-initial /h/ in two distinct variables: negation with postverbal indeterminates (NEG) (e.g. *I don’t like her no more/I don’t like her anymore*) and tag questions (TQs) (e.g. *He did, didn’t he?*).

584 tokens of NEG and 778 TQs were analysed from data collected during an ethnography of British adolescent girls. Statistical analyses (considering social class and community of practice) reveal that NEG is more socially stratified than TQs. An examination of discourse placement and topic also reveals distinct pragmatic functions: whilst the multiple negative particles in negative concord can convey intensity, the placement of a TQ after a declarative frequently serves to conduce agreement. Finally, the analysis of /h/ shows that, whilst negative concord has a linear correlation with /h/-dropping, TQs do not.

The correlation between NEG, social class, and the shibboleth of /h/-dropping suggests that NEG has “quite fixed social meanings associated with ... class and ... education” (Eckert 2018: 190). Whilst NEG can function to portray intensity, this pragmatic meaning is often ‘bleached out’ by its iconic social status (Gal & Irvine 2019). Conversely, the more fluid social associations of TQs, and the non-linear correlation with /h/-dropping, suggest that the distribution of TQs is rooted in pragmatic utility (Cheshire 2005) not ‘social meaning’ per se.

These results suggest that uncovering the social meaning of grammatical variation requires understanding of (i) the intersection of syntactic configuration, pragmatics and iconicity, and (ii) any implicational relationships (Cole 2020) between co-occurring grammatical and phonetic variants.

References:


Eckert, Penelope. 2018. *Meaning and Linguistic Variation: The Third Wave in*


Exploring the polarity effect on future variation in Parisian French
Yiming Liang, Pascal Amsili and Heather Burnett

In all varieties of French, future events may be expressed using a synthetic future (1a) or a periphrastic future (1b). Although many factors (e.g., subject type (Blondeau & Labeau, 2016); contingency (Wagner & Sankoff, 2011), temporal distance (Poplack & Turpin, 1999)) have been shown to condition future temporal reference (henceforth FTR), one of the most puzzling aspects is the effect of polarity, which has been observed in a number of varieties (Poplack & Turpin, 1999; Wagner & Sankoff, 2011; Roberts, 2012; Villeneuve & Comeau, 2016, among others). In the present study, we investigate the polarity effect in the yet unstudied variety of Multicultural Parisian French using the Multicultural Parisian French corpus (Gadet & Guerin, 2016), and propose an analysis in terms of quantifier raising.

(1) a. Je la verrai.
b. Je vais la voir.
“I will see her.”

Mixed effects logistic regression analysis of 3,807 FTR tokens shows that the polarity constraint is active in Parisian French, but is limited to negative quantifiers (e.g., jamais, plus, rien, personne; \(z = 6.025, p < 0.001\)), while “pas” is not subject to the constraint (\(z = 1.257, p = 0.207\); see Figure 1). We hypothesize that the polarity constraint arises because of the interaction between the syntax of negative quantifiers, phase theory and compound tenses in French. We propose that, for reasons of facilitating sentence processing, speakers prefer placing the verb and its arguments in the same domain in the final syntactic derivation. As argued by Kayne (1998); Burnett et al. (2018), negative quantifiers in Germanic languages must raise out of the VP domain to the Spec of a higher NegP. We propose this also holds for French as a soft constraint. Since a transitive VP is a phase, when a negative quantifier (like rien “nothing”) is present, it would be preferable to have the synthetic form which raises the verb to the same domain as its arguments, in particular the raised negative quantifier. In varieties of French spoken in Qu’ébec, “pas” is also subject to the polarity constraint. We suggest that the different patterns observed in Parisian and Qu’ébecois varieties are due to different settings for “pas” in different varieties. While “pas” participates in negative concord in many Canadian varieties (see for example Burnett et al., 2015), it does not in Parisian French, and as such “pas” is not subject to the same movement constraints across varieties.
Figure 1: The proportion of Synthetic Future use across affirmative, pas and negative quantifier contexts. Error bars represent a 95% CI.

References


9th of September 2021

Day 2

Posters
**Married at First Sight: the role of f0 variation in heterosexual female-male flirting interactions**

Emma Harbo Jakobsen and Miša Henjá

A number of recent studies have looked into perceived vocal attractiveness [e.g. 1-6]. Just as important as our understanding of perceived vocal attractiveness is our understanding of how speakers produce speech in situations where attractiveness may be at the centre of the interaction, e.g. when flirting. Our case study investigates how cis-gender heterosexual men and women produce their fundamental frequency (f0) in a flirting situation as opposed to a non-flirting situation, in order to 1. add to the rather limited number of production studies in the area [3, 7]; 2. test whether hypotheses generated by perceptual studies are borne out in production studies as well. More specifically, perceptual research leads us to expect heterosexual male speakers to lower their f0 in flirting contexts and female speakers to raise theirs.

We use conversational data from four heterosexual cisgender couples from the reality show *Married at First Sight*. In the non-flirting context, we use speech from when the speakers are alone and introduce themselves to the camera. The data collected from the flirting situations were all from the so-called “date nights”. All vowel phonemes were manually annotated, and f0 measures were extracted at the midpoint of each. 3250 measures were extracted in total. We find that two of the women raise their mean f0 in flirting contexts while two show no change. Furthermore, all women show a larger f0 range when flirting. Two male speakers lower their mean f0 in the flirting situations, while the other two raise their mean f0. The male speakers who raise their f0 have female partners who also show f0 raising in the flirting context.

Half of the individuals display linguistic behaviour expected based on perceptual studies into perceived vocal attractiveness. The latter half suggest other flirting tactics. More specifically, two of the male speakers adopt the strategy to accommodate to their partner in f0.

**References**


This poster explores how two traditional features of North-Eastern English change in two independent panels of six younger and six older speakers: hyper -s and the vernacular realization of the first-person possessive ([mi] as opposed to [mai], [ma], or [ma]). Research suggests that both features are restricted to specific environments and become increasingly marginal in the grammar of North-Eastern varieties (Cole, 2008; Snell, 2010; Childs, 2013). To date, however, we do not know how this marginalization process operates in individual speakers relative to the overall community trend. Moreover, there is a lack of comparative panel data exploring the coherence in individual grammars (see Beaman and Guy to appear).

I investigate how individual speakers participate in these ongoing changes across their lifespans (see Figures 1 and 2). My findings suggest that the informants' realization of both variables is influenced by internal and external linguistic constraints reported in the literature. While the Northern Subject Rule, a type of hyper-s realization with a long pedigree in the North of England, seems to have receded almost entirely as the speakers have aged, non-standard agreement in existentials becomes increasingly common (see Tagliamonte, 1998; Pietsch, 2005). Moreover, it seems as if the stigmatized [mi] realization of the first person possessive is becoming replaced by [ma].

The poster contributes to the growing body of research on factors influencing speaker malleability over the lifespan. By analysing the (in)stability of speakers' use of one morpho-syntactic and one phonological variable as they move through their lives, the present study offers a comprehensive panel view on ongoing changes, showing "language change as lived through by individual speakers" (Sankoff, 2019, p. 198).


The link between breathier phonation and increased perception of femininity has been established in numerous studies (see e.g. Borsel et al. 2009; Dacakis et al. 2012) and has been shown to be used as a stylistic feature in the production of hyper-feminised identities (e.g. Hall & Bucholtz 1995). However, inconsistencies in the ways breathiness has been measured (see Simpson 2012) have meant that there is often little consensus between studies as to 1) whether men or women are breathier, and 2) if breathy voice is conditioned physiologically, or if it might be subject to sociolinguistic variation.

The current study explores the variation in breathy voice quality between respondents stratified by 1) gender, 2) sexuality and 3) self-assessed masculinity/femininity on the TMF scale (Kachel et al. 2016). I draw on a sample of 19 respondents (1) from South-East England who were recruited in four sub-groups: self-defining gay men, gay women, straight women and straight men. In line with Hejná et al. (2020), several breathiness measurements (including Harmonics-to-Noise [HNR] and Cepstral Peak Prominence [CPP]) were used for analysis. Measurements were extracted using the PraatSauce package of scripts (2) in Praat. Mixed effects models were built through the ImerTEST package (Kuznetsova et al. 2017) in R.

Results show that a course gender split between male and female does produce significantly different breathiness distributions for both HNR (p=0.02) and CPP (p=0.03), with men having breathier vowels than women. Gay females are statistically less breathy than straight males (p=0.03) but there is no significant variation between the other gender/sexuality groups (figures 1 & 2). However, analysis of the CPP measurements shows that more feminine gay men and women produce breathier vowels than those who describe themselves as masculine, although this variation is not found to be significant (Figures 3 & 4).

(1) Data collection has been put on hold due to corona restrictions and of the 53 respondents so far, there are only four straight males, thus equal amounts in the other three groups have been analysed here.

(2) Script made available by James Kirby (https://github.com/kirbyj/praatsauce)
References


Differential object marking in two Italian communities abroad: a variationist perspective
Margherita Di Salvo

In Italian and Southern Italian dialects, differential object marking (DOM) occurs with highly definite and human objects while is not grammatical with objects which do not have these semantic features. This paper aims to describe the different object marking (DOM) in a language contact and variationist approach, focusing on the case of Italian and Italo-Romance varieties used as heritage languages in two different migrants setting, Bedford (UK) and Liège (Belgium).

In the first case Italo-Romance varieties are in contact with French and in the second one with English. In each case, however, Italo-romance varieties are in contact with a language with no DOM. DOM has been deeply investigated in Spanish, Hindi and Romanian as heritage language, mainly in an experimental perspective, while it has not received much attention in the case of Italian and Italo- Romance varieties abroad. The only previous corpus-based study’s findings for Italian in Toronto (Di Salvo and Nagy in press) show speakers’ sensitivity to the syntactic and semantic factors described in the theoretical literature, consistently across generations. No attrition was found and no one of the external factors investigated (age, generation, sex) were significant.

The corpus consists of:

- 10 1st generation speakers and 10 2nd generation speakers for Bedford Italian community;
- 10 1st generation speakers and 10 2nd generation speakers for Liège.

All speakers were interviewed in Italian and the analysis is based on a corpus of spontaneous speech.

The study adopts a variationist perspective that will let us to consider both the importance of internal factors such as definiteness and humanness of O, the kind of Verb, the presence or not of a left dislocation and of the external ones (gender, generation, ...). The findings show that, as in Italian in community in Toronto, only internal factors are significant, even across generations.
The Present Perfect is the verbal form in the Spanish verbal paradigm that shows most variation. This study reports on three data collections conducted in Alicante, Spain, that included the usage of Present Perfect (PP), in relation to the Simple Past form, in co-occurrence with determinate temporal reference. We analyzed the data of 28 respondents from Alicante at a university campus, a language school and a retirement home, and divided the participants into two age groups: younger speakers (18-35 years) and older speakers (45-90 years). In previous research, the Peninsular Spanish PP has empirically shown to be the default past perfective form in indeterminate contexts (Schwenter & Cacoullos, 2008). However, the current functions of the PP in determinate contexts, with temporal modification, are not yet completely established. The objective of this study is to focus on the proposed distinction between the presence of hodiernal, e.g. today, and prehodiernal, e.g. yesterday, temporal references, and to contribute to the body of experiments conducted in the speech variety of Alicante. In order to test the hypothesis that the PP, in Alicante, is more accepted and/or produced by younger speakers than older speakers, we collected two types of data: firstly, two oral narrative picture description tasks, and secondly an acceptability judgement task. The findings indicate that, for both groups, the Simple Past form is the default past tense in the hodiernal context of the fictional narrative task. However, both groups also produced the PP form. These findings point out to a different perspective on the stage of grammaticalization of the PP in Alicante than what has been presented in the literature.

