Ministry Of Education And Science Of Ukraine
Taras Shevchenko National University of Kyiv
Educational and Scientific Institute of Philology

Department of English Philology and Intercultural Communication

Bachelor's thesis

Experimental phonetic research of Liverpool English and Newcastle English

Viktoriia Yatskiv
4th year student of the Education Program
'English Studies and Translation
and Two Western European Languages'
Field of science: 03 "Humanities"
Specialty: 035 "Philology"

Supervised by:
Anna Karaban

«Допущено до захисту»
Протокол засідання кафедри англійської філології
та міжкультурної комунікації
Протокол № 11 від 26.05.2025
Зав. кафедри _____д. філол. н., проф. Алла БЄЛОВА

KYIV – 2025

АНОТАЦІЯ

Яцків В.І. Експериментальне фонетичне дослідження ліверпульського та ньюкаслського варіантів англійської мови. – Кваліфікаційна робота освітнього ступеня "бакалавр".

Дослідження присвячено акустичному аналізу та порівняльній характеристиці двох варіантів Британської англійської мови — ліверпульського (скауз) та ньюкаслського (джорді). Ми зосереджуємось на порівняльному аналізі ключових напружених (NURSE, FOOL) та ненапружених (STRUT, FOOT) голосних звуків у сучасних варіантах англійської мови – ліверпульському (скауз, на прикладі мовлення Дарсі Шоу) та ньюкаслському (джорді, на прикладі мовлення Тіллі Локі). Актуальність цієї теми зумовлена необхідністю створення актуального інструментального профілю фонетичних особливостей сучасних північноанглійських варіантів, зокрема у мовленні молодого покоління. Також важливим аспектом є перевірка гіпотези про їхнє фонетичне нівелювання (зближення) або ж збереження відмінностей в умовах впливу надрегіональних стандартів.

Об'єктом дослідження є спонтанне мовлення молодих носіїв ліверпульського (скауз, на прикладі мовлення Дарсі Шоу, 2002 р.н.) та ньюкаслського (джорді, на прикладі мовлення Тіллі Локі, 2005 р.н.) варіантів англійської мови. Предметом роботи є акустичні характеристики (формантні значення F1 та F2) голосних NURSE, FOOL, STRUT та FOOT та їх реалізація у зазначених варіантах.

Метою дослідження є визначення сучасного акустичного профілю вибраних голосних у скаузі та джорді; порівняння отриманих даних з нормативною британською вимовою, опублікованими діалектними нормами та даними досліджень, зокрема праці Стричарчук П., Лопес-Ібанеса М., Браун Г., Лімана А. (2020); та, на основі цього аналізу, оцінка наявності тенденцій до фонетичного зближення чи дивергенції між двома варіантами.

Методи дослідження, використані в цій роботі, включають акустичний аналіз (вимірювання формант F1 та F2 за допомогою програми Praat), метод

суцільної вибірки для формування корпусу токенів, порівняльний метод, описовий метод та елементи статистичного аналізу (обчислення середніх значень, стандартного відхилення та діапазону формантних частот).

За підсумками проведеного дослідження встановлено, що реалізація досліджуваних голосних у мовленні Дарсі Шоу (скауз) та Тіллі Локі (джорді) демонструє як спільні тенденції відхилення від нормативної британської вимови, так і збереження унікальних рис кожного акценту. Спостерігається значна варіативність, що свідчить про динамічну природу цих діалектних систем. Для напружених голосних NURSE та FOOL обидві мовиці демонструють значно переднішу реалізацію порівняно з нормативною вимовою, що є спільною північноанглійською рисою. Проте зберігаються й відмінності: NURSE у скаузі виявився значно відкритішим, ніж у джорді, а FOOL у джорді — більш закритим та в середньому навіть більш переднім, ніж у скаузі, що частково суперечить деяким попереднім дослідженням. Щодо ненапружених голосних, STRUT у Дарсі Шоу демонструє відхід від традиційного злиття FOOT-STRUT у скауз. Акторка реалізує цей звук як відкритий та передній голосний. У Тіллі Локі STRUT також більш передній у порівнянні із стандартною вимовою цього голосного звуку у Великобританії, але також більш піднятий та стабільний. FOOT в обох варіантах є більш відкритим та переднім за нормативну вимову цього звуку, продовжуючи задокументовані тенденції, але знову ж таки, зі специфічними для кожного акценту характеристиками висоти та стабільності.

Соціолінгвістичний аналіз показує, що скауз, незважаючи на негативні стереотипи, залишається сильним маркером місцевої ідентичності та гордості. Натомість джорді останнім часом набуває позитивніших конотацій, асоціюючись із дружелюбністю та автентичністю, що сприяє зростанню його престижу та використанню в медіа та брендингу. Ці спостереження підкреслюють, як соціальне сприйняття та культурне представлення впливають на статус та динаміку регіональних варіантів мови.

Ключові слова: *скауз*, *джорді*, *акустична фонетика*, *формантний аналіз*, *голосні звуки*, *регіональні варіанти англійської мови*, *варіативність*, *фонетичне зближення/нівелювання*.

ABSTRACT

Yatskiv V.I. Experimental phonetic research of Liverpool English and Newcastle English. – Bachelor's degree qualification paper.

The research is dedicated to the acoustic analysis and comparative characterisation of two varieties of British English – Liverpool (Scouse) and Newcastle (Geordie). The study focuses on the comparative analysis of key stressed (NURSE, FOOL) and unstressed (STRUT, FOOT) vowel sounds in the modern variants of English – Liverpool (Scouse, on the example of Darcy Shaw's speech) and Newcastle (Geordie, on the example of Tilly Loki's speech). The relevance of the topic is determined by the need to create an up-to-date instrumental profile of the phonetic features of modern Northern English dialects, particularly in the speech of the younger generation, as well as by the need to test hypotheses about their phonetic levelling (convergence) or the maintenance of distinctions under the influence of supra-regional standards.

The object of the study is the spontaneous speech of young native speakers of Liverpool (Scouse, represented by the speech of Darci Shaw, b. 2002) and Newcastle (Geordie, represented by the speech of Tilly Lockey, b. 2005) varieties of English. The subject of the study is the acoustic characteristics (formant values F1 and F2) of the NURSE, FOOL, STRUT, and FOOT vowels and their realisation in the aforementioned varieties.

The aim of the research is to determine the contemporary acoustic profile of selected vowels in Scouse and Geordie; to compare the obtained data with Received Pronunciation (RP), published dialectal norms, and research data, particularly from the work of Strycharczuk et al. (2020); and, based on this analysis, to assess the presence of tendencies towards phonetic convergence or divergence between the two varieties.

The research methods used in this paper include acoustic analysis (measurement of F1 and F2 formants using the Praat program), the method of continuous sampling for corpus formation, comparative method, descriptive method,

and elements of statistical analysis (calculation of mean values, standard deviation, and formant frequency ranges).

Based on the research conducted, it was established that the realisation of the studied vowels in the speech of Darci Shaw (Scouse) and Tilly Lockey (Geordie) demonstrates both shared tendencies of deviation from RP and the maintenance of unique features of each accent. Significant variability is observed, indicating the dynamic nature of these dialectal systems. For the tense vowels NURSE and FOOL, both speakers show a significantly fronter realisation compared to RP, which is a common Northern English feature. However, distinctions remain: the Scouse NURSE proved to be significantly more open than the Geordie one, while the Geordie FOOL was closer and, on average, even fronter than the Scouse one, which partially contradicts some previous research. Regarding the lax vowels, Darci Shaw's STRUT shows a departure from the traditional Scouse FOOT-STRUT merger, being realised as an open and front vowel. Tilly Lockey's STRUT is also fronter than RP, but more raised and stable. The FOOT vowel in both varieties is more open and fronter than RP, continuing documented trends, but again, with accent-specific characteristics of height and stability.

The sociolinguistic analysis shows that, despite its negative stereotypes, Scouse remains a strong marker of local identity and pride. In contrast, Geordie has recently acquired more positive connotations, being associated with friendliness and authenticity, which has contributed to its growing prestige and use in media and branding. These observations highlight how social perception and cultural representation influence the status and dynamics of regional language variants.

Keywords: *Scouse*, *Geordie*, *acoustic phonetics*, *formant analysis*, *vowels*, *regional varieties of English*, *variability*, *phonetic levelling*.

INTRODUCTION

The phonetic study of regional accents remains a cornerstone of sociolinguistics, phonetics, and identity research. Accents do far more than signal place of origin: they index social class, local allegiance, mobility histories, and - even in an age of mass-mediated English - continue to carry prestige or stigma. This study dwells on Liverpool English (Scouse) and Newcastle English (Geordie), since within Britain, the contrast between the selected varieties is especially revealing. Both belong to the broader "Urban Northern" continuum, yet historical, social, and migratory forces have pushed their sound systems along sharply divergent paths. Understanding how these two varieties pattern today - whether they are converging under supra-regional pressures or maintaining entrenched distinctions - offers a window onto the resilience (or erosion) of local identity in twenty-first-century England.

The thesis **aims** to provide an up-to-date instrumental profile of the segmental phonetic features of contemporary Scouse and Geordie and to establish whether the two systems are diverging, converging, or internally restructuring.

The specific **objectives** of this study are to:

- Define and classify the varieties, explore geographical and historical contexts; based on the existing studies, analyse differences between Scouse and Geordie varieties; investigate sociolinguistic factors;
- Catalogue the vowel sounds that the literature identifies as diagnostic of Scouse and Geordie.
- Compile a corpus of spontaneous speech in broadcast interviews, livestreams, and public appearances by two young female speakers (b. post-2000) representing Liverpool and Newcastle
- Analyse the variables and identify whether they tend to become similar across the varieties, employing experimental phonetic research tool.
- Compare the obtained formant means with Received Pronunciation baselines and with published community norms for Scouse and Geordie.
- Prove or disprove the levelling of the selected varieties.

The **object** of the study is spontaneous speech of Northern English speakers born in the 21st century.

The **subject** of the study is acoustic parameters (segmental vowel-level features) that characterise present-day Scouse and Geordie and indicate possible inter-variety convergence.

Theoretical and methodological framework

The investigation is grounded in variationist sociophonetics, drawing on Labov's principle of inherent variability (Labov 1994) and the exemplar-based view of sound change (Pierrehumbert 2001). It also adopts the comparative-dialectological perspective of Wells (1982) and the Northern English dialects literature, treating vowel quality as a gradient variable.

Furthermore, the investigation draws on the prominent linguists' findings (Hughes, Trudgill, Watt, Kortmann, Schneider and many others) and on the original research article "General Northern English. Exploring Regional Variation in the North of England With Machine Learning" **(**Strycharczuk et al. 2020). Methodologically it integrates:

- **Document analysis** of scholarly monographs, journal articles, and dialect atlases to establish canonical features.
- **Auditory screening** to flag candidate variables.
- **Case-study analysis** for speaker-specific dynamics.
- **Instrumental phonetics** and **categorical coding** of sounds in *Praat* (formants, bursts, F_0 contours).
- **Statistical summaries** (token counts, z-normalised centroids) to track divergence vs. convergence.
- **Case-study analysis** of people's opinion on the varieties.

Pinning down the direction and magnitude of that change is not only theoretically relevant for models of sound change in progress; it is also practically useful for accent recognition technology, and the pedagogy of English pronunciation for L2 learners who increasingly meet Northern voices in the media.

The **structure of this thesis** is as follows:

- **Chapter 1** reviews the theoretical background and key literature on Scouse and Geordie phonetics and sociolinguistics, establishing the methodological framework and research questions.
- **Chapter 2** details corpus construction and acoustic methodology; presents the segmental analysis: tense and lax vowels; describes the collection of spontaneous modern Scouse and Geordie speech, the PRAAT‑based extraction of vowel formants and an acoustic comparison of segmental phonetic features, the quantitative analysis (means, standard deviations) against RP and published norms, and interprets the findings to assess potential convergence or divergence in these regional varieties.

Through this study, we aim to contribute to the ongoing discourse on varieties of British English — namely Scouse and Geordie — exploring the presence or lack of their convergence.

Preliminary results were presented and discussed at IX All-Ukrainian Student Readings “Philology of the 21st Century” (Section 6: English Language 2020–2025).

CHAPTER 1: THEORETICAL FRAMEWORK FOR THE COMPARATIVE ANALYSIS OF TWO BRITISH VARIETIES: SCOUSE AND GEORDIE.

1.1 Definition and Classification of Accents.

Accent refers to distinct ways a language is pronounced, whether by native or non-native speakers. English, a world language with many speakers in many different regions and of many different social groups, has many distinct accents [21, p. 2]. It refers to the distinctive pronunciation patterns of a language, influenced by phonetic and phonological features and these patterns can indicate a speaker's regional or social background. Some often confuse the concepts of accent and dialect. That is why it is important to point out that while 'accent' pertains specifically to pronunciation, 'dialect' encompasses broader linguistic variations, including vocabulary and grammar. Since a lot of linguists and phoneticians argue about the status of language varieties with someone calling them “accents” and the other calling them “dialects”, we decided to use the term “variety” in order to avoid any kind of confusion and misunderstanding.

Linguists typically classify varieties based on geographical, social, and linguistic factors. **Geographical classification** distinguishes them according to the regions in which they are spoken. These are British Isles, North American, Australian, Indian English varieties and the ones spoken in different other English-speaking countries. Within these broad categories, further distinctions exist, such as Cockney in London, Scouse in Liverpool, Geordie in Newcastle in the UK, or Southern American English in the United States, etc. [18, pp. 122-123]. **Social classification**, on the other hand, considers factors such as socioeconomic status, education, and ethnic background, which can influence pronunciation and speech patterns. For example, Received Pronunciation (RP) in the UK has traditionally been associated with prestige and higher social status, whereas Cockney, spoken in East London, has historically been linked to the working class [1].

Another important factor in accent classification is **phonetic and phonological variation**, which refers to differences in vowel and consonant pronunciation, intonation patterns, and speech rhythm [18, pp. 122-123]. The focus

on shibboleths distinguishing the major accent divisions in English-speaking territories, which implies that the list of regionally distinctive phonetic and phonological features is far from exhaustive.