Keywords: Peninsular Spanish, Present Perfect, Simple Past, Grammaticalization

Selected References


Explor(ing) age-grading: A dynamic model for testing linguistic malleability across the entire adult life-span
Lea Bauernfeind, Johanna Mechler, James Grama, Mirjam Eiswirth and Isabelle Buchstaller

The variationist enterprise relies on a number of assumptions regarding the trajectory of individuals across their life-span, including the adolescent spike, the middle-aged trough in response to marketplace pressures and a “tail” in older age (see Downes 1998, Chambers 1996, Buchstaller 2006). Analyses of panel data, repeated recordings of individual speakers, has provided some support for these assumptions (Wagner 2012, Sundgren et al. to appear, Beaman 2021, Mechler and Buchstaller 2019). However, data-sets so far only provide diachronically narrow snap-shots of individual life stages or rely on recordings that are very far apart. To date, thus, we lack panel corpora that would allow us to model speaker’s behaviour across the life-span as a whole. In this talk, we report on a novel dynamic data-set that allows us to put the assumptions underlying age-grading with respect to the behaviour of the individual across their life-span to the test.

Our corpus is based on two panel groups of speakers who are re-recorded across the crucial adult life-stages. For the younger speakers from the final year of university into emergent adulthood (Arnett 2000) and finally into more settled stages of their lives. For the older speakers from adulthood into early retirement and finally into old age. The current talk reports on the use of (ing), a classic stable variable (Hazen 2006) across these two data-sets. The analysis is based on a mixed effects regression analysis of circa 5,300 tokens of (ing), coded based on a complex set of intra- and extralinguistic factors (see Mechler and Buchstaller 2019).

While the findings in Figure 1 suggest that the older panel speakers are more malleable across their life-span than the younger group, our results support Mechler and Buchstaller’s (2019). We present findings that group means hide individual trajectories that can be explained by a complex set of determinants, including social trajectories as well as intralinguistic factors.
References


A growing number of sociolinguistic studies is relying on the microblogging platform Twitter to investigate (1) features which are statistically marginal in print (Bohmann 2016), (2) transcontinental distributions for which “regular” data collection is unfeasible (Haddican & Johnson 2012; Brown 2016), or (3) specific stylizations (the “Sassy Queen”, Ilbury 2020) enhanced by the larger toolbox of expressive possibilities on CMC. This paper reports on ethical, methodological and theoretical advances that extend the potential of Twitter for sociolinguistic study.

A major disadvantage of Twitter is the absence of a diachronic dimension in the data it provides. Non-paying customers can extract a maximum of 3200 tweets per query, with a time span of 7 days (the streaming endpoint of the Twitter API allows for large coverage, but extracts only a random sample of tweets starting from a given point in time). Alternative data-mining tools like Twint (Zacharias 2018) can bypass these restrictions but are expressly forbidden by Twitter Terms-of-Service. In autumn 2020, however, a new project obtained ethical approval to use Twint to compile parallel diachronic Dutch and UK Twitter corpora (2006-2021) to study rapid linguistic diffusion.

Here we discuss the ethics and construction of our Twitter corpora, and then demonstrate the benefits of the corpora with case studies from two Scots features (negative -nae, as in isnae/isn’t, and OOT/OUT as in hoose/house) and one Dutch morphosyntactic diffusion (subject-hun “them”). A crucial advantage of Twitter’s (ortho)graphic compensation for the absence of intonation and expression (Androutsopoulos 2011), is the fact that variables like expressive lengthening (soooo good) and capitalization (SO good) can be used as production proxies for the “non-posh” social meanings Stuart-Smith et al. (2013) found to be the correlates of almost all recent UK diffusions. The hash-tagged topic references also represent quantifiable parameters of the media influence hypothesized to co-determine change.

References


Stuart-Smith, Jane, Gwilym Pryce, Claire Timmins & Barrie Gunter 2013. Television can also be a factor in language change: evidence from an urban dialect. Language 89(3): 501-536.

How and why does language change, and how can we understand these changes relative to individual moments of language use in interaction? While sociolinguistics has made great strides describing *patterns* of language variation and change, *how* these changes come about in interaction remains a challenging question (Labov, 2001; Walkden, 2017; Weinreich et al., 1968).

The present paper investigates this process by exploring how the locally situated realisation of a variable relates to the speaker’s and interlocutor’s linguistic production and to variation and change across the speaker’s life span and at the community level. It focuses on moments of format tying — instances where speakers recycle some of the linguistic material their interlocutor used in the preceding utterance to start their own turn (Goodwin & Goodwin, 1987). This frames questions of language variation and change in the context of accommodation (Giles, 2016), especially in interaction (Gallois et al., 2016; Nilsson, 2015).

The analysis is based on a subset of data from the DFG-funded project “Tracing Language Variation and Change Across the Life Span”. It focuses on a panel sample of six speakers from the Newcastle area, who were re-recorded in dyadic interviews at two or three time points, from their university years into early and middle adulthood (ages 20, 25 and 30).

All interviews are fully transcribed and time-aligned, which allows us to select the variables for analysis based on the words used in the ~300 format ties (see example). I primarily focus on FACE, GOAT and (ing), which are currently being analysed within the larger project. Initial results suggest that speakers may deviate from their overall pattern of use of the variable to converge with or diverge from their interlocutor when format tying. These findings can help formulate new questions about the relationship between interaction and language variation and change.

References


Example of an instance of *format tying* (original and repetitions marked with arrows and printed in bold): Peter utters “making soup” at the end of a turn constructional unit (TCU), and when Anne takes the floor at the end of Peter’s next TCU she starts her turn by recycling Peter’s formulation, in fact repeating it twice.

Anne:       mmm I like baking-
Anne:       I like [baking a lot.
Peter:     ->      [yeah and *making* soup.
Peter:       we’ve done quite [a lot-
Anne:     ->     [making soup-
Anne:     ->      we do like *making* [soup.
Peter:         [ehm-
Anne:       [but] not that egg soup (.) [no:::
Peter:       [and]      [no there’s this recipe that we’ve seen once egg and semolina and cheese-
The aim of this study is to explore the ways in which non-linguists engage in accent meta-attitudinal discourse - i.e. how they talk about their attitudes toward accents. In examining language/accent attitudes, discourse-based studies (e.g. Hall-Lew & Stevens, 2012; Preston, 1994) have focused on non-linguists' meta-linguistic discourse - i.e. how they talk about language/accents - and specifically, on the topical, linguistic, rhetorical, interactional, and/or cognitive layers of it. Such studies tend to ask 'what can a non-linguistic tell us about variety x' and not 'what can a non-linguist tell us about their evaluations of variety x', the latter of which is the focus of this study.

To examine the meta-attitudinal discourse of non-linguists, ten native English-English university students were interviewed. The interviews were preceded by a quantitative experiment where the participants were asked to evaluate the recordings of six English-English accents on six semantic differential scales (the attitudinal part). During the interviews, the participants were re-exposed to the recordings of the first four trials, and after each recording, they were asked to talk about their scalar evaluations of it (the meta-attitudinal part). Due to the exploratory nature of the study, a primarily topic-oriented analysis was performed, focusing on the main themes emerging from the meta-attitudinal data. Within each topic, linguistic and rhetorical patterns were identified, too.

Results showed that the non-linguist interviewees discursively constructed various stimuli as influences on their accent ratings, ranging from collective accent attitudes to their own interpersonal relationships. The participants also tended to position themselves relative to those stimuli by aligning themselves with the stimuli's influence or by opposing it. As such, within the context of a carefully considered meta-attitudinal interview, the ways in which non-linguists perceive and discuss the formative influences on their accent attitudes can have implications for how accent attitudes in general are (perceived to be) formed. Therefore, meta-attitudinal discourse can play an integral role in the study of language ideology.

References


Perceiving Yorkshire Women’s voices: F0 and perceptions of sexuality and femininity  
Salina Cuddy

This talk will present findings from a perception survey investigating whether listeners perceive a “gay voice” for female speakers. While the idea of a male “gay voice” has been more frequently researched (see Rogers and Smyth, 2003; Levon, 2006; Maegaard and Pharao, 2016), there has been far less research that considers a female “gay voice”. This study seeks to fill this gap, as well as consider perceptions of a self-identified Northern, working-class female speaker more generally.

The data was collected through an online survey that presented the electronically manipulated voice of a native Yorkshire British English speaker. The stimuli were digitally altered to either increase or decrease the speaker’s average fundamental frequency, while keeping the speech rate constant relative to that of the original sample. F0 was chosen based on earlier research on lesbian speech (see Moonwomon-Baird, 1997; Waksler, 2001; Van Borsel, Vandaele and Corthals, 2013). Listeners were asked to respond to a series of sentences and make judgements about the speaker by rating traits on a 7-point Likert scale from “Strongly disagree” to “Strongly agree”. These traits included “friendly”, “intelligent”, “feminine”, “trustworthy”, “homosexual (i.e., lesbian)”, and “low pitch”.

This paper will address several factors of these ratings, first considering how likely participants were willing rate certain qualities and not others. There was an overall trend of participants rating “Neither agree nor disagree”, when asked if the stimulus sounded “homosexual (i.e., lesbian)”. This is juxtaposed with the willingness to rate all of the other presented qualities using a larger portion of the scale. Next, this paper will address how specific qualities were rated. Of the six qualities, five were significantly correlated with F0. Finally, there will be a consideration of which qualities were correlated with each other and what these correlations could imply about perceptions of femininity and sexuality.

References:


The speech patterns employed by lesbian and bisexual women (L/B) to express sexual orientation have been understudied as much of the sociophonetic research on the queer community has focused on the linguistic practices of gay men (Levon, 2007; Proescholdbell, 2006). This is, in part, due to the reduced visibility of L/B in male-dominated gay culture (Jones, 2012) and that listeners, regardless of sexuality, are often biased to assume a female speaker is straight (Muson and Babel, 2007), meaning differences may be difficult to detect. It has been suggested that the back-ness of the low back vowels (Pierrehumbert et al., 2004) may be a source of variation between L/B and heterosexual women. Additionally, aspects of masculine speech are often stereotypically attributed to L/B (Rendall et al., 2008) such as shorter mean vowel duration (Simpson, 2009). In this study I compare the speech of 6 L/B podcasters and 4 heterosexual female podcasters. Vowel formants and durations were collected from transcribed episodes of 5 podcasts: 3 podcasts with L/B speakers and 2 with heterosexual female speakers. Each podcast episode has two interlocuters and contains both scripted and unscripted speech.

This research endeavors to answer three questions: 1) do L/B women have backer low-back vowels than heterosexual women; 2) do L/B women use shorter vowel duration than heterosexual women, varying in line with stereotypically masculinized L/B speech; 3) does this vary between scripted and unscripted speech? I hypothesize that, due to the performative nature of podcasts as a form of social media, the L/B speakers differ from heterosexual women exhibiting backer low-back vowels and shorter vowel durations; I further hypothesize that these traits will be more pronounced in scripted speech because the podcasters will be more conscious of their own speech.

Sources Cited


Maintenance of diphthong TRAP amidst retreat from the Northern Cities Shift

Daniel Duncan

The Northern Cities Shift (NCS), previously found in the English of the Inland North of the United States,[1] is in retreat in many communities[2,3,4]. This retreat includes a change from a generally raised, fronted, and diphthongized TRAP vowel[1] to a system more widespread in white North American Englishes in which the vowel is raised and fronted in pre-nasal contexts, but lowered otherwise[2,3]. However, study of this reorganization has not typically considered whether the diphthongal nature of the vowel has been maintained, although [5] suggests that pre-oral TRAP is becoming monophthongal in Lansing, MI. This paper explores the status of the diphthong in Greater St. Louis (STL). It shows that unlike in Lansing, in STL the diphthong is being maintained in pre-oral contexts despite the previously attested reorganization of the TRAP system[6].

Data comes from 52 recordings of white, middle-class women from STL, born 1896-1995. Approximately 15 minutes of each recording was transcribed and force aligned in FAVE.[7] F1/F2 of TRAP tokens, excluding function words, were subsequently extracted in 10% intervals using a Praat script (n=3173). Diphthongization was assessed using the 20-80 Vector Length[8], calculated as the Euclidean distance between the 20% measurement and the 80% measurement.

Linear mixed effects regression (1) shows the diphthong to be present in the baseline environment of preceding coronal stops (β=278.7656 Hz). Vector Length is significantly (p<0.01) larger in pre-nasal and pre-labial contexts, and significantly smaller pre-dorsal. Diphthongization in pre-nasal contexts is increasing significantly in apparent time. However, a main effect of age is not statistically significant (p=0.2063).

Results therefore suggest that the diphthong is being maintained in pre-oral contexts. Maintenance of the diphthong in STL, but loss in Lansing,[5] shows that while retreat from the NCS may be generalized across communities in the US, how that retreat is implemented may vary by community.

Examples:

(1). A larger model was run, and then the step function in R was used to select a final model using a stepdown process.

Initial model: Vector Length ~ Manner of Following Consonant Articulation + Place of Following Consonant Articulation + Voicing of Following Consonant + Location in STL Speaker Grew Up + Speaker Age + Manner:Speaker Age + Manner of Articulation:Location + Place of Articulation:Speaker Age + Place of Articulation:Location + Voice:Speaker Age + Voicing:Location + (1|Speaker) + (1| Lexical Item)

Final model: Vector Length ~ Manner of Following Consonant Articulation + Place of Following Consonant Articulation + Speaker Age + Manner of Articulation:Speaker Age + (1|Speaker) + (1|Lexical Item)
References:


Ambiguous rhoticity in Lancashire and Glasgow: A perceptual comparison
Robert Lennon

Despite the many studies investigating the effect of unfamiliar accents and phonetic variants on speech processing (Adank et al. 2009; Maye et al. 2008), we know comparatively little about the perception of phonetically ambiguous variants in familiar accents. Rhoticity was historically lost across most of England (Wells 1982), but many speakers in Blackburn, Lancashire still pronounce /r/ in e.g. spar, court, often with a weakened/ambiguous variant. This research tests how native Blackburn listeners perceive rhoticity, discussing the results alongside previous work on ambiguous /r/ in Glasgow.

In an online 2AFC experiment (100 experimental trials +100 fillers), Blackburn listeners identified which word they heard from an onscreen pair (e.g. spa/spar, caught/court). One group (n=17) heard e.g. spar with weak-/r/ (produced by a native Blackburn male), and another (n=12) heard spar words as non-rhotic variants.

Reaction time analysis (Fig.1) shows – for listeners in the weak-/r/ condition – responses to spar words were faster than to spa words, with the opposite in the no-/r/ condition, suggesting that even weakly rhotic variants facilitate perception. However, accuracy was low: 56% in the weak-/r/ condition; 54% for no-/r/. This contrasts with Anon (XXXX), who previously found (in a similar 2AFC experiment) that native Glaswegians can discriminate Glaswegian word pairs with weak/ambiguous /r/ (e.g. hut/hurt) at around 90%. Informative measures including sensitivity and response bias will also be discussed.

This is an intriguing glimpse at the perceptual system in a community in England which remains at least partly rhotic. Perceptual differences between Lancashire and Glasgow listeners will inform our wider investigation regarding historical /r/-loss, raising questions
surrounding the reason for the change, and the status of /r/ in Scottish vs. English perceptual systems, given the opposing status of rhoticity in prestige varieties in each country.

References


Anon (XXXX)

“Would the robot understand my accent?” An Exploration of Perceptions of Human-Robot Interaction in Scotland
Mary Ellen Foster and Rhiannon Fyfe

The privileging of certain accents of English has been demonstrated in many sociolinguistic studies across several areas of human-human interaction. As the use of conversational artificial intelligences, from digital agents to humanoid robot interfaces, become more prevalent in our society, the sociolinguistic factors of Human-Artificial Agent Interaction are becoming relevant to sociolinguistic theory, including how problems in communication are impacted by non-standard dialects and attitudinal biases.

This poster aims to identify how intersecting sociolinguistic factors such as age, gender, and social class affect expectations of Human-Robot Interaction. The study is part of a longer-term project intended to examine the sociolinguistics of Human-Robot Interaction in a real-world scenario. During the main in-person data collection phase, members of the public in Glasgow will be observed while interacting with an embodied AI (Fig.1) located in a popular museum, and asked about their experiences. Glasgow was selected given its well-documented sociolinguistic diversity and stigmatized local dialect. The study presented here provides some context for the in-person investigation, and examines the expectations that the Scottish public have of interacting with a conversational robot in a public space.

An online survey was sent out through social media platforms in order to recruit a wide range of Scottish participants; to date, there have been 151 respondents. The survey asks about participants’ previous experiences with Artificial Agent/Robot interactions, their expectations of interacting with robots, and what might affect the quality of those interactions. It then asks for core demographic information (Tables 1, 2 & 3).

Preliminary thematic analysis of the qualitative data using NVivo reveals several recurrent themes. Concerns about the robot’s ability to understand the participants’ accent is a prevalent theme, especially in respondents identifying as working-class, indicating that sociolinguistic factors, especially relating to non-standard dialects, are likely to affect Human Robot Interaction.

References
1 Coupland, N. and H. Bishop. 2007. Ideologised values for British accents. Journal of Sociolinguistics 11: 74-93


3 Foster, M. E. 2019. Face-to-face conversation: why embodiment matters for conversational user interfaces Proceedings of the 1st International Conference on Conversational User Interfaces


10 “Results: overview” *Accent Bias Britain* https://accentbiasbritain.org/results-overview/
## Table 1

<table>
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<th>Participant Age Range</th>
<th>No. of Participants</th>
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## Table 2

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<td>Working Class</td>
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</tr>
<tr>
<td>Middle Class</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
<tr>
<td>I do not believe social class matters</td>
<td>36</td>
</tr>
<tr>
<td>Prefer Not To Say</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>151</strong></td>
</tr>
</tbody>
</table>

## Table 3

<table>
<thead>
<tr>
<th>Gender Identity</th>
<th>No. of Participants</th>
</tr>
</thead>
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<tr>
<td>Female</td>
<td>99</td>
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<tr>
<td>Male</td>
<td>51</td>
</tr>
<tr>
<td>Prefer not to say</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>151</strong></td>
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</tbody>
</table>
A Game of Phones: An Investigation into Yorkshire Accent Imitation in the Television Series, Game of Thrones
Lucy Jackson

This paper examines non-native speakers’ ability to imitate a Yorkshire English accent in the television series, Game of Thrones (GOT). Accent imitation is a frequent method to adjust one’s perceived identity or societal distance between the speaker and interlocutor (Giles, 1975; Labov, 1994). The indexicality of speech features to communicate societal information of an individual (Eckert, 2019) places regional accents as a salient performative tool in entertainment to cultivate character information to an audience (Anderson, 2016).

This study analyses three Yorkshire accent performances in the GOT series, comparing the imitated attempts of native SSBE speaker (Harrington) and Glaswegian (Madden) to the native Yorkshire actor, Bean. The focus of the acoustic analysis was the STRUT-FOOT merger and monophthongal GOAT and FACE vowels, as realised by Bean. An equal distribution of 78 Yorkshire feature tokens realised by the three actors was analysed in Praat (2010), with the F1 and F2 values of the merger extracted from the stable mid-point. To analyse the degree of movement across the GOAT and FACE vowels, the 25%, 50% and 75% trajectory points were extracted.

The lay-listener experiment included a 50:50 ratio of native and non-native Yorkshire speakers who were previously screened to have minimal to no awareness of the GOT series. Listeners were assessed on their perceptual ratings of the Yorkshire performances, sensitivity to regional varieties and ability to identify imitated accents (Knooihuizen, 2016). Questioning included 6-point likert scales to encourage listeners to make active judgements, avoiding direct reference to accent imitation to avoid priming effects.

The results suggest that the non-native actors could not successfully merge their STRUT and FOOT vowels. Diphthongal qualities were also present in their GOAT and FACE productions, contrasting to Bean’s native Yorkshire speech. Listeners rated the imitated performances as below average and displayed an 83% success rate in detecting the imitated accents, utilising the specified Yorkshire features in their judgements. The use of regional accents as a performative tool in entertainment provides insight into the present construals of specific speech communities, and our sensitivity to such phonetic parameters and their social indexicality.
References


Teenage Language in Dublin: standardising or maintaining local variants?
Stephen Lucek

In considerations of a Standard Irish English, questions arise about the validity of postcolonial contexts of the standardisation processes itself (see Kirk 2011; Milroy & Milroy 1999). Hickey (2005) certainly makes an attempt to describe a stabilised tiered system of local and nonlocal varieties of English in Dublin, while Lonergan (2016) suggests a more nuanced view of Dublin English as perceptually divided into 4 areas, principally arranged by geography, while other recent work has shown further salience between areas in the West (O’Dwyer 2020) and the South (Schulte 2020) of the city. These processes are made more difficult to see when we factor in the variable nature of teenage language use (Eckert 1997: 52) that takes on many influences over time (Eckert 2008; Nortier & Svendsen (eds) 2015). The current study examines a dataset of focus group interviews with 54 teenagers from the Dublin area collected between 2019–2020. What we see here are gendered language attitudes and language perceptions that are somewhat unsurprising, and others that point towards a greater level of awareness of linguistic variation. I also present a subset of these data that relate to media representations of varieties of Dublin English and how these are interpreted and understood by the teenagers. While choice of linguistic influences might be beyond our control as linguists, the representation of varieties of Dublin English warrants closer investigation.

References


Negative Concord (NC) in English is often described as socially evaluated. This description has not yet been empirically tested in perception studies. This study tests evaluations of NC along three dimensions of attribute: superiority, attractiveness, and dynamism (Zahn & Hopper 1985). It is expected that NC will be strongly evaluated in all three dimensions. NC is a symbol of ‘incorrect’ speech (Nevalainen 2006, Anderwald 2017), and its usage is stratified by social class (e.g., Wolfram 1969, Feagin 1979). Additionally, it is used stylistically among adolescents to convey a rebellious, anti-school or delinquent identity (Cheshire 1982, Eckert 2000, Moore 2020).