By understanding the complexities of accents, we gain a deeper appreciation of the role pronunciation plays in communication and identity within the English-speaking world.

1.2 Geographical and Historical Contexts of Regional Variation.

Language is deeply influenced by both geography and history, shaping the way accents develop and evolve over time. In the case of English, regional variation has been driven by historical migrations, trade, social changes, and geographical isolation. This chapter explores the geographical and historical factors that have contributed to the development of regional varieties.

As Johnstone notes, "sociolinguists have always been concerned with place. Be it nation, region, county, city, neighborhood, or block, place has long been adduced as a key correlate of linguistic variation, and geography has often entered into explanations of variation" [17, p. 203]. This is evident in the way English accents and dialects have developed distinct phonetic and lexical features in different regions.

One of the key geographical factors influencing regional varieties is physical geography, which can either facilitate or hinder communication between communities. Natural barriers, such as mountains, rivers, and coastlines, often contribute to linguistic divergence by limiting interaction between populations [6, p. 7]. For instance, in England, the Pennines and other geographical features have historically influenced dialect differences between the North and the Midlands. Similarly, the dialects of coastal areas, such as those in the West Country, have been shaped by maritime trade and contact with speakers of other languages.

From a historical perspective, settlement patterns and migrations have played a fundamental role in shaping the way people spoke. The Viking invasions, the Norman Conquest, and internal migration during the Industrial Revolution each left distinct linguistic imprints on regional speech. The Norse influence in areas such as Yorkshire and the East Midlands contributed to specific phonological and lexical

features, while the French-speaking Norman elite introduced a range of vocabulary that later became embedded in certain dialects more than others [2, pp. 91-92].

Moreover, urbanization and industrialization have had lasting effects on regional variation. Urbanization and the resulting social dynamics have significantly influenced the relationship between standard languages and regional varieties. As populations migrate from rural to urban areas, there's an intensified interaction between standard language forms and local speech patterns. This interaction often leads to the assimilation of dialectal features into the standard language and vice versa. Technological advancements and enhanced communication have further accelerated this process, contributing to the gradual attenuation of distinct dialectal characteristics [38, pp. 113-120]. Therefore, understanding the impact of urbanization and technological progress is crucial in comprehending the evolution and current state of regional accents within the broader linguistic landscape.

In conclusion, geographical and historical factors have played a key role in shaping how English varies across regions. Natural barriers and where people settled in the past contributed to this linguistic diversity. However, social and economic changes, like industrialization and urbanization, have changed the linguistic landscape by increasing movement and mixing between varieties. While some regional accents and dialects have faded because of these changes, many still exist as symbols of local identity, showing the strong link between language, location, and culture. This ongoing relationship between history and modern language trends highlights how regional variation continues to evolve, making English a language full of diversity.

1.3. The Relevance of Studying the Differences between Scouse and Geordie Varieties.

In this paper, we will focus on the differences between the two English varieties: Scouse and Geordie. An important aspect of this study is to explore why the aforementioned varieties have been chosen for comparison. One potential hypothesis is that both of them belong to the broader category of Urban Northern British English. The survey in *Towards an Updated Dialect Atlas of British English* suggests

that regional variation in Northern English is influenced by both historical settlement patterns and contemporary social and geographical factors [22, pp. 51-62]. Additionally, there may be a trend of assimilation between Scouse and Geordie over time, particularly as social and geographical influences play a role in language change. This paper will examine whether the ongoing linguistic changes in the north, as highlighted in recent dialect surveys, show signs of convergence between these two regional varieties.

1.4 The Scouse Variety.

Scouse (/skaʊs/ *skowss*), more formally known as **Liverpool English** or **Merseyside English** is an accent and dialect of English associated with the city of Liverpool and the surrounding Liverpool City Region [11, pp. 193-194]. The Scouse variety is one of the most distinctive and recognizable regional varieties in the UK. The term "scouse" refers to Liverpool English. An inhabitant of Liverpool (a Northwest England city, situated on the eastern side of the River Mersey) is a Liverpudlian or Scouse(r). Scouse is well-known throughout Britain and the world mainly due to the Beatles and other Liverpool pop groups and singers from the 60s. The variety of Liverpool is limited to the city itself, to urban areas adjoining it, and to towns facing it across the River Mersey (although its influence may be detected in other neighbouring accents, including those spoken for a considerable distance along the coast of north Wales [16].

Characterized by its unique vowel shifts, melodic intonation, and strong influence from Irish and Welsh immigration, Scouse stands out among northern English varieties, which is why it is worth exploring.

1.4.1 Historical Background of the Scouse Variety.

The Scouse variety, one of the most distinctive and recognizable varieties of English in the UK, is deeply intertwined with Liverpool's rich and complex history. Unlike many other regional accents and dialects, which have evolved gradually over centuries, Scouse emerged relatively recently, shaped by waves of migration, trade, and cultural exchange.

Scouse is a relatively recent development. Until the mid-19th century, Liverpudlians spoke similarly to their Lancastrian neighbors, and remnants of this softer Lancashire tone can still be heard in the speech of older generations. Like many aspects of Liverpool's culture, the Scouse accent emerged due to the city's role as a major port. The melting pot created by the influx of people from far and wide was the foundation of the distinctive Scouse sound [3].

At the turn of the 19th century, Liverpool rapidly developed into one of the busiest ports in the world, handling trade, shipbuilding, and industry, which created numerous job opportunities. Given the proximity and convenient travel route, the Welsh began migrating to the city. Moreover, in 1845-1852, Ireland experienced the Great Famine, which caused mass starvation and economic devastation in the area [20]. According to an article titled '*A trip through Liverpool's rich Irish history*' in the Guardian newspaper, Liverpool is widely known as the 'real capital of Ireland', with an estimated three quarters of its population having some Irish roots [26]. Thus, the connection between the peoples cannot be denied.

Furthermore, Liverpool's role as a major port city facilitated constant interaction between locals and migrants, accelerating the fusion of linguistic elements. They congregated and obviously, that had an impact on the way people spoke. That is why we have to admit that the Scouse accent was shaped significantly by the Irish and Welsh migrants who arrived in Liverpool during the 19th century. Over time, these influences distinguished Scouse from other northern English varieties, giving it the unique sound it has today.

What is more, Scouse retains some features of the Lancastrian variety because Liverpool was historically part of Lancashire and shared linguistic traits with the surrounding region before developing its own distinct speech patterns. Even as Liverpool developed its own identity, linguistic ties to the wider Lancashire region persisted, especially among older generations and those in suburban or rural areas, still exhibiting Lancashire-like pronunciation patterns.

In conclusion, the Scouse variety is not just a product of Liverpool's historical development as a major port city, but also a symbol of its diverse cultural

background. Today, it remains a powerful marker of local identity, rooted in the history of Liverpool's people and their rich, multifaceted heritage.

1.4.2 Key Phonetic Features: Vowels, Consonants, and Intonation.

The phonetic landscape of the Scouse variety has been profoundly shaped by the waves of Irish and Welsh migration to Liverpool during the 19th century. As Liverpool developed into a thriving port city, it became a melting pot of languages and dialects, with Irish and Welsh migrants playing a particularly significant role in shaping its speech patterns. Unlike other northern English accents, which evolved gradually within relatively stable linguistic communities, Scouse emerged as a dynamic mixture of local Lancastrian speech, Hiberno-English (Irish English), and Welsh phonetic traits.

According to Arthur Hughes, Peter Trudgill and Dominic Watt, the vowel sounds of the Scouse variety have the following features:

- Unlike RP, words such as *dance* and *daft* are pronounced with /a/ rather than /ɑː/.
- There is no contrast between *put* and *putt*, with both pronounced as /pʊt/.
- Words like *book* and *cook* are pronounced with a fronted and diphthongal /uː/, often realized as [ɨʉ].
- The final vowel in words such as *city* and *seedy* is /i/ rather than the lax [ɪ] found in other northern varieties.
- The contrast between *fair* (RP /fɛə/) and *fir* (RP /fɜː/) is neutralized in Scouse, with both words typically realized as [ɛː] or, less commonly, [ɜː].
- Diphthongs such as /eɪ/ and /əʊ/ are realized as narrow diphthongs, giving them a more monophthongal quality compared to other English varieties.

Furthermore, the linguists claim that the accent exhibits several distinctive consonantal features that contribute to its recognizability:

- The plosives /p t k/ are heavily aspirated and often affricated. For instance, *can't* may be pronounced as [kxɑːnt], and *back* as [bax]. In final position, these sounds may undergo spirantization, yielding realizations such as [ɸ s x].

- Unlike many other urban northern accents, Scouse does not exhibit widespread glottalization of /t/. Instead, /t/ is frequently realized as a tapped [ɾ] in intervocalic positions, particularly in cases of *t*-flapping.
- Scouse also displays the *T-to-R* phenomenon, where intervocalic /t/ is realized as a rhotic segment, either [ɾ] or [ɹ], in words such as *matter*, *what*, *but*, and *get*, so that got a sounds like "gorra" and get as "gerra" [24].
- Furthermore, Scouser's also have an inability and history with the pronunciation of certain sounds. A struggle within Scouse is the speech sound /t/, which has been termed the 'slit t'. This is a phonological feature of Scouse that has derived from the Irish accent and is also featured within the Gaelic Irish language too [19].
- Liverpudlians may also render the letter t at the start of words as a 'ts' sound, so the pronunciation of 'tree' becomes 'tsree' [19].
- The rhotic consonant /ɹ/ is typically realized as a tap [ɾ], reinforcing the distinctive rhythm of the accent.
- The phoneme /h/ is frequently dropped but is sometimes retained, indicating some variability among speakers.
- Word-initial /ð/ may be realized as [d], as in *there* [dɛː].
- The affricative sound /θ/ made alongside /t/ creates a more /ts/ sound which is typical of Northern Irish speakers around areas such as Belfast [19].
- The velar nasal /ŋ/ is realized as [ŋg] in words like *singer* and *thing*, a feature not typically found in RP.

What is more, Scouse is known for its distinctive intonation patterns, which set it apart from other northern English varieties:

- A notable feature of Scouse is the use of rising intonation at the end of declarative sentences. While rising intonation is typically associated with questions in many English dialects, in Scouse, statements often end with a rising pitch, which can influence how statements are perceived by listeners [31, p. 1-6].
- Stress patterns can be influenced by Irish English, leading to a more rhythmic and dynamic prosody compared to the flatter intonation patterns of RP.

- Velarization plays a crucial role in the overall sound of Scouse speech. The presence of velarized or dark /l/ throughout the accent contributes to its unique timbre [16].

In conclusion, the combination of these vowel, consonant, and prosodic features makes Scouse one of the most recognizable and distinctive varieties of English spoken in the British Isles.

1.4.3 Sociolinguistic Factors: Identity, Prestige, and Cultural Representation.

According to Cambridge Dictionary, sociolinguistics is, by definition, "the study of how language is used by different groups in society" [9]. Yet again, according to Coupland and Jarowski (1997), sociolinguistics is defined as "the study of language in its social contexts and the study of social life through linguistics" [12, p. 25-30]. Sociolinguistics studies show that language is not only a means of communication but also a powerful marker of identity and social belonging. Regional varieties, as a key component of linguistic variation, reflect complex sociolinguistic dynamics that go beyond phonetic distinctions. The way people see and judge a language variety is influenced by history, society, and culture. In the context of modern English, accents and dialects are deeply intertwined with issues of identity, social prestige, and cultural representation. Some regional varieties are linked to high status and authority, while others are seen as more working-class or strongly tied to a specific local area.

Furthermore, in "A sociolinguistic study of UK varieties of English: a case study of Liverpool English", it was pointed out that language actively shapes identity [34, p. 68]. The researcher relies on Bucholtz and Hall's and Blommaert's studies, according to which identity is not a fixed construct but rather an ongoing process shaped by interaction with others. Moreover, it is argued that individuals may critique their own cultural or national identity in private yet defend it in broader social contexts. This suggests that identity is not just personal but also socially constructed and negotiated. This perspective challenges the traditional view of language as a simple reflection of identity, suggesting instead that language actively shapes identity. This chapter explores the way the Scouse variety is perceived.

It is widely known that Scouse and Scousers are highly recognisable within the UK, with research revealing longstanding associations with white, urban, working-class male speakers [28, pp. 52-70].

The study titled "Stereotyped accent judgements in forensic contexts: listener perceptions of social traits and types of behaviour" examines how listeners' perceptions of various British regional accents and dialects influence their judgments about individuals' characteristics and the likelihood of engaging in certain behaviors, including criminal activities. According to its findings, Scouse is quite often associated with criminal behavior. Participants perceived speakers with this variety as more likely to engage in criminal activities compared to those with varieties considered to be higher in status, such as Standard Southern British English (SSBE). This suggests a bias associating the Liverpool variety with a higher inclination for criminal behavior.

The study also found that Scouse is one of the British varieties, which were perceived as lower status and were associated with negative social traits [32]. These perceptions could influence judgments about an individual's character and behavior. The findings indicate that individuals speaking the Scouse variety may face biases in forensic settings, where their accent could negatively influence perceptions of their credibility or character [32]. This highlights the need for awareness and mitigation of accent-based biases within the criminal justice system to ensure fair treatment.

Additionally, the representation of Scouse in media and popular culture contributes to its sociolinguistic status. Television, films, and online content often reinforce stereotypes about Scousers, portraying them in roles associated with working-class struggles, criminality, or comedic exaggeration. This repeated cultural framing further solidifies social perceptions, shaping attitudes toward Scouse speakers both within and outside Liverpool.

The sociolinguistic dynamics of Scouse demonstrate how language, identity, and prestige are deeply interconnected. While Scouse serves as a strong marker of regional identity, it is also subject to social judgments that reflect broader power structures and cultural narratives.