In an online survey, participants from 5 different dialect groups in the US and UK (n=25) read short “excerpts from spoken interviews” (n=36) and selected as few or as many adjectives to describe the speaker as appropriate. Adjectives were taken from the superiority dimension (intelligent-unintelligent, educated-uneducated, upper class-lower class), attractiveness dimension (friendly-unfriendly, sounds like me-doesn’t sound like me), and dynamism dimension (rebellious-obedient).

Logistic mixed effect regressions were used to determine the effect of dialect group and syntactic context on the likelihood of selecting a particular adjective. Across all dialect groups, negative attributes in the superiority dimension (uneducated, lower class) were significantly connected to use of NC. There were no main effects of dialect group, and perceived attributes in the attractiveness and dynamism dimensions were not influenced by NC usage to the same degree as the superiority dimension.

Lack of dialect group effects shows that there is global evaluation of NC on superiority traits. However, evaluation of attractiveness and dynamism traits are not shared cross-dialectally. Although NC usage is used to perform delinquency and rebelliousness in different adolescent groups across time and space, these indexical links seem to need a specific context to index these specific social meanings.
This paper provides insights into non-linguists’ awareness of geolinguistic variation in South East England and the sociodemographic perceptual correlates. Based on 10-second, lexically identical speech stimuli extracted from passage readings, 191 participants (18-33yrs) circled on an interactive map the area(s) they thought speakers were from. 99 different speakers were heard (52=female, 47=male; 78 = white British, 21 = ethnic minority background). Each participant heard between 27 and 29 speakers in a randomised order.

All speakers and participants were aged 18-33 years and were from the following places: Essex, Surrey, Hertfordshire, Kent, Bedfordshire, Buckinghamshire, Berkshire, Hampshire, Suffolk, West Sussex, Hampshire, or the following areas of London: North, North East, East, South East, South, South West, West, North West.

A series of binomial generalised linear models found that accuracy at the task is significantly greater if the speaker is: (1) from London or Essex; (2) attended comprehensive schooling; (3) from an ethnic minority background; (4) identifies with their local area. A geographic proximity effect was also found which spanned the region; participants performed significantly better for speakers from nearby to them.

Participants tended to consider white, working-class speakers to be from East London and/or Essex; white, middle-class speakers to be from the western home counties, particularly Hertfordshire and Surrey; and ethnic minority speakers, regardless of class, to be from London. This picture of variation translates only loosely to accuracy. Though significantly greater than chance (calculated by a series of computer models), participants averaged only 12.15% accuracy. More than geolinguistic variation, participants are attuned to linguistic variation by social class and ethnicity which, consciously or not, they use as a basis to geographically locate the speaker.

Results bridge the gap between what we know about language production and what we know about how language production is perceived and categorised in South East England.
This paper investigates the close back vowels /u(:)/ and /ʊ/ in Cardiff Welsh and aims to examine the extent to which social and linguistic factors influence variation. In an analysis of word-list data, Mayr et al. (2017) found little variation in the production of monophthongs in Welsh among male speakers in south-west Wales. The present study builds on this work by applying a variationist framework to the study of the close back vowels and by focussing on the social structures within the community (Morris 2017). The research was undertaken in Cardiff as it offers a unique sociolinguistic context due to language revitalization efforts and the migration of L1 Welsh-speakers from traditional Welsh-speaking areas. Specifically, I aim to answer the following research questions:

1. To what extent do linguistic and social factors affect the Cardiff close back vowels?
2. Do local peer group networks influence variation?
3. To what extent do the results shed light on the effects of language contact in revitalization contexts?

The data were collected via sociolinguistic interview and wordlist from 24 14-15 year-old Welsh speakers in a Welsh-medium secondary school. The sample was equally stratified by home language and gender. The students were also observed through ethnographic methods. The data were analysed acoustically with PRAAT (Boersma & Weenink 2008) using a script (Stanley 2017) to measure F1 and F2 quality. Tokens \( n=2263 \) were normalised using the Watt & Fabricius (2002) method. The data were analysed statistically using mixed-effects models in Rbrul (Johnson 2009).

Preceding phonetic environment was significant for the F2 of the /u(:)/ vowel, showing parallels with previous studies on the English GOOSE vowel (e.g. Holmes-Elliott 2015). Variation was influenced by stylistic factors for both vowels, but this feature does not appear to be an indicator of peer-group membership within this community. I discuss the results with reference to previous work on Welsh and Cardiff English as well as other revitalisation contexts (e.g. Nance 2015), and suggest that Cardiff Welsh speakers could be reproducing close back vowel patterns from English in Welsh through language contact.

References:

BOERSMA, P. & WEENINK, D. 2008. Praat, a system for doing phonetics by computer (Version 5.0. 34)[Computer software].


MAYR, R., MORRIS, J., MENNEN, I. & WILLIAMS, D. 2017. Disentangling the effects of long-


Primed to discriminate: Linguistic profiling against Uyghurs in the job market
Ruoan Wang and Matthew Hunt

Motivation
This experiment is a first attempt at examining linguistic profiling towards Uyghurs in mainland China. This is particularly pertinent to current geopolitics, where the Chinese Communist Party (CCP) has systematically oppressed the Uyghur culture and people since 2015 (Ruser, 2020) with the goal of “cultural unification” (Grose, 2020). Negative portrayals form a major part of this oppression; consequently, many Uyghurs have fled to their home region, Xinjiang. While there have been reports of discrimination against diaspora Uyghurs in the housing and job markets (Beydulla, 2019), the effect of these anti-Uyghur sentiments remains un-investigated with respect to language. This project fills this gap by focusing on linguistic profiling in the job market.

Experiment
The study was an online matched-guise survey (Lambert et al., 1960) distributed to 227 native Standard Mandarin Chinese participants. Participants listened to two audio clips, recorded by an L1 and L2 Mandarin speaker respectively. The task had three conditions, which differed in the names provided for candidates. Participants evaluated “Speaker X” vs. “Speaker Y” in Condition 1 (unnamed condition), “Yimei Wang” vs. “Soyeon Kim” in Condition 2 (Chinese/Korean condition), or “Yimei Wang” vs. “Aynur Dilmurat” in Condition 3 (Chinese/Uyghur condition). Participants evaluated the candidates on 6 semantic differential scales.

Results and Discussion
Results suggest that participants showed a preference for the L2 accent with a Uyghur name on the scales confident and hard-working (both p < 0.01, see Figures 1 & 2). On the intelligent scale, male participants also significantly favored the L2 accent with the Uyghur name (p < 0.01, see Figure 3). We entertain two possible interpretations of these results. The first is that native Mandarin speakers hold a bias in favor of Uyghurs. Alternatively, the predicted dispreference for the ‘Uyghur’ speaker may have reduced expectations of their ability. Furthermore, a lack of significant effects for the scales accented and articulate suggest that the experimental conditions did not affect how the accent itself was actually processed.

References


Figure 1: Confident ~ Accent * Condition

Figure 2: Hard-working ~ Accent * Condition

Figure 3: Intelligent ~ Accent * Condition * Participant Gender
The retroflex fricative /ʂ/ is a socially salient variable in Taiwan Mandarin. It is undergoing a process of de-retroflexion, in the direction of its postalveolar counterpart /s/. While sociolinguists have researched this variable extensively, no sociolinguistics research on this variable has been done for oral deaf speakers.

Specifically, this study looks at the topic-based variation of /ʂ/. Two passages were prepared for the participants to read aloud. The first passage is on Chinese royal history, in which the participants are not interested. The second passage is on an allegory of the relationship between hearing people and signing deaf people.

Previous research on topic-based variation in non-interactional reading tasks have investigated topics which are stereotypically associated with particular variants of a variable. Analyses of topic effects were done by invoking an exemplar account that different topics are cognitively linked with different variants, so speakers automatically shift to that variant when reading aloud its associated topic. Therefore, it has been questioned how stance-taking, or an identity-based account, can contribute to our understanding of topic effects in read speech.

This study instead demonstrates how a topic, like deaf people, without an associated variant, can still elicit a topic effect from speakers. This topic-based variation emerges because the participants embody their stance-taking towards the topic by invoking variants of this socially salient variable. We observed that participants who found the story of signing deaf people unrelatable for them take a “distant” stance by shifting to the variant which is indexed to formal speech in their stylistic repertoire. In contrast, for participants who found the story relatable to their personal experiences take an “intimate” stance by shifting to the variant which they use in spontaneous speech.
In this study we attempt to assess the existence of biases arising from the geographical locations of research institutions, and their effect on empirical study in the field of language variation and change (LVC). A consequence of such biases is that the literature on variation and change tends to be clustered around particular varieties (Trudgill and Watts, 2002). Bias like this can lead to gaps in the data and hence casts doubt on broader conclusions drawn about the principles of LVC. This paper sets out a novel methodology, aiming to understand some of the possible biases present in our research, beginning with varieties of English spoken in England.

Our research question is: which of the following factors affect a variety’s likelihood of being studied?

- geographical distance from a university with a Linguistics department
- presence of a locally focussed corpus
- association with higher or lower social/income status
- whether the area it is associated with is suburban, metropolitan, or rural

To answer this question, systematic literature searches (Lefebvre et al., 2019) are used to estimate the frequencies of studies on different varieties of English (dependent variable). Independent variables are measured using systematic online searches and online geographical measurements (more methods and analysis details can be found at: https://osf.io/bp3es ). Studies returned from searches are coded for date, content, and methods, and only studies published between 1982 (Wells, 1982) and 2019, assessing sociophonetic change in apparent time, are included, so that we are assessing bias in studies that use similar methods and theoretical approaches.

This study will allow researchers in LVC to assess the existence of bias in current datasets, and will aid the direction of future research efforts towards a better understanding of the principles of language variation and change.

References


Sociolinguistic work on variable ING (thinking~thinkin’) in conversational speech shows that a speaker is likely to reuse a variant they used recently[1]. This persistence suggests that both -ing and -in’ are mentally represented and once activated, can bias the choice of a subsequent variant. This production mechanism is akin to priming in perception, where a linguistic unit is recognised more easily if it has recently been encountered[2]. I use experimental priming to test this, and ask whether ING variants prime themselves and each other in word recognition.

67 participants completed a continuous auditory lexical decision experiment. Critical stimuli consisted of disyllabic progressive verb pairs, controlled for frequency, stem-final consonant, and homophony. The critical conditions (Table1) asked whether working and workin’ prime thinking and thinkin’ by comparing their response times (RTs) to a baseline condition (e.g. working-thinking versus jiggle-thinking). Participants heard 60 critical prime-target pairs, 198 filler pairs, and responded whether they heard a real word of spoken American English or a nonword. RTs, measured from sound-file onset to response, were log-transformed and analysed using LMEMs.

The results (Figure1, Table2) show significant priming for all critical conditions. The finding that working primes thinking and workin’ primes thinkin’ suggests that -ing and -in’ are both mentally represented, and aligns with persistence patterns[1]. There is an asymmetry in how variants cross-prime each other: -ing and -in’ primes yield equal facilitation for -ing targets. However, for -in’ targets, same-variant primes facilitate better than cross-variant ones. The representations of -ing and -in’ are therefore intricately related. This study lays the groundwork for a large set of experiments that elucidates the mental representations of ING.

It explores the processing asymmetry further, dives into the contrast between the mental representations of progressive and monomorphemic ING, and considers the impact of speaker characteristics.

References:


Table 1. Experimental conditions
Figure 1. Results: Priming effects in ms, determined by subtracting RTs to the target in -ing and -in’ prime conditions from the RT to the target in the control condition (i.e. working/workin’-thinking compared to jiggle-thinking and working/workin’-thinkin’ compared to jiggle-thinkin’).

Table 2. Raw RTs per condition, priming effects in ms, and results from linear mixed effects regression model on the log-transformed RTs.

| Prime | Target  | Raw reaction time (SD) in ms | Priming effect in ms | PE significance | Cross-condition comparisons  \\
<table>
<thead>
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<tbody>
<tr>
<td>jiggle thinking</td>
<td>thinking</td>
<td>992 (116)</td>
<td>44 ms</td>
<td>$\beta = -0.05, p &lt; 0.001$</td>
<td>$\beta = 0.008, p = 0.55$</td>
</tr>
<tr>
<td></td>
<td>thinkin’</td>
<td>948 (111)</td>
<td>36 ms</td>
<td>$\beta = -0.04, p &lt; 0.001$</td>
<td></td>
</tr>
<tr>
<td>jiggle thinking</td>
<td>thinkin’</td>
<td>1022 (121)</td>
<td>51 ms</td>
<td>$\beta = -0.05, p &lt; 0.001$</td>
<td>$\beta = -0.03, p &lt; 0.001$</td>
</tr>
<tr>
<td></td>
<td>thinkin’</td>
<td>971 (114)</td>
<td>84 ms</td>
<td>$\beta = -0.09, p &lt; 0.001$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>thinkin’</td>
<td>938 (111)</td>
<td></td>
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</table>

Table 2. Raw RTs per condition, priming effects in ms, and results from linear mixed effects regression model on the log-transformed RTs.
Individual Variation in Backward Transfer and the Role of Psycholinguistic Factors
Divyanshi Shaktawat

The languages in a bilingual mind are known to interact and interfere with each other which may lead to a transfer of features from one language to the other [1,2]. The transfer from the second language to the native language is called Backward Transfer. Furthermore, there may be variability in the transfer exhibited by the bilingual speaker in their L1. It may be attributed to individual variation due to various factors.

The objective of this study is two-fold: (1) to investigate phonological backward transfer from Glaswegian English (GE) to the native language (Hindi) and dialect (Indian English) of bilingual immigrant Indians in Glasgow or ‘Glaswasians’ [3] who have lived in Glasgow for at least three years, and (2) to examine the individual variation exhibited in this transfer due to two psycholinguistic factors— inhibitory skills and cognitive flexibility.

A mixed methods approach has been used which incorporated: questionnaire, speech production task to collect high quality speech samples, and tasks to collect reaction-time data on inhibitory skills and cognitive flexibility. Three groups of speakers with equal number of male and female speakers will be recruited— the experimental group ‘Glaswasians’ and two control groups— monolingual native speakers of GE and Hindi-Indian English bilingual Indians residing in India. The speech of Glaswasians will be compared with the two control groups to determine the direction and extent of transfer. This study predicts that poor inhibitory skills and cognitive flexibility will lead to more transfer from GE on the native language and dialect. In the speech production task, four sounds-categories—/t/, /b, d, g/, /l/ and /u/ will be studied. The data is being collected online using Gorilla Experiment Builder and LaBB-CAT, and will be analysed in PRAAT and R. The results of this study will contribute to the understanding of bilingual language processing and language contact in immigrants.

REFERENCES


10th of September 2021

Day 3 Talks
It is natural for conversation partners to sound alike over time. An extensive literature on this phenomenon, i.e. phonetic imitation, has revealed a myriad of modulating factors, including linguistic distance between the talkers, individual differences in the perceptual system, attitude toward the interlocutor’s accent (see Pardo et al., 2017 for a review; see also Babel, 2012; Drager & Kirtley, 2016).

To our best knowledge, the participants of most existing imitation studies had no preexisting interpersonal relationships. To extend this line of research, we examine the patterns of phonetic imitation across multiple generations within a family when the language is undergoing a sound change (Babel et al., 2013; Lin et al., 2019). The language under investigation is the Zhangqiu dialect spoken in northern China, which is undergoing a loss of word-initial [ŋ], presumably due to contact with Standard Mandarin. We recruited 18 Zhangqiu speakers (11F), evenly distributed across three generations (grandparents (~60s), parents (~40s), children (~20s)) from three families, to participate in a map task where each speaker would collaborate with another family member to locate places on a map. The pairs exemplify all possible combinations of the three generations, with each speaker appearing in one pair only. Ten critical words with initial [ŋ] were embedded in the place names, which were also read in isolation before and after the map task.

Preliminary analysis (see Figure 1) shows that (1) grandparents sounded much more conservative when conversing with the younger generations, and accommodated toward grandchildren but not middle-aged adult children; (2) parents were the most conservative when conversing with children, and accommodated toward grandparents but not children; (3) children were the most conservative when conversing with parents, and accommodated toward grandparents but not parents. We discuss the results in terms of short- and long-term accommodation and cross-generational dynamics within the family.
References


Predictors of sociolinguistic variation in later life

Heike Pichler

Despite repeated calls for action (e.g. Coupland et al. 1991; Bowie 2011), older adults have rarely been the central focus of variationist research. Our understanding of the social conditioning of language variation in later life is therefore limited (Pichler et al. 2018). This paper examines the use of discourse marker you know, as in (1)-(3), by older residents of Tyneside, north-east England. It demonstrates that older adults’ use of you know is systematically affected by variability in their social participation, and explores the role of discourse function to account for this pattern.

(1) You know, in them days, if you didn’t go to church, you got wrong.
(2) They were two, you know, erm spinster sisters.
(3) I take pride in my appearance, you know.

The investigation is based on some 2500 tokens of you know extracted from sociolinguistic interviews collected in 2019-2020 from 48 Tynesiders aged 70+. Quantifiable questionnaires were administered to measure the size, quality and types of interviewees’ social networks. Quantitative analysis shows that, across sentence positions, older adults with large and diverse social networks use you know more than twice as frequently as older adults who are socially isolated. Qualitative analysis suggests that socially connected older adults’ higher frequency of use of you know reflects their heightened sensitivity to the interpersonal dimensions of social interaction, specifically the establishment of common ground between participants (see Schiffrin 1987). The results demonstrate the value of analysing later life “in terms of its own social practices, meanings and experiences” (Eckert 1997: 167), and call for more studies that examine predictors of sociolinguistic variation in later life.

References


Lifespan change and stability across the linguistic architecture: a Swabian case study
Karen Beaman

Ever more studies show that adult vernaculars are malleable, influenced by shifting cultural contexts, prominent social, psychological or cognitive adjustments, exceptional historical incidents, and decisive life-changing events (Beaman and Buchstaller 2021; Wagner and Buchstaller 2018). But do all variables change in the same way and under the same conditions for all speakers? Are there notable deviations at different levels of the linguistic architecture?

To explore these questions, this research targets two speech communities of Swabian, an upper German dialect belonging to the Alemannic family. The real-time panel study comprises 20 native Swabian speakers first recorded in 1982 and re-recorded 35-years later in 2017. The hypothesis of this study claims that greater coherence is found with phonological variables than with morphosyntactic ones. This may also be attributed to the expectation that morphosyntactic variables are more salient (and hence more stigmatized), making them more susceptible to change, while phonological variables are more frequent (and hence more entrenched), making them less vulnerable to change. To explore these claims, this study follows Buchstaller, Krause- Lerche, and Mechler (2021) in analyzing three common sociolinguistic heuristics – inventory change, frequency change, and constraint system change – in 20 variables across four levels of the linguistic architecture – phonology, morphology, syntax, and lexicon (see Figure 1).

The results show that, while lifespan change largely follows community change, there are important individual patterns that diverge from the norm (see Figure 2): some speakers change more quickly, some more slowly, some not at all, and some in reverse of the change (Beaman 2020; Sankoff 2006). Overall, the metrics from the three sociolinguistic heuristics concur, although they signal crucial deviations for individual variables and specific speakers at specific points in time – variances which can be explained with reference to immense societal change, pivotal personal life events, and linguistic marketplace effects (Bourdieu and Boltanski 1975).
<table>
<thead>
<tr>
<th>Speaker</th>
<th>Community</th>
<th>Year</th>
<th>Variant</th>
<th>Standardization</th>
<th>Changing</th>
<th>Probability</th>
<th>Rec. Year</th>
<th>Word Freq</th>
<th>Community</th>
<th>SOI</th>
<th>Education</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
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<td>Rupert</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>81.9%</td>
<td>n.s.</td>
<td>0.880</td>
<td>n.s.</td>
<td>▲ ***</td>
<td>n.s.</td>
<td>▲ ***</td>
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<tr>
<td>Angela</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Nascent</td>
<td>Incipient</td>
<td>85.8%</td>
<td>n.s.</td>
<td>0.827</td>
<td>n.s.</td>
<td>n.s.</td>
<td>▲ ***</td>
<td>▼ ***</td>
</tr>
<tr>
<td>Herbert</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Nascent</td>
<td>Incipient</td>
<td>86.4%</td>
<td>n.s.</td>
<td>0.708</td>
<td>n.s.</td>
<td>▲ ***</td>
<td>n.s.</td>
<td>▲ ***</td>
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<td>Elke</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>84.0%</td>
<td>n.s.</td>
<td>0.888</td>
<td>n.s.</td>
<td>▼ *</td>
<td>n.s.</td>
<td>▲ ***</td>
</tr>
<tr>
<td>Louise</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>79.3%</td>
<td>n.s.</td>
<td>0.836</td>
<td>n.s.</td>
<td>▲ *</td>
<td>n.s.</td>
<td>▲ ***</td>
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<td>Markus</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Nascent</td>
<td>Incipient</td>
<td>92.1%</td>
<td>▼ ***</td>
<td>0.847</td>
<td>▼ ***</td>
<td>▲ *</td>
<td>n.s.</td>
<td>▲ ***</td>
</tr>
<tr>
<td>Alfrid</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>83.1%</td>
<td>▼ *</td>
<td>0.838</td>
<td>▼ *</td>
<td>n.s.</td>
<td>n.s.</td>
<td>▲ ***</td>
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<td>Siegfried</td>
<td>Gmünd</td>
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<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>79.4%</td>
<td>n.s.</td>
<td>0.774</td>
<td>n.s.</td>
<td>▼ *</td>
<td>n.s.</td>
<td>▲ ***</td>
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<td>1982</td>
<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>84.9%</td>
<td>n.s.</td>
<td>0.836</td>
<td>n.s.</td>
<td>n.s.</td>
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<td>▼ ***</td>
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<tr>
<td>Theo</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Incipient</td>
<td>Stable</td>
<td>82.8%</td>
<td>▼ ***</td>
<td>0.842</td>
<td>▼ ***</td>
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<td>Bardine</td>
<td>Gmünd</td>
<td>1982</td>
<td>NO</td>
<td>Nascent</td>
<td>Emerging</td>
<td>86.6%</td>
<td>▼ **</td>
<td>0.867</td>
<td>▼ **</td>
<td>n.s.</td>
<td>n.s.</td>
<td>▲ ***</td>
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<td>Arneliese</td>
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<td>1982</td>
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<td>79.4%</td>
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<td>Jurgen</td>
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<td>0.826</td>
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<td>n.s.</td>
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Figure 1. (-st) Coda Palatalisation – Schwäbisch Gmünd
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<thead>
<tr>
<th>Linguistic Variables</th>
<th>Variable Characteristics</th>
<th>A. Inventory Change</th>
<th>B. Frequency Change</th>
<th>C. Constraint System Change</th>
<th>Heuristic Summary</th>
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<td>AI51 – MHG /e/ Diphthong [æz ~ ø]</td>
<td>SWG</td>
<td>low</td>
<td>low</td>
<td>7359</td>
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<td>high</td>
<td>7611</td>
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<td>ANN – Nasal ‘a’ before ’n’ [ã ~ an]</td>
<td>SWG</td>
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<td>FRV1 – Unrounded Front Vowel [e~ ø]</td>
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<td>low</td>
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<td>FRV3 – Unrounded Front Vowel [a ~ y]</td>
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<td>low</td>
<td>3253</td>
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<td>LEO – Lower Long Vowel [e~ ø]</td>
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<td>3616</td>
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<td>SFV – Stop-Fricative Variation [ט~ ש]</td>
<td>REG</td>
<td>low</td>
<td>low</td>
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<td>STP – Palatal Coda –st[uesta]</td>
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<td>EDP – Plural Verb Inflection: -ed ~ -en</td>
<td>SWG</td>
<td>high</td>
<td>low</td>
<td>3189</td>
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<td>PVB – Periphrastic Subj: dåld ~ würde</td>
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<td>low</td>
<td>low</td>
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<td>DAS – Definite Article: des ~ das</td>
<td>REG</td>
<td>high</td>
<td>low</td>
<td>5454</td>
<td>•</td>
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<tr>
<td>IRV1 – Irregular Verb: gange ~ gehen</td>
<td>SWG</td>
<td>high</td>
<td>high</td>
<td>506</td>
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<td>IRV2 – Irregular Verb: stande ~ stehen</td>
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<td>high</td>
<td>high</td>
<td>317</td>
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<td>IRV3 – Irregular Verb: hen ~ haben</td>
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<td>low</td>
<td>low</td>
<td>2927</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>NEG – Negative Marker: ned ~ nich(t)</td>
<td>REG</td>
<td>high</td>
<td>low</td>
<td>3256</td>
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<td>•</td>
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<td>Syntax:</td>
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<tr>
<td>REL – Relative Clause Marker: wo ~ dxx</td>
<td>REG</td>
<td>high</td>
<td>high</td>
<td>1575</td>
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<td>Summary:</td>
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<td></td>
<td>22</td>
<td>45% 68% 32% 27% 59% 0% 55% 36% 86% 73% 41%</td>
</tr>
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</table>