1.5 The Geordie Variety.

To begin with, according to the Geordie Guide by Newcastle University, Geordie is an English dialect spoken in the Tyneside area of North East England, especially connected with Newcastle upon Tyne, and sometimes known in linguistics as Tyneside English or Newcastle English [29]. The Geordie variety of English is spoken in the northernmost conurbation of England, the city of Newcastle-upon-Tyne and neighbouring towns. The region is also called Tyneside, which would include the city of Newcastle along with towns along the valley of the River Tyne as far as the North Sea [8, p. 40]. Geordie is a distinct urban variety in England that differs significantly from other English varieties in terms of phonetics and phonology. It actually shares many features with other English varieties from the Midlands northwards and Scotland.

The Geordie variety of English, spoken in Newcastle and the surrounding Tyneside area, stands out due to several distinctive phonetic, phonological, lexical, and grammatical features that set it apart from other English varieties.

1.5.1 Historical Background of the Geordie Variety.

The Geordie variety, native to Newcastle upon Tyne and its surrounding areas in North East England, boasts a rich history that reflects the region's complex socio-cultural evolution. Its origins are deeply rooted in the linguistic influences of the Angles, a Germanic tribe from the regions now known as Schleswig-Holstein and the Danish Peninsula [23]. The Geordie variety started to develop after the Romans left Britain in the 5th century and the Anglo-Saxons, originally from what is now Denmark and Germany, started invading Britain [14].

The Anglo-Saxons brought their language to England, which is now referred to as Old English. This language was predominantly Germanic, incorporating only a few expressions from the Celtic languages, as the Celts had been pushed westward and northward. Although Old English differs significantly from modern English, nearly half of the words used in contemporary English can be traced back to it. Over the time, it developed into four major dialects: Northumbrian, spoken north of the river Humber; Mercian, spoken in the Midlands; Kentish, spoken in Kent; and West

Saxon, spoken in the southwest. Over the years the Anglo-Saxon language changed greatly due to the influence of Latin, Greek, Old Norse1 or Norman-French. As a result of its relative remoteness and isolation, the North-East was not influenced so heavily and Old English has not been changed to such an extent as it was in other parts of England. That is why the modern-day dialects that bear the closest resemblance to Old English are the dialects of Northumberland, Durham and Tyneside [14].

Additionally, the relative isolation of the region played a key role in preserving its dialect, as seen during the Viking invasions of the 9th century. These invasions primarily impacted areas south of the River Tees, leaving the North East largely untouched by the linguistic changes that were reshaping Yorkshire dialects. Although Viking influence reached neighboring regions such as Yorkshire, South Durham, and Cumbria, and had some impact on Geordie, the dialect maintained a strong cultural identity, which contributed to its distinct linguistic features [10, pp. 13-16].

The important question to discuss is also the origins of the term "Geordie" itself and it has quite an intriguing etymology. While commonly used today to describe both the people of Tyneside and their distinctive speech, its origins are varied and complex. Some theories suggest that "Geordie" was initially a general term for a local person, possibly derived from the name "George," which was popular in the region. Over time, it became specifically associated with the inhabitants of Newcastle and their dialect [33, pp. 76-79].

Moreover, there are some other theories people have associated the Geordie variety with. One of them is the Miner’s Lamp Theory, according to which the name "Geordie" comes from George Stephenson, an engineer from Northumbria. In the early 19th century, he invented a safety lamp for miners, but another man, Humphry Davy, came up with a similar design around the same time. There was a big dispute over who invented it first, but eventually, both were recognized. However, miners in Tyneside preferred Stephenson’s lamp and started calling it the "Geordie lamp". Over time, the miners themselves became known as Geordies [30].

The following theory we would like to discuss is also linked to George Stephenson. It claims that "Geordie" comes from the man's strong North East accent. In 1826, he gave evidence to a Parliamentary Commission on Railways, and Londoners mocked his blunt way of speaking. After that, people in the capital started calling coal workers from Tyneside "Geordies", linking them to Stephenson's way of speaking.

However, the most popular theory is known as the Jacobite Rebellion Theory. The theory most Geordies believe today comes from the Jacobite Rebellion in the 18th century. At that time, King George I ruled England, Scotland, and Wales. Many people in Scotland and Northumbria didn't support him and instead wanted James Stuart to be king. These supporters, known as the Jacobites, started an uprising. Almost all the towns in the North were willing to join the rebellion, except for Newcastle. The city remained loyal to George I, as they relied on the king's support. This frustrated the Jacobites, who started mockingly calling Newcastle's people "Geordies"—a reference to their loyalty to King George. Over time, this nickname stuck and became a regional identity rather than an insult [15].

In conclusion, the Geordie variety, shaped by both external invasions and internal cultural identity, continues to be an important marker of regional pride, preserving its rich historical and linguistic heritage in the face of changing times.

1.5.2 Key Phonetic Features: Vowels, Consonants, and Intonation.

In this section, we will explore the key phonetic features of the Geordie variety, focusing on vowels, consonants, and intonation. Understanding these features is essential for analyzing how the Geordie dialect differs from other accents of English. Each of these elements - vowels, consonants, and intonation - plays a significant role in shaping the sound of Geordie speech and contributes to its distinctiveness.

We will first look at the vowel sounds in Geordie, highlighting the differences from other regional accents. According to Joaquín Bueno-Amaro, the variety has the following features:

- Preservation of Middle English (ME) /u:/, instead of RP /au/ (for example: about, also spelt aboot [ə'bu:t]; town, also spelt toon [tu:n]; down, also spelt doon [du:n]), and sometimes change into [ɪə] (for example: boot [bɪət]).
- Preservation of ME /u/, instead of RP /ʌ/ (for example: homophones put and putt [put], could and cud [kud], book and buck [buk], shook and shuck [ʃuk]): This is a major identifying feature of Geordie, and even most Northern Englishes.
- Long vowel /i:/ when followed by a former fricative sound, instead of RP /aɪ/: ME /ɪ/ when followed by a fricative lost the fricative and lengthened, but it did not diphthongise into /aɪ/ as it happened in RP (for example: fight [fi:t]; night, also spelt neet [ni:t]; right, also spelt reet as in alreet for all right [ri:t]).
- Open vowel similar to /a/ in final position or in centring diphthongs /ɪə/ and /ʊə/, instead of RP /ə/ (for example: better ['beʔa], beer [bia], cure ['kju:a]).
- Semi-open vowel /æ/ when followed by a voiceless fricative or by a nasal and a consonant, instead of RP /ɑ:/ (for example: glass, path, France, past, laugh, homophones ant and aunt), as in General American.
- Long vowel /a:/ when followed by velar /l/ or /r/, instead of RP /ɔ:/ and /əʊ/ (for example: all, also spelt al or aal [a:l]; talk [ta:k]; war [wa:]; cold [ka:ld])
- Long vowels /e:/ and /o:/, instead of RP diphthongs /eɪ/ and /əʊ/ (for example: face [fe:s], goat [go:t], away [ə'we:], snow [sno:], make [me:k]).
- Narrow diphthong [ɛɪ], instead of RP /aɪ/ (for example: Tyneside ['tɛɪnsɛɪd], shine [ʃɛɪn]).

Moreover, some of the consonant sounds in the Geordie variety differ from those of the other British Englishes. Joaquín Bueno-Amaro claims that when it comes to Geordie, we should bear in mind the following features of its consonant sounds:

- No h-dropping: the Geordie dialect is the only urban dialect which preserves the pronunciation of /h/.
- Non-rhoticity: Geordie is a non-rhotic accent, which means that [ɹ] is not realised in post-vocalic positions, as in four or heart, unless followed by a vowel, as in very or parade. The intrusive [ɹ] to mark word boundaries is not common either, and in such cases, Tyneside English is characterised by an intrusive glottal stop [ʔ].

- Glottalisation of medial voiceless plosives: this might probably be one of the most distinguishing traits of Geordie speech. Intervocalic voiceless plosives, that is, /p/ /t/ and /k/, are replaced by a glottal stop [ʔ] (for example: couple [‘kuʔəl], city [‘sɪʔi:], better [‘beʔa], water [‘wɔ:ʔa], reckon [‘reʔən]). In some cases, it also happens with voiceless plosives between a sonorant and a vowel (for example: Ashington [‘æʃɪŋʔən]).

Regarding prosody, that is, intonation, pitch, voice quality, stress, loudness and rate of delivery, Tyneside and Geordie English are renowned for an extended lilting intonation with several final rising patterns, the so-called Geordie ‘sing-song’ which sounds to non-Geordies as tentative or questioning [25].

Basing on the aforementioned features of the Geordie variety, we can conclude that it stands out due to its distinctive phonetic patterns, contributing to its enduring identity within English dialects.

1.5.3 Sociolinguistic Factors: Identity, Prestige, and Cultural Representation.

As it was already stated in chapter 1.4.3, language is more than just a means of communication; it is deeply intertwined with social identity, cultural heritage, and societal hierarchies. Sociolinguistic factors such as identity, prestige, and cultural representation play a crucial role in shaping linguistic variation and influencing how different accents and dialects are perceived. This chapter explores the impact of these factors on the Geordie variety.

Historically, the Geordie variety was rated low on status but high on solidarity [27]. It was linked to the industrial past of Newcastle, particularly coal mining and shipbuilding, strengthening its connection with working-class heritage. The perception of Geordie varies depending on context, speaker, and audience. While it is often associated with friendliness and authenticity, it was also been subject to stigmatization in certain professional and educational settings.

However, recent studies indicate a shift in perception. According to the survey carried out by linguists in 2015 on the Geordie identity run for Bueno-Amaro’s research, nowadays the variety is rarely rated low [8, p. 43-50]. Geordie has gained increased attractiveness ratings, reflecting a growing appreciation for its unique

qualities. This change aligns with the commodification of the dialect, where elements of Geordie speech are used in media and branding, enhancing its prestige and visibility [4].

In summary, the Geordie variety is more than just a means of communication; it is a vital component of regional identity and cultural expression. Its evolving perception reflects broader social changes and the dynamic nature of language prestige and cultural representation.

1.6 A Comparative View of Scouse and Geordie in Research

We find it essential to look at the studies which were carried out to identify differences and similarities of the selected varieties, since there are certain views about the accents converging. This chapter dwells on Strycharczuk's research conducted in 2020 relying on crowd-sourcing speech data and quantifying variation with machine learning. Its aim was to compare the Northern varieties of British English and to prove or disprove their livelling [37].

According to the research, both Scouse and Geordie are well discriminated from the varieties of other Northern cities.

The phonetic profile of Liverpool is marked by a set of salient vowel features:

- Lowered lettER vowel: identified as a key classifier, this feature had not been widely discussed in previous literature and contributes to Scouse's unique sound.
- Fronted FOOL vowel: this contrasts with the more retracted realizations found in cities like Leeds and Sheffield.
- Lowered DRESS vowel: adds to the distinctiveness of the accent.
- Lowered NURSE vowel: more extreme than in other cities, further contributing to its phonetic distinctiveness.
- happY-tensing: present and consistent, aligning with earlier accounts of Scouse phonology.

These features collectively position Scouse as a highly differentiated variety with strong regional characteristics.

The Geordie variety also displays distinctive vowel characteristics:

- Lowered STRUT vowel: the most defining feature of Newcastle speech in the model; STRUT is realized with a low F1, making it clearly distinct from FOOT.
- Fronted offglide in PRICE: a unique phonetic trait that helps distinguish Newcastle from other northern cities.
- happY-tensing: similar to Liverpool, indicating a raised realization of the happY vowel.
- Front-centralized NURSE: somewhat unexpected, as it aligns more with Standard Southern British English than traditional descriptions of Tyneside English.
- lettER vowel lowering: confirmed by the study and consistent with earlier descriptions by Wells (1982b).

Despite some evidence of convergence with Standard Southern British English, particularly in NURSE, Geordie retains robust features that support its classification as a distinct variety.

Both accents share some broad northern features but diverge notably in the phonetic realizations of specific vowels.

- GOOSE/FOOL: is fronted in both varieties, though less so in Newcastle than in Liverpool.
- FOOT: remains retracted in Liverpool and slightly fronted in Newcastle, but still retains backness overall.
- BATH and TRAP: show similar degrees of frontness in both cities, consistent with the general Northern English pattern (i.e., lack of a BATH–TRAP split).
- lettER: lowered in both varieties, although this phenomenon in Liverpool represents a newer finding.
- NURSE: may be a centralized, rounded or unrounded vowel in Scouse, but fronted and rounded or strongly retracted in Geordie.

Furthermore, we find it important to look at the diphthongal variation in Scouse and Geordie. According to Strycharczuk's research, diphthongs display greater regional variability across Northern English cities than monophthongs and

both Liverpool and Newcastle exhibit distinctive diphthong patterns, with Liverpool showing innovative or reduced forms in many cases, and Newcastle retaining or even exaggerating diphthongal movement in others.

For example, the FACE diphthong is more “diphthongal” than in most other cities; the glide is clearly articulated, consistent with the Scouse tendency toward extreme vowel dynamics, while Geordie speakers would pronounce it as a closing diphthong.

Moreover, the GOAT diphthong serves as a clear regional marker, with Liverpool’s GOAT-fronting reinforcing its phonological distinctiveness. Newcastle maintains a more conservative realization.

Regarding the PRICE diphthong, it appears monophthongal in Scouse and exhibits a very wide diphthong in Geordie, with significant movement from a back, low onglide to a front, high offglide.

What is more, the NEAR diphthong tends toward monophthongisation, although it retains a short centering trajectory in Scouse and in Geordie it is realised as a centring diphthong, consistent with the broader Northeast English pattern.

The SQUARE diphthong is raised and overlaps with NURSE, indicating a NURSE–SQUARE merger in Scouse and is clearly diphthongal with a low offglide in Geordie, marking it as phonetically distinct from both Liverpool and other Northern varieties.

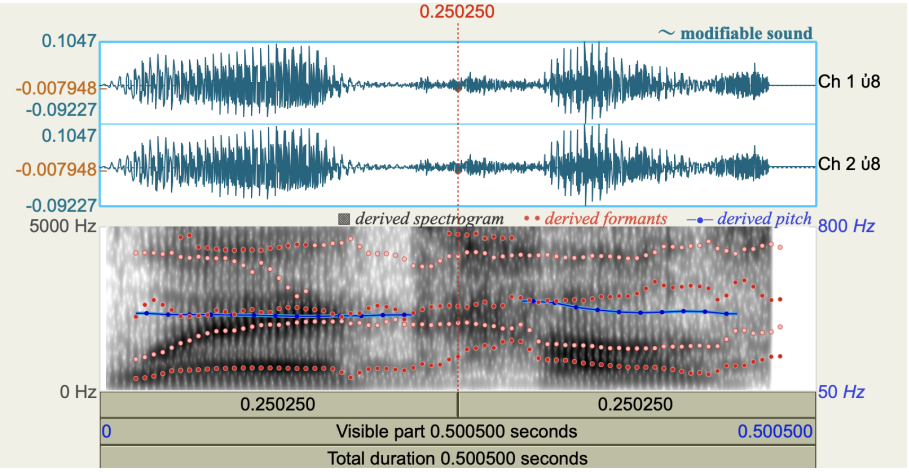
In summary, the comparative analysis of Scouse and Geordie based on the 2020 study by Strycharczuk et al. confirms that both varieties maintain robust regional identities despite some signs of convergence. In our research, we would like to explore the realisation of tense and lax vowels in the selected varieties — namely NURSE, FOOL, STRUT and FOOT vowels. We consider our choice to be pertinent, since according to the research conducted in 2020 the aforementioned vowel sounds are clearly different and do not demonstrate any traces of levelling. We aim to explore whether this distinctness is relevant nowadays and whether the selected sounds have modified becoming closer to each other.

1.7 Integrating PRAAT into Experimental Phonetic Research

The primary methodological tool for the acoustic analysis in this study is PRAAT, a widely used scientific software package for the analysis of speech in phonetics, developed by Paul Boersma and David Weenink at the University of Amsterdam. Since its creation, PRAAT has become an essential instrument for phoneticians and linguists due to its powerful and accessible functions for analyzing speech sounds. It was chosen for this research for its reliability and precision in providing detailed visual and acoustic measurements of speech, which are indispensable for studying the subtle phonetic variations that characterize regional accents like Scouse and Geordie.

While PRAAT offers a wide array of functions, this study primarily relied on its core capabilities for waveform, spectrogram, and formant analysis to investigate vowel quality.

The initial step in our analysis involved visually inspecting the sound files within PRAAT. The software displays a **waveform**, a graph of sound pressure over time, which helps in identifying the boundaries of words and sounds. Below the waveform, PRAAT generates a **spectrogram**, which is a visual representation of the spectrum of frequencies of a sound as they vary with time. The darker areas on the spectrogram indicate frequencies with higher intensity, which is crucial for locating vowels and their resonant frequencies (formants).



Picture. Main functions of PRAAT, where white and blue make a waveform, white and black - a spectrogram, green stands for intonation, blue - pitch, red- formants.

The most critical function for this research is **formant analysis**. Formants are the resonant frequencies of the vocal tract, and their values, particularly the first two (F1 and F2), are the primary acoustic correlates of vowel quality. **F1 (First Formant)** correlates inversely with vowel height. A higher F1 value (in Hertz) corresponds to a lower, or more open, vowel. **F2 (Second Formant)** correlates with the frontness or backness of a vowel. A higher F2 value (in Hertz) corresponds to a fronter vowel articulation. By accurately measuring F1 and F2, we can acoustically plot and compare the vowel sounds produced by the Scouse and Geordie speakers.

Our research methodology involved a systematic application of these PRAAT functions. The source material consisted of spontaneous speech samples from publicly available interviews with Darci Shaw (Scouse) and Tilly Lockey (Geordie).

To conduct our research, we have the following plan of action:

1. Target words containing the NURSE, FOOL, STRUT, and FOOT vowels are identified within the audio recordings. Using the visual information from the waveform and spectrogram, each target word was isolated, and the specific segment corresponding to the vowel sound was carefully marked.

2. For each segmented vowel, PRAAT's formant analysis algorithm is used to track the F1 and F2 values. The midpoint of the vowel is identified to ensure a stable measurement, and the F1 and F2 values at this point are extracted in Hertz (Hz).

3. These F1 and F2 measurements for each vowel token are compiled into a dataset. This raw acoustic data then forms the basis for the statistical and comparative analyses presented in this paper, allowing us to calculate mean formant values, standard deviations, and ranges to characterize and compare the vowel systems of the two speakers.

The spectrogram images included in this paper (see Appendices) provide a visual record of the acoustic analysis.

By employing PRAAT in this manner, we were able to conduct a detailed, data-driven examination of the phonetic features that characterize the Scouse and

Geordie varieties of English as spoken by our selected speakers, allowing for a precise comparison of their vowel realisations.

CHAPTER 2: COMPARATIVE ANALYSIS OF TWO BRITISH VARIETIES: SCOUSE AND GEORDIE.

2.1 Comparison of Segmental Phonetic Features.

The analysis of regional varieties requires a careful examination of both segmental and suprasegmental phonetic features. In this chapter, the focus is placed on segmental features, which refer to the individual speech sounds - vowels and consonants — that form the basis of spoken language. This chapter presents a comparative analysis of the segmental phonetic features observed in the selected regional varieties — Scouse (Liverpool) and Geordie (Newcastle).

This research will be based on the analysis of the speech of two young individuals — one from Liverpool and the other from Newcastle — in order to examine whether and to what extent the characteristic features of Scouse and Geordie are preserved, with the underlying hypothesis that these regional varieties may be levelling or converging.

2.1.1 Variation in Vowel Sounds across the Selected Varieties.

This section compares the vowel and consonant systems of the Scouse and Geordie accents. Listening to 21-century born speakers of the selected varieties — the 23-year-old Liverpool actress Darci Shaw and the 19-year-old blogger Tilly Lockey coming from Consett, a small city near Newcastle — and analysing the data on sound realisation collected by scholars, we have observed whether in terms of pronunciation their speech sticks to the phonological features and principles outlined in the studies analysed and mentioned in the theoretical part of the paper.

Darci Shaw and Tilly Lockey were chosen because they exemplify the target demographic — Generation Z native speakers of their respective urban centers — whose speech is both readily accessible in high‑quality, unscripted video formats and likely to display salient local accent features: as a 23-year-old Liverpool actress, Darci Shaw provides clear, spontaneous Scouse data from professional interviews, while 19-year-old Consett-born blogger Tilly Lockey offers comparably rich, contemporary Geordie speech from vlogs. Their ages ensure that we capture the most current realizations of Scouse and Geordie among speakers born after 2000,

minimizing influence from older social networks, and their public profiles guarantee consistent, unedited audio suitable for precise acoustic measurement. Both are young women, and sociolinguistic research shows that female speakers in this age group often lead phonetic change, ensuring that their vowel patterns capture the most innovative, in-progress shifts in Scouse and Geordie; women in this age cohort typically have broader social networks — both locally and via social media — and often act as early adopters and diffusion points for innovative features

To ensure accuracy and objectivity in our phonetic analysis, we employ PRAAT, a widely recognized tool for acoustic analysis in phonetic research. By using PRAAT, we are able to visualise and measure key acoustic properties of speech, such as formant frequencies (F1 decoding vowel height; and F2 uncovering vowel backness and frontness), duration, and pitch, which are essential for identifying subtle yet significant differences in vowel and consonant realisations.

Through the application of PRAAT, we can analyse selected lexical sets produced by young speakers from Liverpool and Newcastle. This methodological approach enables a data-driven examination of whether the speakers preserve traditionally described features or whether there are any signs of levelling or convergence across the selected varieties.

2.1.1.1 The Realisation of Tense Vowels.

To begin with, Strycharczuk (2020) reports that the overall tense vowel inventories of Scouse and Geordie appear broadly comparable; yet two specific lexical sets — FOOL and NURSE — exhibit notable differences. In the Liverpool variety, FOOL is realized with marked fronting, often approximating [ʉː] (i.e., a close, front-rounded vowel). By contrast, in the Newcastle variety FOOL tends to be less fronted, typically realized as a back or near-back vowel such as [uː] or [ʊː]. Similarly, the NURSE vowel in Scouse is generally lowered and centralized, and may be either rounded or unrounded, whereas in Geordie it is comparatively less lowered, maintains a front-central quality, and is usually rounded. The present study seeks to confirm whether these distinctions persist in the speech of our selected Generation Z

speakers, or whether the FOOL and NURSE vowels have begun to converge across the two varieties.

We first examine the NURSE vowel as produced by our Scouse informant, actress Darci Shaw. From her appearances in unscripted video interviews, we extracted nine NURSE-token words and measured their acoustic properties. Specifically, the following tokens were selected:

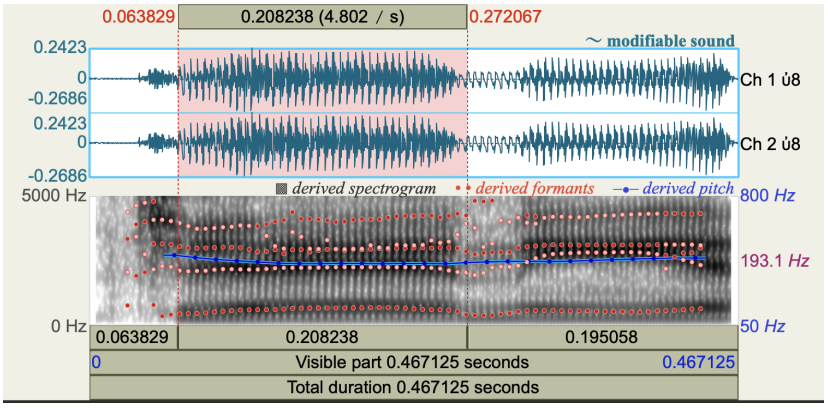
From her interview to *The Upcoming* titled *"Darci Shaw interview at The Colour Room premiere in London" (The Upcoming, 2024, 6:07)* we extracted the following tokens: *first* [0:18], *heard* [2:46], *journey* [3:41], and *girlfriend* [3:57]. The other three tokens were extracted from the YouTube video *"This City is Ours Jack McMullen & Darci Shaw interview 2025" (Dave's Cave, 2025, 4:17)*: *person* [00:41], *world* [00:45], and *rehearsals* [02:27]. The next token *workhouse* [2:05] was retrieved from the YouTube video *"Em Wallbank chats to the cast of A Thousand Blows - Part 1" (em wallbank, 2025, 7:56)*. The last token was extracted from the YouTube video *"THE IRREGULARS: Harrison Osterfield, Thaddea Graham & Darci Shaw Talk New Netflix Series! (On Demand Entertainment, 2021, 5:03)* — *nervous* [2:04]. We analysed the realisation of the word in PRAAT. In order to conduct the research, we extracted midpoint F1 and F2 values of the aforementioned token in Hertz. F1 tells us how "open" the vowel is (higher F1 = more open), and F2 tells us how "front" it is (higher F2 = fronter). Across these nine tokens, the mean F1 was 697.4 Hz (SD = 58.0 Hz), and the mean F2 was 1769.9 Hz (SD = 283.9 Hz). In raw terms, the speaker's most open instance of NURSE (in "world") reached 763.3 Hz in F1, and the closest (in "journey") dropped to 595.1 Hz. On the front–back dimension, the backest token (in "world") sat at 1441.5 Hz in F2, while the frontest (in "journey") pushed up to an exceptionally high 2191.0 Hz.

Concerning classic British‑English NURSE (/ɜː/), it typically falls around F1 ≈ 500 Hz, F2 ≈ 1400 Hz, representing a mid-central unrounded vowel. Darci Shaw's mean NURSE vowel (F1=697.4 Hz, F2=1769.9 Hz) is markedly different: it is significantly more open (F1 is nearly 200 Hz higher) and substantially fronter (F2 is

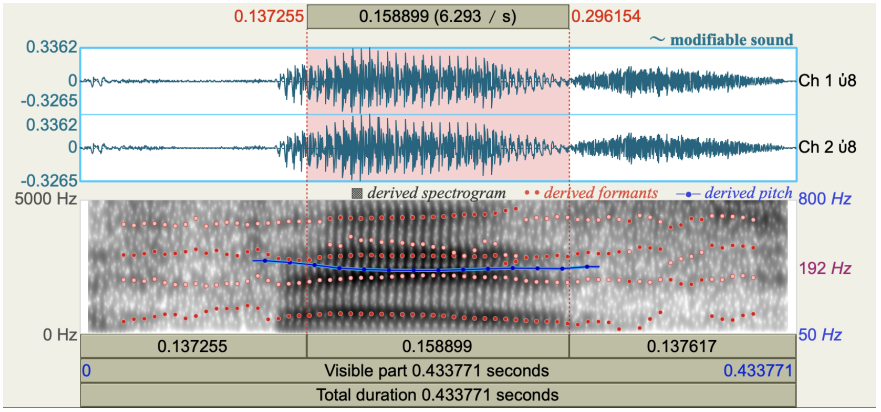
over 350 Hz higher) than the RP /ɜː/ target. This indicates a major shift in phonetic quality.

Comparing this to traditional Scouse realizations of the NURSE vowel, which is famously fronted and raised, often realized as a close-mid front rounded vowel [øː] (with F1 typically around 350-450 Hz and F2 around 1300-1600 Hz) or, particularly in younger speakers, an unrounded [eː]-like quality (with a potentially higher F2), Darci Shaw's NURSE vowel presents an interesting development. Her mean F1 of 697.4 Hz is considerably more open (lower) than the traditionally cited close-mid Scouse NURSE. While her mean F2 of 1769.9 Hz is extremely high, indicating a very fronted articulation consistent with or even exceeding traditional Scouse NURSE fronting, and indeed falls within the F2 range typical of high front vowels like /iː/ (especially in tokens like "journey" at 2191.0 Hz and "first" at 2077.2 Hz), it is crucial to note that her significantly more open articulation (higher F1 value) means the resulting vowel is not /iː/. The spectrograms of Darci Shaw’s realisation of the words “journey” and “first” are presented in Picture 1 and Picture 2 respectively. Instead, this combination of a very high F1 and very high F2 points towards an open front vowel quality.