Figure 2. Summary of Variables across the Linguistic Architecture.
References


Variation in the Edinburgh KIT vowel
Lauren Hall-Lew, Jessica Goebel, Nina Markl, Claire Cowie, Catherine Lai, Stephen McNulty and Zuzana Elliott

The canonical examples of stable English variation are more often consonantal than vocalic (e.g., -ing; CCR). Drawing on a class-stratified speaker sample from Edinburgh, Scotland, whose years-of-birth span nearly 100 years, we show that variation in the height of KIT (Wells 1982) remains stable and class stratified across time. This contrasts to Eremeeva’s (2002) findings for Glasgow, but supports Speital & Johnston’s (1983) findings for Edinburgh. There is also an interesting age-grading pattern.


Tokens of KIT in the Esling Corpus were hand-annotated; formants and durations were hand-measured. Tokens of KIT in the Lothian Diary Project were generated through automatic phone alignment implemented with the Montreal Forced Aligner (McAuliffe et al 2017); formants and durations were automatically extracted using Praat (Boersma & Weenink, 2021). Tokens have primary stress and do not precede /l/ or /r/.

The results indicate a robust correlation between speaker social class and KIT F1, with working class men producing a more open vowel than middle class men. Log-transformed vowel duration is the only other factor retained in the best-fit model; phonological environment, age, and year of birth are non-significant predictors.

Middle class men vary little with respect to age, while working class men show a quadratic relationship to age: those of working age appear to have a more open KIT vowel than their younger and older counterparts. This suggests an age-graded pattern motivated not by working-age conformity to the linguistic market (see Wagner 2012) but by increased alignment with class norms during the working years.

Bibliography


**Figure 1:** KIT F1 from Edinburgh men collected in 1975 and 2020, by age and class
Tracing vowel change across the life-span: A three-wave panel analysis of FACE and GOAT
James Grama, Isabelle Buchstaller, Lea Bauernfeind and Carina Ahrens

The canonical examples of stable English variation are more often consonantal than vocalic (e.g., -ing; CCR). Drawing on a class-stratified speaker sample from Edinburgh, Scotland, whose years-of-birth span nearly 100 years, we show that variation in the height of KIT (Wells 1982) remains stable and class stratified across time. This contrasts to Eremeeva’s (2002) findings for Glasgow, but supports Speitel & Johnston’s (1983) findings for Edinburgh. There is also an interesting age-grading pattern.


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Bibliography


Figure 1: KIT F1 from Edinburgh men collected in 1975 and 2020, by age and class
Layers of Variation in Scottish Gaelic Genitive Mutation – Is the System Changing?
Beth Cole

Case inflection in Scottish Gaelic (SG) is marked by a combination of word-initial lenition or nasalisation and word-final palatalisation of the radical nominal form, constrained by nominal gender and number, and initial consonant quality. Variation in mutation in genitive environments in SG has been found in fluent speakers in communities undergoing language shift (Dorian 1977, 1981). Here I present careful and casual speech data gathered, through an elicitation task and a recorded conversation, from native speakers in Uist (an island group in the Outer Hebrides). My data reveal layers of variation in nominal mutation, constrained by both speech style and syntactic environment, which cannot adequately be explained with reference to language shift alone.

Nominal mutation consistent with the genitive case is expected in three syntactic environments in SG: possessive constructions, PPs with genitive-triggering prepositions, and direct objects in progressive constructions (figure 1). My analysis revealed an unusual inverse pattern between the two speech styles with speakers showing greater variability in progressive constructions in casual speech, but greater variability in possessive constructions in careful speech (figure 2). In this paper, I argue that the patterns of variation evident in my data are more adequately explained by an interaction between language contact and internal change: prepositions and the progressive particle ag/a’ are losing their genitive-triggering quality with the lack of parallel structures in the contact language, English, accelerating this ongoing change. In possessive environments I argue that genitive marking is retained at a higher rate as a result of pressure from the parallel structure in English. In light of this, I propose that the variation present in nominal mutation in genitive-triggering environments represents broader restructuring in the SG case system as a whole.
1. Radical: 
   *balach*
   boy.SG
   'boy'

2. Possessive: 
   *taigh*  *a’ bhalaich*
   house the.GEN.SG boy.GEN.SG
   'the boy’s house'

3. Preposition: 
   *cheannaich*  *mi*  *leabhar*  *airson*  *a’ bhalaich*
   buy.PAST I book for the.GEN.SG boy.GEN.SG
   'I bought a book for the boy'

4. Progressive: 
   *tha*  *mi*  *a’ freagairt*  *a’ bhalaich*
   be.PRES I PROG answer.PROG the.GEN.SG boy.GEN.SG
   'I am answering the boy' (Lit: I am at [the] answering [of] the boy)

*Figure 1: Glossed examples of genitive-triggering syntactic environments.*

![Application of Genitive Inflection](image)

*Figure 2: Application of mutation in genitive-triggering environments*

References:


In the last two centuries, many regional minority languages worldwide became obsolete. It is against this backdrop that a number of language revitalisation efforts have been put in place, including in the UK. This has resulted in communities of New Speakers of hitherto endangered languages. These are speakers who have acquired the minority language through means other than transmission from caregivers, such as through education (McLeod and O’Rourke, 2015: 152). Here, I investigate the revival of the Celtic language of Manx. The modern variety of Manx is spoken only by New Speakers who have had no direct contact with traditional native speakers, providing an excellent template for the processes of language revitalisation in its initial state.

In this paper I investigate the linguistic processes in language revitalisation through an analysis of the speech of three groups of speakers who have acquired the language in different contexts: teachers of Manx, younger speakers who received Manx instruction through the medium of English, and younger speakers who have received Manx-immersion education. I conduct a quantitative analysis of verbal forms which vary between synthetic (1a, 2a) and analytic forms (1b, 2b, 2c):

1. a. honnick mee
   see.past.1.sg
   b. ren mee fakin
   do.past.1.sg see

2. a. hee’m
   see.past.1.sg
   b. nee’m fakin
   do.fut.1.sg see
   c. bee’m fakin
   be.fut.1.sg see

The results reveal differences between these three groups of New Speakers, where the teachers have higher rates of synthetic usage than younger speakers. These differences may be correlated with the amount and type of input in the target language but further, the results show that younger New Speakers of Manx may be developing their own linguistic norms with regards to the expression of the future tense. The results of this paper therefore provide insight into change in progress in Revitalised Manx.

References:


The role of language professionals in minority language revitalisation: Production and stability in Scottish Gaelic rhotics
Claire Nance and Sam Kirkham

We consider the linguistic production of Scottish Gaelic ‘language professionals’ – speakers who use Gaelic in middle-class occupations such as media, education and publishing and who play a central role in the revitalisation programme (McEwan-Fujita 2008). Specifically, we consider the auditory, acoustic, and articulatory characteristics of Gaelic word-initial and word-final rhotic phonemes. The three Gaelic rhotic phonemes are a typologically unusual system: /r̥ r̟ ŗ/ (Ladefoged et al. 1998).

Our auditory and acoustic analysis considers 1088 rhotic tokens from twelve L1 Lewis Gaelic speakers aged 21–80. The articulatory (midsagittal ultrasound) analysis considers 399 tokens from seven of those speakers. Data were auditorily transcribed by three transcribers. Acoustic analysis included measures of the first three formants in the rhotic and following/preceding vowel, and centre of gravity measures in word-final devoiced rhotics. Ultrasound analysis involved GAMs fitted to each speaker’s data and Principal Component Analysis to compare across speakers (Turton 2017, Bennett et al. 2018). Modelling was conducted via Linear Mixed Effects.

Overall, our results show stability across the dataset with few differences according to age/gender. Typically, velarised rhotics are produced with a retracted/lowered tongue shape and palatalised rhotics with a fronted/raised tongue shape. There were more trills in the velarised phonemes and more palatalised taps in the palatalised phonemes. Our GAMs of the ultrasound data show two main strategies for rhotic production: either tip up or bunched (Figure 1) (Mielke et al. 2016).

While many production studies of endangered minority languages show reduction of complex and unusual systems (Dorian 1981, Jones 1998), our data instead suggest stability. We discuss this result with respect to the language professional role of our speakers: as linguistically aware and highly educated users of Gaelic, they may consciously be preserving these contrasts. We explore the implications of the expanding numbers of language professionals for future revitalisation developments.

References


![Figure 1](attachment:image.png)

Figure 1: GAMs fitted to polar coordinates of midsagittal tongue splines at rhotic midpoint. Four out of the seven speakers analysed are shown here for space reasons. Top two speakers show a tip-up strategy, bottom two speakers show a bunched strategy.
"Kids nowadays don’t speak Doric": Using perceptions of language to chart linguistic change
Dawn Leslie

According to census data, the North-East of Scotland is one of the strongholds of the Scots language-speaking population. However, the distinctive dialect of Scots found there (commonly known as ‘the Doric’) is undergoing change. Recent linguistic studies report dialect attrition, with younger speakers less likely to use traditional dialect forms (Marshall, 2004; Millar et al., 2014; Brato, 2016). Concurrent with such change has been the rapid demographic and social transformation of the North-East due to the North Sea oil industry.