This finding of a more open quality aligns with Strycharczuk’s description of Scouse NURSE as "lowered." However, Darci Shaw’s mean of the sound F2 of 1769.9 Hz indicates an extremely high degree of fronting, consistent with or even exceeding the fronting associated with traditional Scouse NURSE vowel descriptions. This strong fronting observed in our data for Darci Shaw contrasts with Strycharczuk’s characterization of Scouse NURSE as "centralized." Indeed, the high F2 values in our study, especially in tokens like "journey" (2191.0 Hz) and "first" (2077.2 Hz), firmly place her realization in a very front, rather than central, phonetic space, pushing towards the F2 range of high front vowels like /iː/.



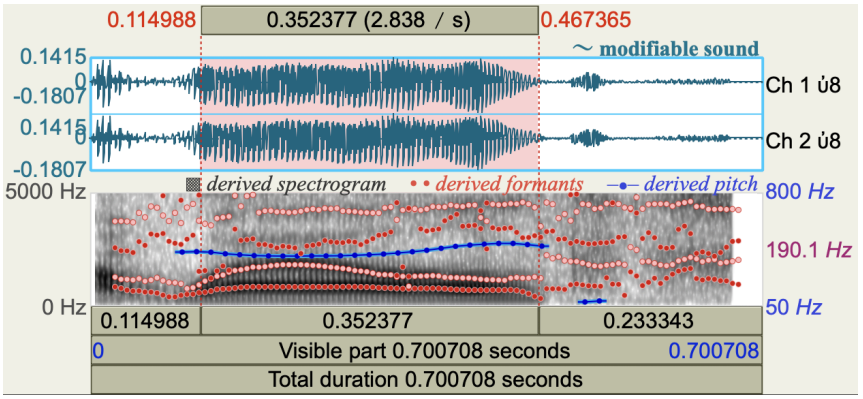
Picture 1. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "journey" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 3:41]



Picture 2. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "first" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 0:18]

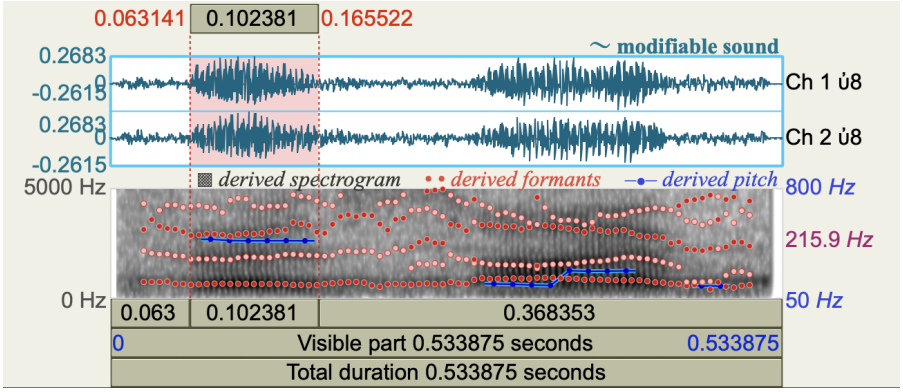
The standard deviation for F1 (58.0 Hz) indicates a moderate degree of variability in openness. The standard deviation for F2 (283.9 Hz) is larger, reflecting considerable variation in the front-back dimension, although all tokens remain relatively fronted compared to RP. The token "world", which spectrogram is presented in Picture 3, (F1=763.3 Hz, F2=1441.5 Hz) is the most open and relatively backest (though still fronter than RP NURSE), while "journey" (F1=595.1 Hz, F2=2191.0 Hz) is the closest and by far the frontest. This suggests that while Darci Shaw's NURSE vowel is consistently very fronted, its height and precise degree of fronting vary. The overall acoustic position—very open and very front—suggests a significant evolution from the canonical close-mid fronted Scouse NURSE, possibly

towards a more open front vowel quality, perhaps [ɛː] or even [æː]-like but with extreme fronting.

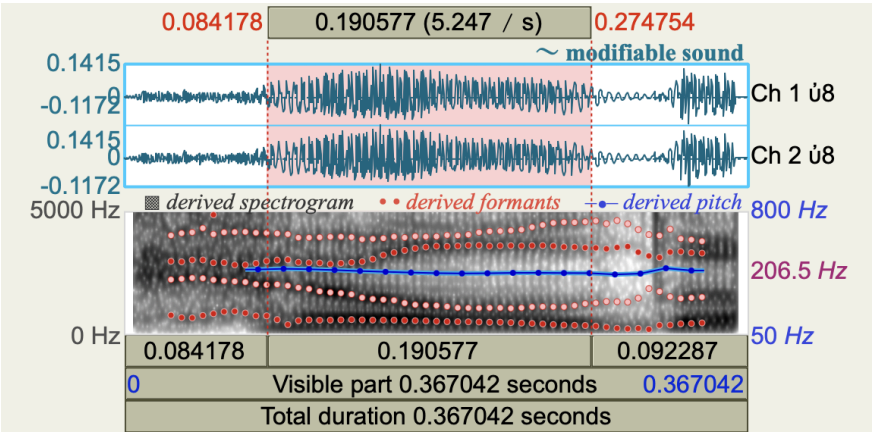


Picture 3. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "world" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview 2025, 0:45]

Furthermore, we also analysed the realisation of the NURSE vowel in Darci Shaw's counterpart from Newcastle — Tilly Lockey. We measured ten tokens of the NURSE vowel in the speech of Geordie speaker Tilly Lockey. We extracted three tokens from the YouTube video "*Dubai vlog! Losing my arms + speaking at the biggest global AI conference*" *(Tilly Lockey, 2025, 12:43)*: *world* [0:10], *birthday* [9:28], *first* [10:56]. The rest of the tokens were extracted from the YouTube video *"HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life" (Tilly Lockey, 2024, 27:56)*: *worst* [0:47], *curled* [1:22], *turn off* [2:59], *nurses* [3:14], *further* [7:58], *internal* [10:03], and *turmoil* [10:11]. Afterwards, we extracted their midpoint F1 and F2 values in Hertz. Across these ten tokens, the mean F1 was 563.1 Hz (SD = 38.5 Hz), and the mean F2 was 1734.6 Hz (SD = 308.7 Hz). According to our findings, the speaker's most open instance of NURSE (in "first") reached 642.4 Hz in F1 (the spectrogram is presented in Picture 4), and the closest (in "curled") dropped to 527.2 Hz e spectrogram is presented in Picture 5). On the front–back dimension, the backest token (in "world") sat at 1123.0 Hz in F2, while the frontest (in "internal") pushed up to an extremely high 2027.0 Hz.



Picture 4. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "first" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 10:56]



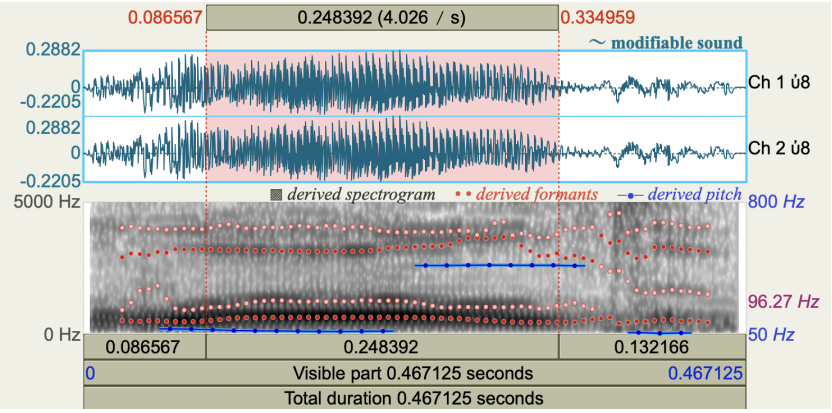
Picture 5. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "curled" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 1:22]

In classic British-English, the formants are the following: F1 ≈ 500 Hz, F2 ≈ 1400 Hz, which represents a mid-central unrounded vowel. Tilly Lockey's mean NURSE vowel (F1=563.1 Hz, F2=1734.6 Hz) is markedly different: it is somewhat more open (F1 is about 60 Hz higher) and substantially fronter (F2 is over 330 Hz higher) than the RP /ɜː/ target. This indicates a significant shift in phonetic quality towards a more open-front vowel.

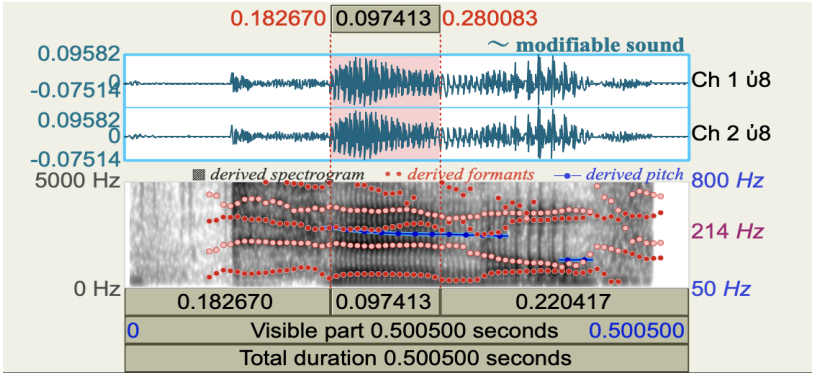
Comparing our results to traditional Geordie realizations of the NURSE vowel, which is well-known for its very fronted quality, often realized as [eː], [øː], or even higher and fronter variants approaching [iː] (with F1 values for closer variants sometimes around 350-450 Hz and F2 values typically high, often 1600-2000+ Hz),

Tilly Lockey's NURSE vowel shows strong alignment with this Geordie tendency for fronting. Her mean F2 of 1734.6 Hz is firmly in the front vowel space and consistent with documented Geordie NURSE. However, her mean F1 of 563.1 Hz suggests a realization that is more open than the closest variants of Geordie NURSE, placing it more in the mid-open front region.

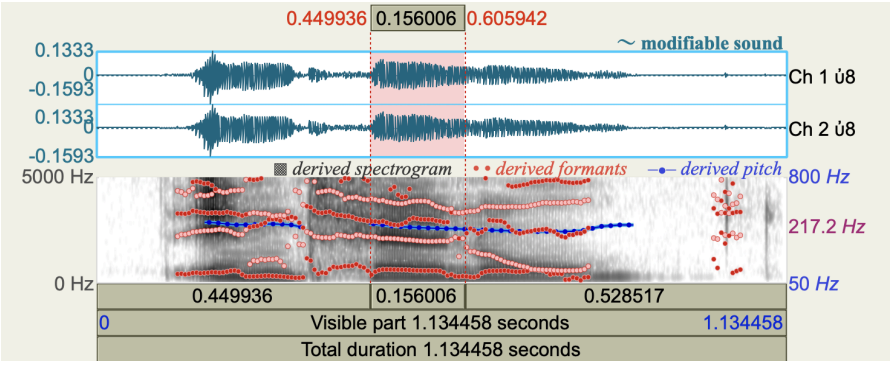
The standard deviation for F1 (38.5 Hz) is relatively low, indicating a fairly consistent degree of openness for this vowel, albeit in a more open position than RP. In contrast, the standard deviation for F2 (308.7 Hz) is quite large, highlighting significant variability in the front-back dimension. This is evident in the token "world" (F2=1123.0 Hz), which is realized as an unusually back vowel for a Geordie NURSE (even backer than RP NURSE), contrasting sharply with tokens like "internal" (F2=2027.0 Hz) and "turn off" (F2=2006.3 Hz), which are extremely fronted. The spectrograms of the tokens “world”, “turn off” and “internal” are presented in Picture 6, Picture 7, Picture 8 respectively. This wide F2 range suggests that while Tilly Lockey's NURSE vowel is, on average, very fronted in line with Geordie characteristics, its precise degree of frontness is highly variable and likely influenced by phonetic context or lexical factors. The overall acoustic profile is that of an open-front vowel, with the frontness being a key Geordie feature, though its realization is not uniform across all tokens. Thus, Tilly Lockey's NURSE vowel largely embodies the advanced fronting characteristic of modern Geordie, aligning with aspects of Strycharczuk’s research — particularly its visual representation of extreme frontness in Figure 5 in Strycharczuk’s study — while also exhibiting considerable individual variability in its precise front-back placement and a more open quality than the closest traditional variants.



Picture 6. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "world" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 0:10]



Picture 7. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the phrasal verb "turn off" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 2:59]



Picture 8. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "internal" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 10:03]

The second tense vowel, which was characterised by Strycharczuk as distinct across the Scouse and Geordie varieties, is the FOOL vowel.

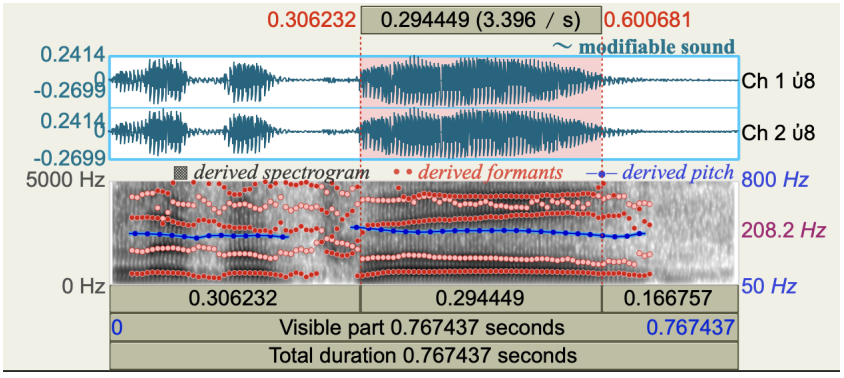
We measured eight tokens of the FOOL vowel in the speech of Scouse speaker Darci Shaw. The two tokens were extracted from the YouTube video *“Love, Liverpool // Letter 6 // A Thank You from Darci Shaw” (everymanplayhouse, 2020, 0:49)*: *roof* [0:10], *communities* [0:44]. The token *Liverpool* [3:50] was retrieved from the YouTube video *“Darci Shaw: Meet the teenage actor starring with Renée Zellweger in Judy Garland biopic” (ITV News, 2019, 1:59)*. The following two tokes *prove* [7:14] and *two* [8:03] were extracted from the YouTube video *“Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama.” (The Upcoming, 2025, 9:00)*. From the YouTube video *“Thaddea Graham, Darci Shaw & Harrison Osterfield Full 'THE IRREGULARS' Interview” (Onic Player, 2021, 6:22)* we extracted the token *costume* [4:57]. The token *group* [8:25] was taken from the YouTube video *“Thaddea Graham, Darci Shaw & Harrison Osterfield Interview: The Irregulars*” *(Screen Rant Plus, 2021, 8:54)*. The last token for the FOOL vowel we extracted was the word *beautifully* [14:26] from the YouTub video *“UK Premiere: Phoebe Dynevor, Darci Shaw, David Morrissey | The Colour Room (The Fan Carpet)” (The Fan Carpet, 2022, 18:54)*. We extracted their midpoint F1 and F2 values in Hertz. Across these eight tokens, the mean F1 was 446.7 Hz (SD = 77.0 Hz), and the mean F2 was 1905.2 Hz (SD = 312.1 Hz). In raw terms, the speaker’s most open instance of FOOL (in "Liverpool") reached 606.2 Hz in F1, and the closest (in "prove") dropped to 366.8 Hz. On the front–back dimension, the backest token (in "Liverpool") sat at 1258.1 Hz in F2, while the frontest (in "beautifully") pushed up to an extremely high 2355.6 Hz.

Darci Shaw’s mean FOOL vowel (F1=446.7 Hz,F2=1905.2 Hz) is markedly different from that of classic British-English with its F1 ≈ 300 Hz, F2 ≈ 800-1200 Hz: it is significantly more open (F1 is over 140 Hz higher) and substantially fronter (F2 is over 700 Hz higher on average than the backer RP variants) than the RP /uː/ target. This indicates a radical shift from the traditional close-back quality.

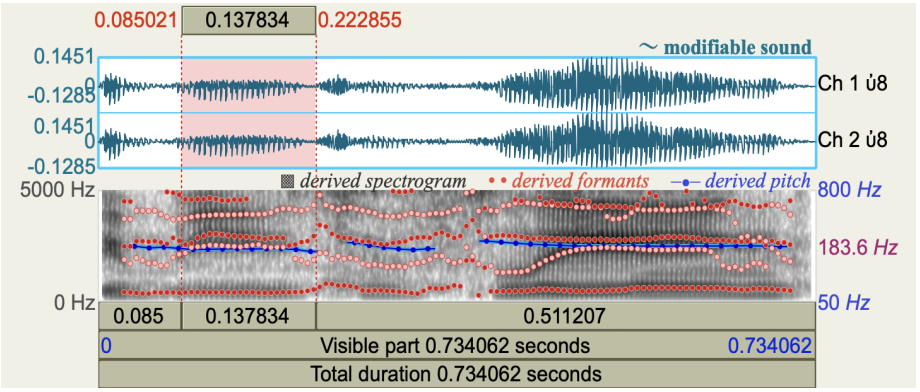
According to the prominent linguists’ findings, mentioned in Chapter 1, traditional Scouse realizations of the FOOL vowel are famously very fronted and often realized as a high front rounded vowel [yː] or a high central rounded vowel [ʉː]

(typically with a low F1 around 300-400 Hz and a high F2 from 1600 Hz up to 2200 Hz or more). The Liverpool actress Darci Shaw's vowel shows strong alignment with the extreme fronting. Her mean F2 of 1905.2 Hz is firmly in the very front vowel space, consistent with the well-documented Scouse fronted FOOL. This strong fronting is also highlighted in Strycharczuk's research, which describes the Liverpool FOOL vowel as "strongly fronted, resulting in a more [ʉː]-like quality (close to front, rounded)," and their Figure 5 visually places Liverpool FOOL in a very advanced position (normalised F2 estimated around +1.5 to +1.8). However, her mean F1 of 446.7 Hz suggests a realization that is somewhat more open (lower) than the highest, closest variants of traditional Scouse [yː] or [ʉː] and potentially more open than the very close position (normalised F1 estimated around -1.0 to -1.2) depicted for Liverpool FOOL in Figure 5 of the research by Strycharczuk. This suggests that while the extreme fronting is maintained, the vowel might be produced with a slightly less close articulation on average than the most classic Scouse FOOL.

The standard deviation for F1 (77.0 Hz) indicates a moderate degree of variability in openness, partly influenced by the token "Liverpool" (F1=606.2 Hz), which is exceptionally open for this vowel set. The spectrogram of Darci Shaw's realisation of the word "Liverpool" is presented in Picture 9. The standard deviation for F2 (312.1 Hz) is also quite high, highlighting significant variability in the front-back dimension. Again, "Liverpool" (F2=1258.1 Hz) is an outlier, being realised as a much backer vowel than the other tokens, though still fronter than typical RP /uː/. The other tokens mostly cluster in the very front space (F2 > 1700 Hz), with "beautifully" (F2=2355.6 Hz) being extremely front. The spectrogram of Darci Shaw's realisation of the word "beautifully" is presented in Picture 10. This variability, particularly the unusual nature of the "Liverpool" token (which might be affected by its position in an unstressed syllable or other phonetic factors), suggests that while Darci Shaw's FOOL vowel is characterized by extreme fronting typical of Scouse, its precise realization can vary, especially in terms of F2, and it may be generally more open than the highest traditional Scouse targets.



*Picture 9. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "Liverpool" [*The Upcoming. *Darci Shaw interview at The Colour Room premiere in London, 2024, 3:50]*



Picture 10. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "beautifully" [The Fan Carpet. UK Premiere: Phoebe Dynevor, Darci Shaw, David Morrissey | The Colour Room, 2022, 14:26]

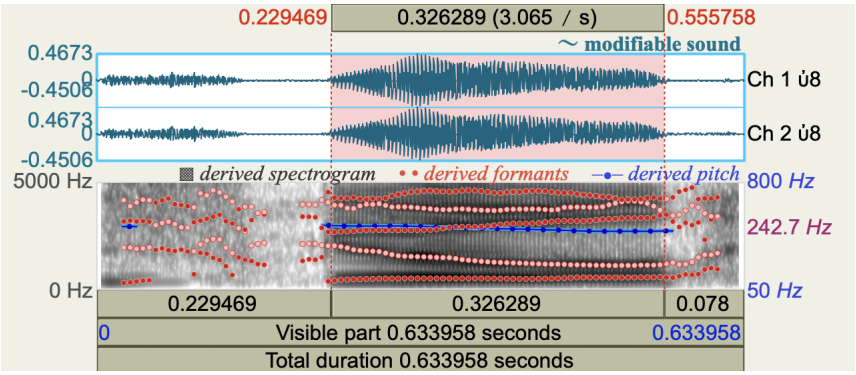
We could not overlook the realisation of the FOOL vowel in the Newcastle blogger Tilly Lockey's speech. That is why we measured nine tokens of the FOOL vowel pronounced by the speaker. All the tokens of Tilly Lockey's realisation of the selected vowel were extracted from the video *"HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life" (Tilly Lockey, 2024, 27:56)*: *soon* [1:34], *doomed* [2:47], *losing* [3:46], *too* [5:11], *school* [6:41], *move* [11:32], *suits* [12:38], *community* [13:37], and *who* [13:54]. Across these nine tokens, the mean F1 is 393.4 Hz (SD = 67.0 Hz), and the mean F2 is 2069.1 Hz (SD = 309.8 Hz). Tilly Lockey's most open instance of FOOL (in "school") reached 522.9 Hz in F1 (the spectrogram of Tilly Lockey's realisation of the word "school" is presented in Picture 11), and the closest (in "doomed") dropped to 309.4 Hz (the spectrogram of

Tilly Lockey’s realisation of the word “doomed” is presented in Picture 12). On the front–back dimension, the backest token (in "school") sat at 1385.7 Hz in F2, while the frontest (in "community") pushed up to an extremely high 2429.6 Hz. Picture 13 presents Tilly Lockey’s realisation of the word “community”.

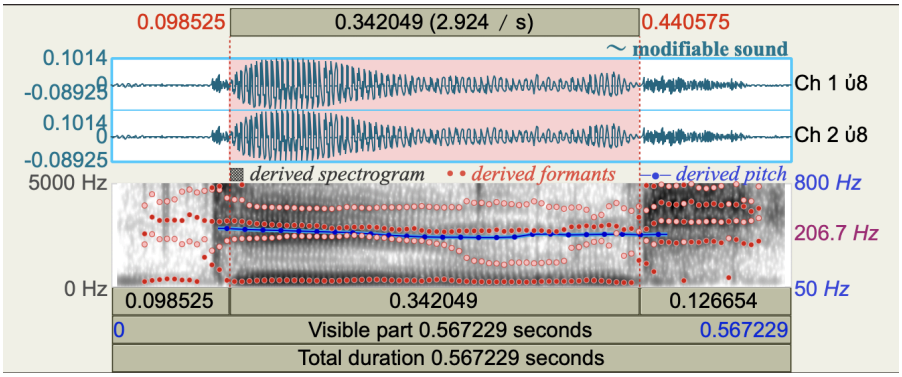
Comparing this to traditional Geordie realizations of the FOOL vowel, which is renowned for its extreme fronting, often realized as a high front rounded vowel [yː] or a high central rounded vowel [ʉː] (typically with a low F1 around 300-400 Hz and a very high F2 from 1600 Hz to 2200+ Hz), Tilly Lockey's vowel strongly aligns with these characteristics. Her mean F1 of 393.4 Hz is well within the range for a close vowel, and her mean F2 of 2069.1 Hz is firmly in the extremely front vowel space, consistent with the well-documented Geordie fronted FOOL. This contrasts significantly with the description in Strycharczuk’s research, which states that in the Newcastle variety, the FOOL vowel is "less fronted, typically closer to a back or near-back realization like [uː] or [ʊː]." Furthermore, Figure 5 in Strycharczuk's paper plots the Newcastle FOOL vowel in a relatively central to slightly back position (normalised F2 estimated around 0 to -0.5) and very close (normalised F1 estimated around -1.0 to -1.2). Our findings for Tilly Lockey, with a mean F2 of 2069.1 Hz, indicate a vowel that is unequivocally and extremely front, rather than back or near-back. While her F1 aligns with a close vowel quality, the frontness observed in our data is a clear departure from the Strycharczuk’s characterization of Geordie FOOL as less fronted. This confirms her FOOL as a clear example of the advanced fronting often cited for modern Geordie, distinct from RP and also differing from the specific description provided in the 2020 study.

The standard deviation for F1 (67.0 Hz) indicates a moderate degree of variability in openness. The token "school" (F1=522.9 Hz) is notably more open and also significantly backer (F2=1385.7 Hz) than the other tokens. This pre-/l/ context often influences vowel quality, and "school" acts as an outlier here, pulling the mean F1 upwards and the mean F2 downwards. The standard deviation for F2 (309.8 Hz) is quite high, highlighting significant variability in the front-back dimension, largely influenced by this backer "school" token. Most other tokens cluster in the very front

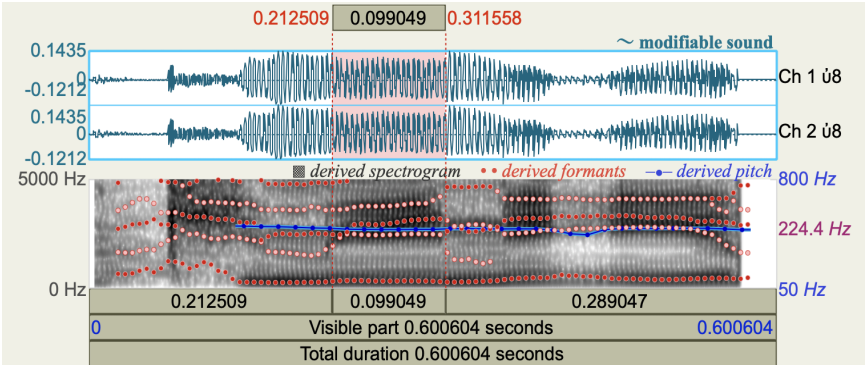
space (F2 > 1900 Hz), with "community" (F2=2429.6 Hz) being exceptionally front. This pattern suggests that Tilly Lockey's FOOL vowel is prototypically a very close, extremely front vowel, characteristic of Geordie. While it shows some variability, especially before /l/, its advanced fronting clearly distinguishes it from RP and aligns it with the recognized features of her native Geordie accent.



Picture 11. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "school" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 6:41]



Picture 12. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "doomed" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 2:47]



Picture 13. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "community" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 13:37]

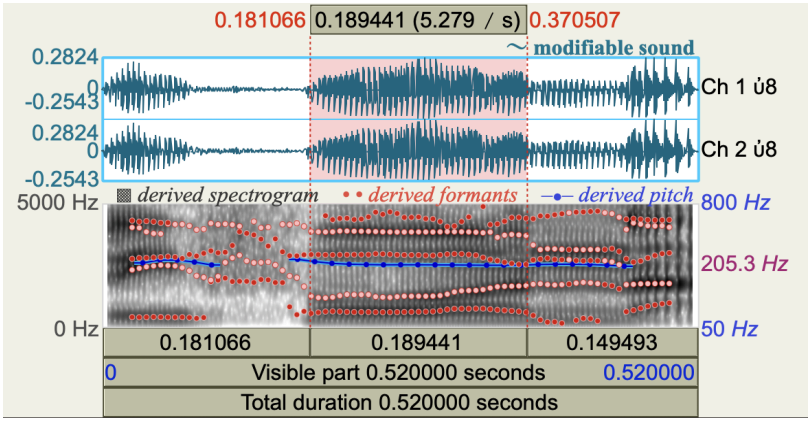
In conclusion, the acoustic analyses presented in this section reveal that for these speakers, some traditional distinctions may be shifting or were not observed. Specifically, while Strycharczuk suggested Geordie FOOL is less fronted than Scouse FOOL, our findings indicate that both speakers exhibit a strongly fronted FOOL vowel, with Tilly Lockey's Geordie FOOL being, on average, extremely front (mean F2=2069.1 Hz) and Darci Shaw's Scouse FOOL also very front (mean F2=1905.2 Hz), both far removed from a back realization. For the NURSE vowel, contrary to Strycharczuk's description of Scouse NURSE as potentially centralized and Geordie as front-centralized, both speakers in this study produced a markedly fronted NURSE vowel (Scouse mean F2=1769.9 Hz; Geordie mean F2=1734.6 Hz). Darci Shaw's Scouse NURSE was found to be considerably more open (mean F1=697.4 Hz) than Tilly Lockey's Geordie NURSE (mean F1=563.1 Hz), which aligns with the Strycharczuk's notion of Geordie NURSE being "less lowered" if Scouse NURSE is indeed substantially lowered, as observed here. Overall, the FOOL vowel realisations across the varieties and the degree of centralization for NURSE point towards shared tendencies of significant fronting for both vowels in both accents, albeit with variety-specific degrees of openness and variability.