In the area known as ‘The Garioch’ (and in its largest town, Inverurie) this expansion has been keenly felt. Once a rural market town, Inverurie’s population has grown by more than 130% since 1970, while its proximity to Aberdeen has seen it drawn into the city’s commuter belt. McRae’s (2006) sociolinguistic study of the Garioch reported that, whereas older speakers retain more ‘Doric’ features, the speech of youngsters is gravitating towards a variety which combines local dialect features with Scottish Standard English (SSE) and more widespread non-standard variants.

In this paper, I present evidence from my larger perceptual dialectology study of the North-East of Scotland which corroborates accounts of dialect attrition by confirming a generational shift in terms of perceptions of language variation and change. Using a modified version of Preston’s (1999) five-point methodology to survey both older residents (aged 60+) and current Garioch adolescents, the study confirms a decrease in perceived intraregional linguistic difference by younger informants, a lessening of the traditional urban/rural divide, a disassociation from traditional identity labels, and – most significantly – the inability of Inverurie youngsters to geographically place an older Garioch speaker. Conversely, the fact that such stark results are not found among youngsters surveyed in more remote North-East communities suggests that linguistic change may be afoot at different paces in different parts of the region.

References:


This paper reports on one aspect of the Manchester Voices ‘draw-a-map’ study, in which 345 respondents used an online tool to identify dialect regions on a map of Greater Manchester. They additionally provided qualitative comments on the regions, including dialect labels, social evaluations, and linguistic descriptions. 1167 comments were coded using a combination of Garrett et al.’s (2005) proposed ‘keywords’ methodology, and more traditional approaches to language attitudes (e.g. Zahn & Hopper 1985). Using ArcGIS Pro, we traced each of the lines and joined them to the coded comments, enabling Hotspot Analysis of each of the identified categories (see Montgomery & Stoeckle 2013; Grieve 2016).

One of the salient categories emerging from this analysis was ‘accentedness’, where a variety of terms were used to describe the perceived nonstandardness of a variety. Of these, ‘broad’ (n=93), ‘soft’ (n=32) and ‘strong’ (n=33) were the most frequent (see Figure 1). We explore both the spatial distribution of these terms and their cooccurrence with other categories. Within Greater Manchester, ‘soft’ appears to describe a more standard/supralocal variety, while ‘broad’ and ‘strong’ appear to describe nonstandard varieties with contrastive social meanings. Specifically, we find that ‘strong’ and ‘broad’ differentiate the more urban and the more rural varieties, respectively. ‘Strong’ correlates with the lowest status, least socially attractive variety, while ‘broad’ varieties appear to be more socially attractive.

Overall, this paper demonstrates the important nuances of folk-linguistic terminology in evaluations of proximal varieties, and how understanding these terms can provide valuable insight into how people use and evaluate language in their local area. In addition, this paper highlights the benefits of using innovative digital, web-based data collection for this kind of task, as we were able to collect large volumes of rich perceptual data with a wider range of people who might otherwise not participate.

References:


Figure 1: Hotspot Analysis of the labels ‘soft’, ‘strong’, and ‘broad’ in greater Manchester, where red indicates hotspots, and blue indicates coldspots.
Examining social and behavioural judgements of British English accents
Alice Paver, Natalie Braber and David Wright

The ESRC-funded IVIP project (Improving Voice Identification Procedures) has four main strands, with the overall aim of improving understanding of earwitness behaviour and improving the interaction of the criminal justice system with the use of earwitness evidence. This paper will report on the initial findings of the third strand, which examines the degree to which social perceptions, judgements, attitudes and stereotypes related to voice(s) can motivate witness decision-making. Our initial experiment involved asking 100 participants to complete an accent judgement task, where regional voices are judged on a series of criminal and non-criminal behaviours, as well as social characteristics, to examine particular patterns of behaviour associated with regional accents.

Our research aimed to find out whether judgements about the social characteristics of particular accents also influenced the judgement of the ways in which such accents were perceived as likely to carry to carry out certain social and criminal behaviours. Furthermore, we were also interested in whether accent familiarity affected such judgements.

Initial findings suggest that for some of the accents there seems to be a relationship between social and behavioural judgements. When compared to Standard Southern British English (SSBE), Glasgow and Belfast consistently rated higher than all accents not only on solidarity dimensions but also on positive social behaviours (and were also rated less likely to carry out morally bad or criminal behaviour). It also seems that self-reported familiarity with accents influences judgements about behaviours, with higher familiarity correlating with ‘good’ behaviour. Furthermore, it seems that overall participants are more likely to give higher ratings for positive traits than negative traits. All of these behaviours could have implications when applied to legal or criminal settings.
Processing regional accent variation: Real-time and reaction time measures.
Gisela Tomé Lourido, Robert Lennon and Bronwen Evans

When listening to a familiar accent, perceived speaker characteristics influence lexical access (e.g., Koops et al. 2008), arguably facilitating processing. Previous work used pictures or words to cue a specific indexical category (e.g., age, region) explicitly. Our first study used eye-tracking to investigate whether brief exposure to accent-specific phonetic features influences the time course of spoken word recognition. Our second study used a web-based word recognition task to examine whether a similar effect would be captured in reaction times (ongoing data collection). In both experiments, we tested listeners’ recognition of words containing the TRAP-BATH and FOOT-STRUT lexical sets, known for distinguishing northern and southern varieties of British English. Southern Standard British English (SSBE) contrasts TRAP [æ] and BATH [ɑː], FOOT [ʊ] and STRUT [ʌ]; whilst many Leeds English speakers (LE) typically realise TRAP/BATH as [æ] and FOOT/STRUT as [ʊ].

The audio stimuli were naturally produced words recorded by 2 LE and 2 SSBE speakers. Words were embedded in the carrier phrase “I'm asking you to access _____” (cf. Evans and Iverson 2004), which included both BATH (asking) and TRAP (access) sets. Therefore, SSBE was cued by the TRAP-BATH contrast, whilst LE lacked this contrast. Forty-one English monolinguals (24 northern, 17 southern) completed the eye-tracking task and listener group (northern, southern) on time.

Results show that both listener groups looked at the target significantly earlier when listening to SSBE, being able to use the vowel distinction in TRAP-BATH and FOOT-STRUT sets to discard the competitor word faster. In other words, even though the contrasts were not part of the northern listeners’ native repertoire, both groups used the information available in the speech signal to facilitate processing.

References

What size linguistic units do listeners use to recognise accents?

Hielke Vriesendorp

Sociolinguistic research on the cognitive processing of language variation has provided evidence in support of exemplar theory. This theory posits that speech is processed by matching linguistic input to detailed memories of words, or ‘exemplars’, which include socio-contextual information. Hearing linguistic variants used with matching socio-contextual information has been found to help word recognition for example (Walker & Hay 2011). However, much less is known about how exemplar models work in the processing of social meaning itself (i.e. what social information – region, social class, persona, stance, etc. – is evoked by linguistic variants). If social meaning is stored in these exemplars, does that mean listeners recognise accents on the basis of word-length memory traces rather than segments?

This paper presents findings from two accent recognition experiments which aimed to test if having strong exemplars stored in memory helps listeners to recognise accents. The experiments did this by comparing listener accuracy for stimuli that were highly frequent, not frequent at all, and non-words. If social meaning was only or mostly stored in lexical exemplars, participants would be expected to be better at recognising a Yorkshire accent in the highly frequent word *bus*, for example, than in the much less frequent word *suss* or the non-word *muss*, even though they contain the same STRUT vowel. In the experiments, listeners (N=1649 and N=155) were asked to recognise words from three different accents of English. They heard isolated words, pronounced by 42 different speakers.

The experiments showed that listeners were in fact not better at recognising the different accents in high-frequency words than in low-frequency words, and that they were able to recognise the accents in non-words. This suggests that it is not lexical exemplars, but other, smaller sized linguistic units that play a central role in the processing of social meaning.

References

Clear /l/ and the Malays in Singapore: origin, social meanings, and ethnic identity
Jasper Sim and Brechtje Post

Linguistic features that emerged from language contact/acquisition can come to gain social-indexical meanings, and may become increasingly enregistered to a particular sociodemographic context. As people experience the sociolinguistic world differently, the interpretation of social meanings can vary between members and non-members of a speech community[1], or even between members[2]. This study focused on the use of coda clear-L, a Malay-derived phonetic trait, in the English speech of English-Malay bilinguals in Singapore[3]. Through a modified matched-guise test (MGT) and metalinguistic talk, it explored the socio-indexical properties of, and Singaporeans’ attitudes towards the variant, in relation to more mainstream variants, vocalised-L and dark-L[4].

101 native Singaporeans from the three main ethnic groups (i.e. Chinese, Malays and Indians) took part in the MGT, which involved manipulated monosyllabic tokens of female speakers that differed mainly in their coda /l/. Informants evaluated the three variants on a list of traits, and described the community they thought the speaker belonged to. 12 Malay Singaporeans were further interviewed about the use of clear-L, and whether and how this variant was associated with certain sub-groups/sub-cultures.

Overall, informants regarded the guises with clear-L as casual and friendly, but less educated, from a lower social class and Malay-dominant. However, they indexed distinct but related social types based on the varied experiences of the informants: mat/minahrep (Malay delinquents), pakciks/makciks (middle-aged Malays) and mat jiwang (one who is always love-struck/sentimental and listens to Malay soft-rock love ballads). Malay respondents who do not belong to these sub-groups revealed that they would use clear-L and a ‘Malay’ accent to fit in. The discussion explores the relationship of these social meanings, and examines the social significance of the use and maintenance of clear-L and a distinctly Malay-accented English repertoire, through an understanding of the socio-cultural norms of the Malay community.

References


Taking Stock of Multicultural London English: Developments and Changing Perspectives

Christian Ilbury and Shivonne Gates

It has now been over 15 years since the ‘Linguistic Innovators’ project (2004-2006) led to the first descriptions of Multicultural London English (MLE; see Cheshire et al., 2008; 2011). Since then, a wealth of research has explored the social distribution and function of an array of MLE features (e.g., Torgersen & Szakay, 2011; Cheshire, Adger, Fox, 2013; Pichler, forthcoming) and drawn comparisons with other multicultural varieties spoken in ethnically diverse areas of the UK (e.g., Drummond, 2018).

Drawing on data and insights from two ethnographic projects in East London, we re-examine two claims that have been made about MLE. The first is that MLE is ‘ethnically-neutral’ and the use of MLE is best predicted by ethnic diversity of friendship networks (Cheshire et al., 2011: 157). Contrary to these findings, we show that MLE features, such as FACE and PRICE vowels with shortened diphthong trajectories, are not consistently used by adolescents with ethnically-diverse social networks. Rather, we show that MLE features have acquired social indexical meanings that are associated with ethnic identity and Black youth subcultures (e.g., Road culture: Gunter, 2008). Second, we demonstrate that features of MLE can be used stylistically by speakers to convey aspects of their identity. Our analyses suggest that some features of MLE have acquired stylistic capital and are deployed by speakers for certain interactional purposes, such as the man pronoun which is used by speakers to index group membership.

By exploring the micro- and meso-level social meanings of MLE features, we present a more socially nuanced account of the variation that foregrounds the importance of ethnicity in contemporary social life in London. Concluding, we reflect on our findings in relation to claims of a broader ‘Multicultural British English’ (MBE: Drummond, 2018).