2.1.1.2 The Realisation of Lax Vowels.

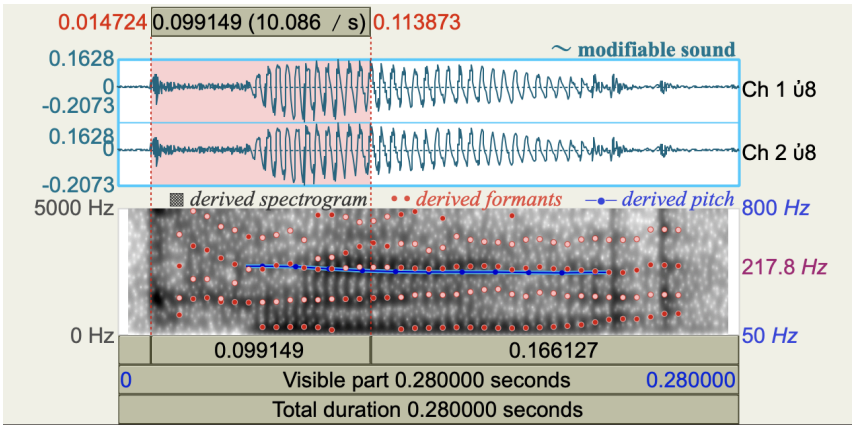
However, it is methodologically unsound to concentrate exclusively on tense vowels while disregarding the broader array of segmental phenomena. In thшi section, we examine the quality of lax vowels in both varieties, focusing exclusively on their similarities and differences by applying the same analytical method used in the previous chapter.

According to Strycharczuk's findings, in the Scouse and Geordie varieties there are such distinct lax vowel sounds as the STRUT, FOOT, lettER and BATH. The similar vowels are the DRESS, happY, KIT, LOT, TRAP vowels. This section shows whether this distinction between the varieties still exists.

In order to analyse the realisation of the STRUT vowel in the Scouse speaker Darci Shaw, we measured fifteen tokens of the selected sound in the speaker's spontaneous speech. The following seven tokens were extracted from the YouTube video *"This City is Ours Jack McMullen & Darci Shaw interview 2025" (Dave's Cave, 2025, 4:17)*: *does* [2:32], *some* [2:44], *bumping* [2:58], *loved* [3:02], *such* [3:03], *much* [3:05], *dummy* [3:34]. From the video *"Darci Shaw interview at The Colour Room premiere in London" (The Upcoming, 2024, 6:07): come* [0:19], *enough* [0:33], *lovely* [1:37], *cut* [2:05], *fun* [2:20], *London* [3:17]. From the YouTube video *"Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama." (The Upcoming, 2025, 9:00)* we extracted the token *just* [4:02]. The last token for the STRUT vowel in Darci Shaw's speech is *struggling [2:15],* extracted from the YouTube video *"Em Wallbank chats to the cast of A Thousand Blows - Part 1" (em wallbank, 2025, 7:56)*. Then we found their midpoint F1 and F2 values in Hertz. F1 tells us how "open" the vowel is (higher F1 = more open), and F2 tells us how "front" it is (higher F2 = fronter). Our findings demonstrate that the acoustic analysis of 15 STRUT vowel tokens produced by Darci Shaw, a Scouse speaker, reveals distinct characteristics when compared to a typical Received Pronunciation STRUT (generally around F1 ≈ 600 Hz, F2 ≈ 1300 Hz). Darci Shaw's mean F1 for STRUT is 642.5 Hz. This mean value is slightly higher (more open) than the typical RP STRUT. However, the F1 values exhibit considerable variability, ranging from a notably closer (lower F1) realization of 433.8 Hz in the token "London" to a very open (higher F1) realization of 929.4 Hz in "enough". The spectrograms of Darci Shaw's realisation of the words "London" and "enough" are illustrated in Picture 14 and Picture 15 respectively. This wide range (495.6 Hz) and the relatively high standard deviation for F1 (154.0 Hz) indicate that the openness of her STRUT vowel is not fixed and varies significantly across different words or phonetic contexts.



Picture 14. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "London" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 3:17]

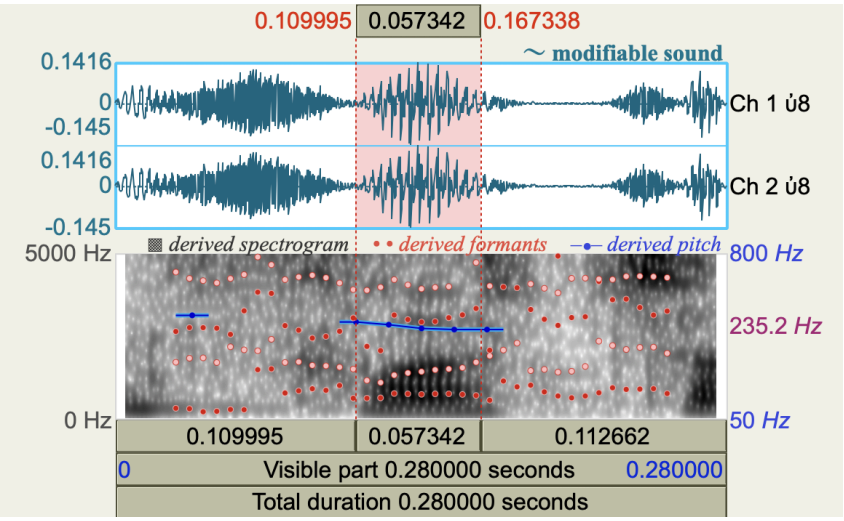


Picture 15. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "enough" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 0:33]

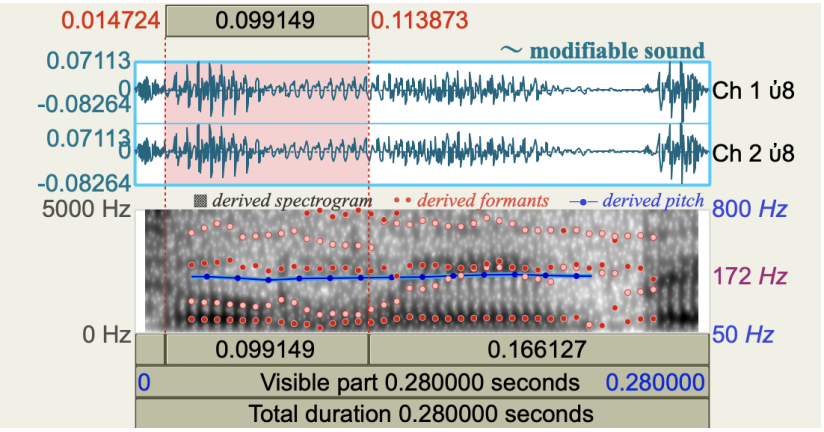
The mean F2 for her STRUT vowel is 1522.8 Hz. This is substantially higher (indicating a more fronted articulation) than the typical RP F2 of around 1300 Hz. This fronting is a significant characteristic of her STRUT vowel. The variability in F2 is even more pronounced than in F1. Values range from 1061.8 Hz (a relatively back realization for "dummy", which is even backer than RP STRUT) to an extremely fronted 2274.4 Hz (for "much"). This frontest realization in "much" places the vowel in a phonetic space typically associated with high front vowels.

The standard deviations for F1 (154.0 Hz) and particularly for F2 (330.7 Hz) are large. These values, along with the extensive ranges observed for both F1 (495.6 Hz) and F2 (1212.6 Hz), highlight a high degree of phonetic dispersion for the

STRUT vowel in Darci Shaw's speech. This suggests that the realization of STRUT is highly variable, potentially influenced by factors such as the surrounding phonetic environment (coarticulation), lexical identity of the word, or even free variation. The token "much" (F1=799.7 Hz, F2=2274.4 Hz) is a notable outlier, being both very open and exceptionally fronted. Conversely, "dummy" (F1=464.4 Hz, F2=1061.8 Hz) is realized as closer and much further back than the mean. The spectrograms of the aforementioned tokes are found in Picture 16 and Picture 17.



Picture 16. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "much" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview, 2025, 3:05]



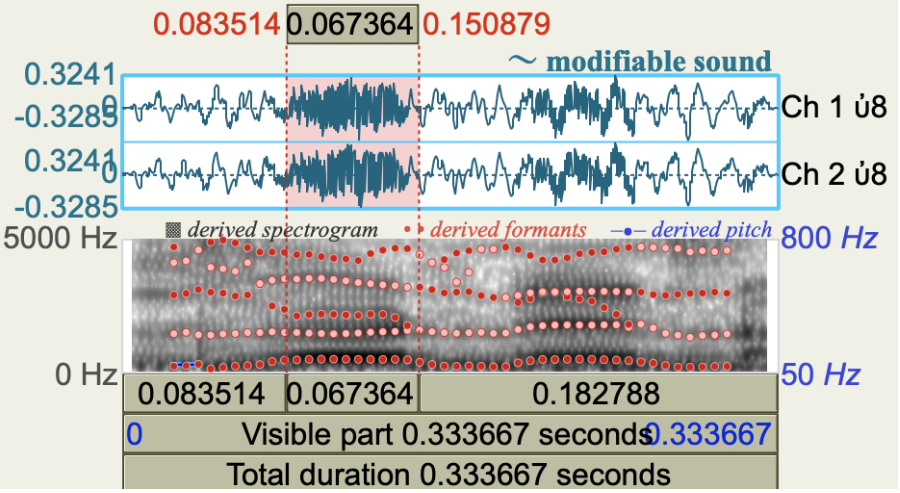
Picture 17. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "dummy" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview, 2025, 3:34]

As it was mentioned in Chapter 1, traditionally, Liverpool English is characterized by the FOOT-STRUT merger, where STRUT words are pronounced with a close, back vowel [ʊ], similar to the vowel in FOOT words (with typical F1 values for male speakers around 490-500 Hz and F2 values around 1120-1130 Hz). Darci Shaw's mean STRUT vowel, with an F1 of 642.5 Hz and an F2 of 1522.8 Hz, is considerably more open (higher F1) and significantly more fronted (higher F2) than this traditional [ʊ]. While her pronunciation exhibits high variability, with some tokens like "dummy" (F1=464.4 Hz, F2=1061.8 Hz) approaching the acoustic space of a traditional [ʊ], her average realisation and many individual tokens (like the extremely fronted "much") deviate substantially, indicating a shift away from the classic close, back [ʊ] typically associated with the STRUT vowel in traditional Scouse.

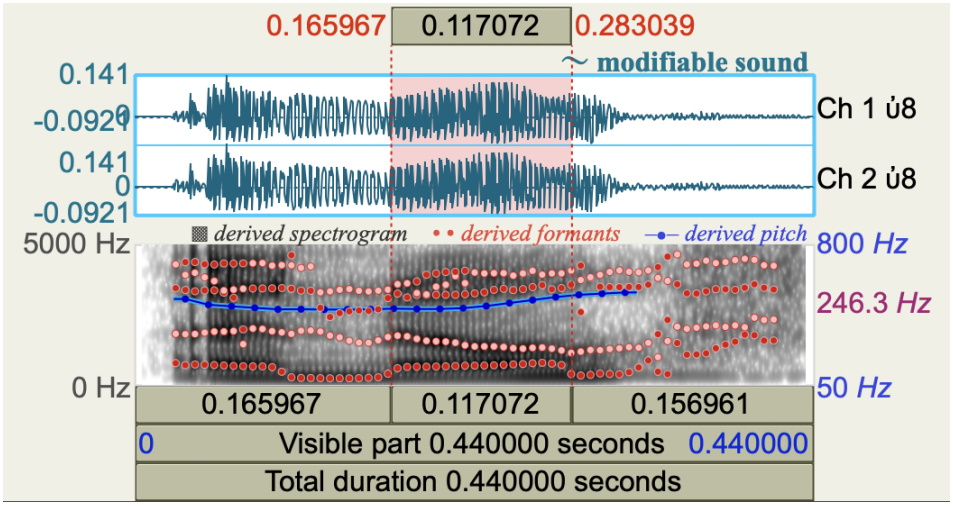
Based on our acoustic analysis, we can conclude that the realisation of the STRUT vowel by the Scouse speaker Darci Shaw largely **does not correspond** to the most widely documented traditional pronunciation of this sound in Liverpool English. Specifically, the study by Strycharczuk and others (2020), in its foundational understanding of Liverpool English phonology, would acknowledge the historical FOOT-STRUT merger, wherein STRUT is phonetically realized as a close, back vowel akin to FOOT. Our findings for Darci Shaw, however, demonstrate a STRUT vowel that, on average (mean F1=642.5 Hz, mean F2=1522.8 Hz), is considerably more open and significantly fronted, and exhibits substantial variability, thus representing a clear divergence from this traditional merged [ʊ]-like quality. While Figure 5 in Strycharczuk's study does not plot STRUT for Liverpool, its textual basis would refer to this merger; therefore, Darci Shaw's unmerged and phonetically distinct STRUT indicates a notable shift or a more innovative pattern in contemporary Scouse.