References


Intra-ethnic variation in the production of English /l/ by Iraqi-Arabs in London and Glasgow

Ebtehal Asiri

Sociophonetic research on ethnic communities in the UK has been largely concentrated on South-Asian and Afro-Caribbean communities that have come to the UK through similar channels of migration. Because of this, little attention has been given to other possible sources of sociolinguistic diversity, such as migration routes and experience, which can be as varied and significant as ethnicity [1].

The Iraqi community in the UK exhibits waves of migration, with different migration routes to different locations. This paper explores variation in the degree of English laterals’ clear/darkness within forcibly displaced (refugee) and professional Iraqi-Arab migrants in London and Glasgow, who despite commonalities, are socioeconomically stratified. In London English, /l/ is characterised by having clear realisation in word-initial positions, and dark realisation in word final-positions [2]. This is different from Glaswegian /l/, which is dark in all word positions [3]. Iraqi Arabic /l/, on the other hand, tends to be clear in all word positions.

44 first- generation Iraqi Arab speakers, aged 40-70 years, and stratified by gender, city, and migration experience were recorded reading target words in a carrier phrase. Midpoint formant values of laterals’ steady- state were extracted and difference between F2, F1 was used as a proxy for /l/ clearness/ darkness (high F2-F1 indicates clearer /l/ and low F2-F1 indicates darker /l/). F2-F1 was then analysed using mixed effects modelling in R for WordPosition, Gender, Dialect, and MigrationExperience (random factors: speakers/ word).

As illustrated in Figure 1, results show that the acoustic clear/darkness of laterals is always significantly affected by WordPosition as expected, but also by Gender and MigrationExperience. Specifically female speakers produce clearer initial /l/ than male speakers and professional male speakers show the darkest initial /l/ realisation. Such variability in /l/ production is accounted for by acculturation attitudes and ethnic identity.

![Figure 1: F2-F1(Hz) for the significant interaction of WordPosition, Gender and Migration Experience](image)

References


Uncovering a Focused Lebanese American Ethnolect in Dearborn Michigan
Chad Hall

This study presents findings from a quantitative analysis of inter- and intraspeaker phonetic variability of second and third generation Lebanese American speakers in Dearborn, Michigan. In this speech community, /t/ and /d/ have an alveolar and a dental variant. It is hypothesized that the dental variant is a feature of a focused Lebanese American ethnolect due to the fact that these speakers reside in an ethnic enclave. Six second-generation and three third-generation speakers from 2006 corpus recordings were analysed. Ethnolect focusing occurs in the third generation of speakers in an ethnic enclave. Synthesizing across the relevant literature on ethnolinguistic variation and new-dialect formation, I devised five diagnostics for a focused ethnolect that the data was tested against.

The dental variant is found in all three third-generation speakers and there is also some evidence that the third-generation speakers show more uniform usage rate of the alveolar and dental variant relative to the second generation. Additionally, there is significant evidence that style affects variant choice for the third generation but not the second generation. These findings support the hypothesis that the variety is focused. In future, stronger evidence of focusing will be required by recruiting a larger number of speakers.

This study provides some of the first sociolinguistic description of the English spoken by Lebanese Americans. It is also one of the first ethnolinguistic studies to introduce the concept of the ‘focused ethnolect’. While ethnolinguistic researchers show consideration for how generations differ regarding inter- and intraspeaker variation, second and third generation differences are usually disregarded as they are often grouped together in ethnolinguistic research. By discussing ethnolect focusing, we begin to consider these differences in more detail. In addition, by being informed about new-dialect formation literature, we can better understand the stages of how an ethnolect forms.
Perceptual and Articulatory Gradience in Coronal Stop Deletion
Ruaridh Purse

Since its first description [1], Coronal Stop Deletion (CSD)—the variable surface absence of underlying word-final /t,d/ in consonant clusters (e.g. old ~ ol')—has been investigated in a number of varieties of English. However, more recent work investigating the articulatory detail of CSD has found that the vast majority of cases in which a coronal stop would traditionally be coded as ‘deleted’ are actually produced with tongue tip raising towards a coronal constriction [2]. While some inaudible tokens feature no tongue tip raising, it remains to be seen whether they are perceptually distinguishable.

250 instances of underlying word-final coronal stops following consonants were extracted, in context, from synchronised acoustic and Electromagnetic Articulography recordings of 5 speakers of Mainstream American English. 44 other English-speaking participants then rated these excerpts in terms of how clearly they heard the relevant word-final coronal stop in each case, on a scale from 1 (very unclear) to 6 (very clear).

For half of the participants, their ratings had a bimodal distribution, with clusters corresponding closely to the author’s binary judgment of stop audibility. The other participants’ ratings were much more unimodal and did not exhibit any relationship to the binary judgments. Regression modelling of the perceptual ratings revealed no significant effect of any articulatory measure beyond what was captured by the binary coding of stop audibility. However, a main effect of grammatical class revealed that participants judged stops at the end of monomorphemes to be significantly clearer than stops constituting -ed suffixes (Figure 1). This effect is unexpected, given that traditionally-coded CSD is most common in monomorphemes [3] and the monomorphemic cases were actually produced with the least pronounced tongue tip raising according to articulatory data (Figure 2). One explanation is listeners have different thresholds for what constitutes a clear stop, according to context.

![Figure 1: Listener ratings for clarity of coronal stop by grammatical class, compared to traditional binary audibility coding](image)
Figure 2: Normalized tongue tip height at apex of coronal constriction trajectory by grammatical class and traditionally-coded binary audibility of the coronal stop

References


Acquisition of glottals in Galloway: from home to nursery
Margie Ferguson

Research on first language acquisition found that children develop the sounds and structures of their language in the first four years of life. Research in the acquisition of linguistic variation shows that children also acquire variable forms in their first language early in their linguistic development (e.g. Foulkes et al. 1999, 2005, Smith & Durham 2019). This study extends this research by examining the development of variable forms when a young child moves from caregiver and home to nursery and peers. Specifically, how is sociolinguistic variation impacted in this important life stage?

The data come from 11 children aged 2:11 to 3:7 and their primary caregivers from a dialect area in south-west Scotland. The children were recorded first in the home with their caregivers and 2 months later once they entered nursery. The corpus comprises 110 hours and 97,000 words in total. An analysis of glottal replacement was conducted on 3303 tokens using the mixed effects model in R.

1. Look at my plan[ʔ]. (Eva, 2:11)
2. Be gen[ʔ]le with the wee slaters. (Fergus’s caregiver)
3. No shou[t]ing in nursery! (David)

The initial results revealed that children’s overall glottal rates and constraints in the home data were in line with those of their caregivers, and these rates did not change much once they moved to the nursery setting. Closer analysis across a range of constraints in both contexts showed that linguistic constraints on use remained stable from home to nursery, but in contrast, style-shifting effects in the home, where more informal contexts showed higher rates of glottal replacement were not evident in the nursery data. These results suggest that initial caregiver influence on linguistic patterns persists beyond the home environment but social constraints are more amenable to change. I discuss how these findings contribute to our understanding of the initial acquisition and further development of sociolinguistic norms in the childhood years.

References


The sociolinguistic dynamics of word-final /r/ in Scottish English

Jane Stuart-Smith, Rachel Macdonald, James Tanner and the SPADE Consortium

The sociolinguistic distribution of Scottish /r/ is reported to have changed over the 20th Century, from apical trills/taps to postalveolar, retroflex and now bunched approximants favoured by middle-class females. Alongside shifts in articulated /r/, long-term language-internal coda /r/ weakening has been observed for urban vernaculars; recent work has also identified increasing ‘modern British’ non-rhoticity in Standard Scottish English. The acoustic signature of a lowered third formant is found for approximant /r/; taps, trills, and weakened /r/ show high and/or rising F3. To date, most sociophonetic research on Scottish /r/ has been auditory, or, if acoustic/articulatory, on small speaker samples from Central Scotland.

This study considers the sociophonetics of word-final Scottish /r/ acoustically on a larger scale: from ~500 speakers covering geographical, social and ethnic diversity across an apparent- and real-time span of more than 100 years. 21-point F1-F3 formant tracks were taken from pre-segmented word-final /r/ longer than 49ms; likely erroneous measures were pruned using existing hand-measures. The first three Discrete Cosine Transformation coefficients, capturing formant trajectories’ mean, slope and curvature, were analysed for following context and lexical stress, and gender, dialect and decade of birth, using Linear Mixed Effects Modelling in R, controlling for speech rate, (log)/r/ duration, (log)lexical frequency, and speaker and word.

Results from 104 speakers from the SCOTS corpus show the acoustic dynamics of /r/ to be influenced by all linguistic and social factors, but lexical frequency. The slope of the F3 trajectory is sensitive to following context (Fig.1-Left), rising before a pause and a consonant, consistent with weakened/delayed tongue tip gesture and uvularization. Fig.1-Right shows how gender interacts with decade of birth: those born most recently show clearly lowered F3 trajectories, especially female speakers, which may reflect a general, but gendered, shift from taps to (more bunched) approximants in Scottish English /r/.

Figure 1: Smoothed F3 trajectories of segmented /r/ from DCT LMEM estimates by gender and Left: by following phonological context (black: prepausal, e.g. car #, blue: pre-consonantal, e.g. car could, red: prevocalic, e.g. car and); and Right: by decade of birth (black: 1910-40, blue: 1950-70, red: 1980-90); 104 speakers, 7,052 tokens.

References


The which–witch merger has been documented as an ongoing process for many varieties of English, including Scottish English (Macafee, 1983; Chirrey, 1999; Stuart-Smith et al., 2007; Lawson and Stuart-Smith, 1999; Robinson, 2005; Schüttler, 2010; Reiersen, 2013; Brato, 2014), where the retention of /u/ is considered a stereotypical feature (Wells, 1982; Giegerich, 1992; Jones, 2002). It is usually framed as a phonetically abrupt change between aspirated /u/ and unaspirated /w/.

I present a qualitative and quantitative acoustic phonetic analysis of 1409 tokens produced by 18 female speakers of Edinburgh English recorded in 2014 & 2019. While all speakers predominantly produce unaspirated tokens, the distribution of variants is conditioned by social class and register: aspirated tokens are favoured in read speech and more prevalent among middle class speakers.

I further show that (HW) comprises 6 distinct variants with varying degrees of aspiration and voicing which lie on a phonetic continuum (echoing work on other Scottish varieties: Lawson and Stuart-Smith (1999), Robinson (2005), and Brato (2014)). The aspirated variants identified in this study differ both in relative duration and type of aspiration, with differences in Centre of Gravity and voicing (see also Bridwell (2019) in White Southern US English). This variation within aspirated tokens is also socially stratified, with more “traditional” lower CoG favoured in read speech. Aspirated and unaspirated tokens furthermore differ in glide quality (reflected in distinct formant contours), as described by Lawson and Stuart-Smith (1999).

Overall, the findings suggest a phonetically gradual shift towards unaspirated variants involving both intermediate variants and lenition: speakers who produce a higher rate of aspirated tokens tend to produce tokens with a longer period of aspiration. Given the sociolinguistic context, the distribution of variants appears to be the result of endogenous, phonetically gradual change (vis-à-vis “traditional” Scottish English) rather than a contact-induced merger (cf. Schüttler (2010)).

References


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