Furthermore, we measured nine tokens of the STRUT vowel in the Geordie speaker Tilly Lockey's spontaneous speech. The following eight tokens were extracted from the YouTube video "*Dubai vlog! Losing my arms + speaking at the biggest global AI conference*" *(Tilly Lockey, 2025, 12:43)*: *up* [0:53], *shuttle* [0:54],

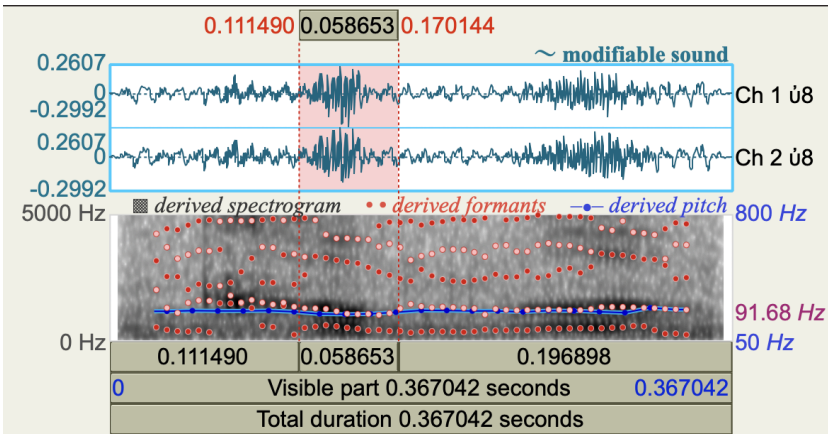
running [1:11], *stunning* [2:27], *couple* [10:38], *lucky* [10:47], *such* [10:53] and *stuff* [11:47]. From the YouTube video *"HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life" (Tilly Lockey, 2024, 27:56)* we retrieved the token *enough* [8:20]. Afterwards, we extracted their midpoint F1 and F2 values in Hertz. F1 tells us how "open" the vowel is (higher F1 = more open), and F2 tells us how "front" it is (higher F2 = fronter), as we did analysing the tokens retrieved from the previous speaker's speech. Across those nine tokens, the mean F1 was 569.8 Hz (SD = 76.1 Hz), and the mean F2 was 1451.3 Hz (SD = 199.2 Hz). In raw terms, the speaker's most open instance ("enough") reached nearly 697 Hz in F1, and the tightest ("running") dropped to about 455 Hz. On the front–back dimension, the backest token ("couple") sat at ~1163 Hz in F2, while the frontest ("stunning") pushed up to ~1747 Hz. The spectrograms of the speaker's realisations of the words "running", "enough", "couple" and "stunning" are presented in Picture 18, Picture 19, Picture 20 and Picture 21 respectively.



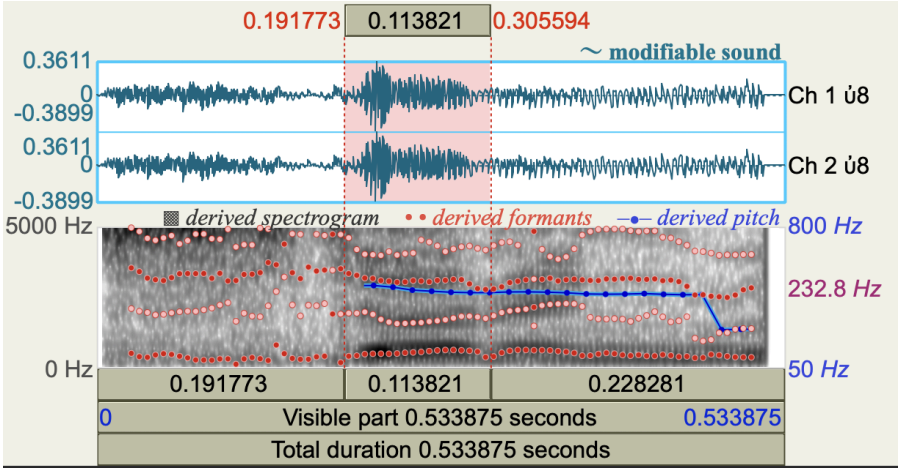
Picture 18. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "running" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 1:11]



Picture 19. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "enough" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 8:20]



Picture 20. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "couple" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 10:38]



Picture 21. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "stunning" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 2:27]

Classic British-English STRUT (/ʌ/) typically falls around F1 ≈ 600 Hz, F2 ≈ 1300 Hz, whereas the close rounded vowel /ʊ/ sits much lower and slightly back (≈ 370 Hz & 1350 Hz). Our speaker's means (570 Hz & 1450 Hz) lie well within the /ʌ/ domain — about 30 Hz below the usual openness and 150 Hz in front of the standard backness — and remain over 200 Hz away from any /ʊ/ cluster. In Strycharczuk's Newcastle (Geordie) data, STRUT comes in at roughly 570 Hz F1 and 1450 Hz F2 — already a raised and fronter variant of RP. Our speaker matches that raised height but actually exceeds the Geordie fronting by another ~100 Hz of F2. In other words, Tilly Lockey's /ʌ/ is even more advanced than the local Geordie realization. The tight grouping (SD ≈ 76 Hz for F1; ≈ 199 Hz for F2) shows the speaker's STRUT is consistent, without overlap into neighboring vowels like KIT or LOT. Its extra fronting suggests either a strong Northern influence or a personal articulatory setting that pushes /ʌ/ close to a high-central or even slightly front-central target.

What is more, we also explored how the lax vowel FOOT is realised across the varieties. We conducted research on the sound the way we did while analysing the other vowel sounds.

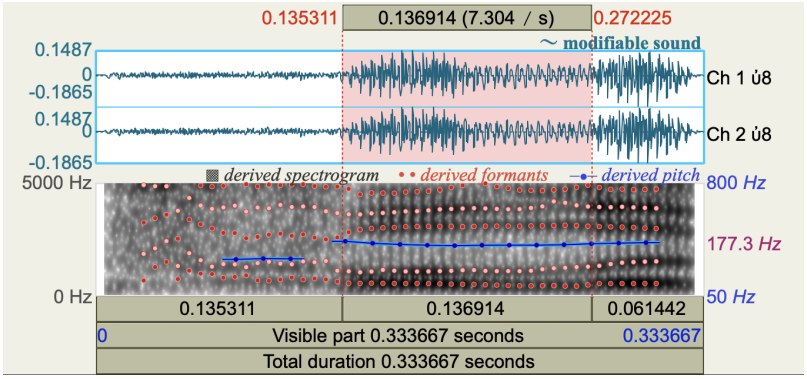
To begin with, in the Liverpool speaker Darci Shaw's speech, we analysed ten tokens. The following two tokes were found in the YouTub video *"UK Premiere: Phoebe Dynevor, Darci Shaw, David Morrissey | The Colour Room (The Fan Carpet)" (The Fan Carpet, 2022, 18:54)*: *good* [10:14] and *full* [13:02]. From the actress' interview to *The Upcoming* titled *"Darci Shaw interview at The Colour Room premiere in London" (The Upcoming, 2024, 6:07)* we extracted the following three tokens: *woman* [0:15], *pushes* [0:35], and *pull* [2:18]. The token *look* [6:44] was extracted from the YouTube video *"Em Wallbank chats to the cast of A Thousand Blows - Part 1" (em wallbank, 2025, 7:56)*. The word *took* [2:41] was extracted from the interview *"This City is Ours Jack McMullen & Darci Shaw interview 2025" (Dave's Cave, 2025, 4:17)*. The token *book* [2:27] was found in the YouTube video

“Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama.” (The Upcoming, 2025, 9:00). The last two tokens of the FOOT vowel in Darci Shaw’s speech were extracted from the YouTude video *“Darci Shaw: Meet the teenage actor starring with Renée Zellweger in Judy Garland biopic” (ITV News, 2019, 1:59)*: *childhood* [1:33], *Hollywood* [2:33]. After that we extracted their midpoint F1 and F2 values in Hertz. Across these ten tokens, the mean F1 was 564.8 Hz (SD = 48.8 Hz), and the mean F2 was 1431.2 Hz (SD = 236.0 Hz). In raw terms, the speaker’s most open instance of FOOT (in "childhood") reached 630.9 Hz in F1, and the closest (in "pushes") dropped to 477.9 Hz. On the front–back dimension, the backest token (in "full") sat at 1140.6 Hz in F2, while the frontest (in "childhood") pushed up to 1765.7 Hz. Classic British‑English FOOT (/ʊ/) typically sits much lower and further back (around F1≈370 Hz, F2≈1350 Hz). Comparing Darci Shaw's means (F1=564.8 Hz, F2=1431.2 Hz) to this RP target, her FOOT vowel is substantially more open (higher F1 by nearly 200 Hz) and somewhat fronter (higher F2 by about 80 Hz). This realization moves it significantly away from the close-back rounded quality of RP /ʊ/, positioning it more in the central part of the vowel space, and much lower (more open). The degree of opening is particularly striking.

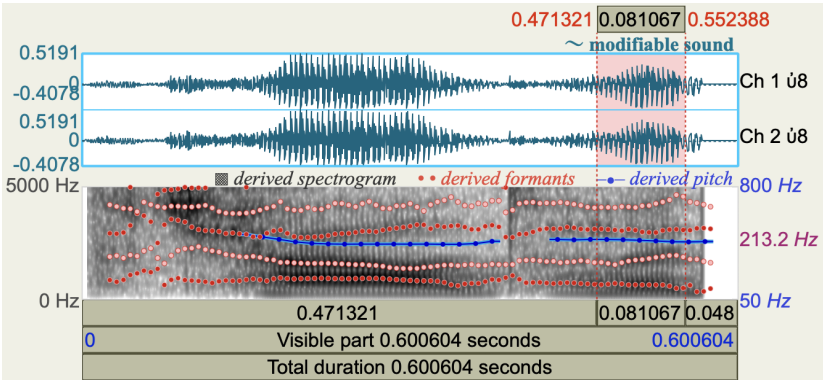
Regarding traditional Scouse realizations, research (the "Frontiers in AI” article on Liverpool English) indicates that the FOOT vowel has undergone changes. Older Scouse speakers typically have a FOOT vowel with F1 around 400 Hz and F2 between 1000−1200 Hz. Younger Scouse speakers show a trend towards a more open and fronter FOOT, with F1 means around 450−500 Hz and F2 around 1200−1400 Hz. Darci Shaw's FOOT vowel, with a mean F1 of 564.8 Hz and F2 of 1431.2 Hz, appears to continue this trend, being even more open than the younger Scouse speakers documented in that research, and positioned at the fronter edge or even slightly fronter than their range. This indicates her realization is a further development from the more traditional, closer, and backer Scouse /ʊ/, representing a very modern, significantly lowered and moderately fronted variant.

The standard deviation for F1 (48.8 Hz) suggests a relatively consistent height for this more open FOOT vowel, while the SD for F2 (236.0 Hz) indicates more

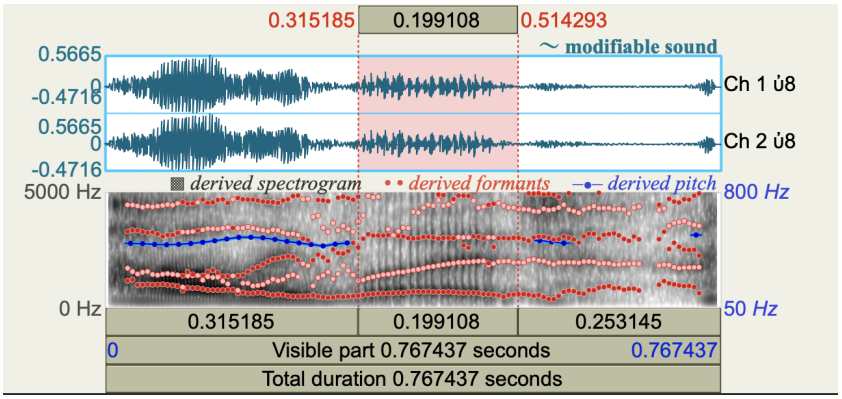
variability in terms of frontness/backness across the tokens. While some tokens like "full" (F2=1140.6 Hz) are relatively back, others like "childhood" (F2=1765.7 Hz) and "Hollywood" (F2=1738.8 Hz) are considerably fronted. The realisation of the aforementioned tokens by Darci Shaw is presented in Picture 22, Picture 23 and Picture 24.



Picture 22. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "full" [The Fan Carpet. UK Premiere: Phoebe Dynevor, Darci Shaw, David Morrissey | The Colour Room, 2022, 13:02]



Picture 23. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "childhood" [ITV News. Darci Shaw: Meet the teenage actor starring with Renée Zellweger in Judy Garland biopic., 2019, 1:33]



*Picture 24. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "Hollywood" [*ITV News. *Darci Shaw: Meet the teenage actor starring with Renée Zellweger in Judy Garland biopic, 2019, 2:33]*

The study by Strycharczuk and others, in their Figure 3, visually represents the FOOT vowel for younger Liverpool English speakers as a somewhat diffuse cluster, generally positioned as open-central to open-front-central, implying a degree of inherent variability. Darci Shaw's data, with a relatively tight F1 grouping (SD=48.8Hz) around a mean of 564.8Hz (which is more open than the ~450-500Hz F1 range for younger speakers in Strycharczuk's study) and a more variable F2 (SD=236.0Hz) averaging at 1431.2Hz (which is at the fronter end or beyond the ~1200-1400Hz F2 range for the same group in their study), suggests that her FOOT vowel has not only advanced further in openness and average frontness but also exhibits its own distinct pattern of variability, particularly in the front-back dimension. This substantial shift from the traditional close-back position of /ʊ/, and its further opening and fronting compared to the documented younger Scouse speakers in Strycharczuk's research, indicates a distinct and evolving phonetic quality for the FOOT vowel in this speaker's accent.

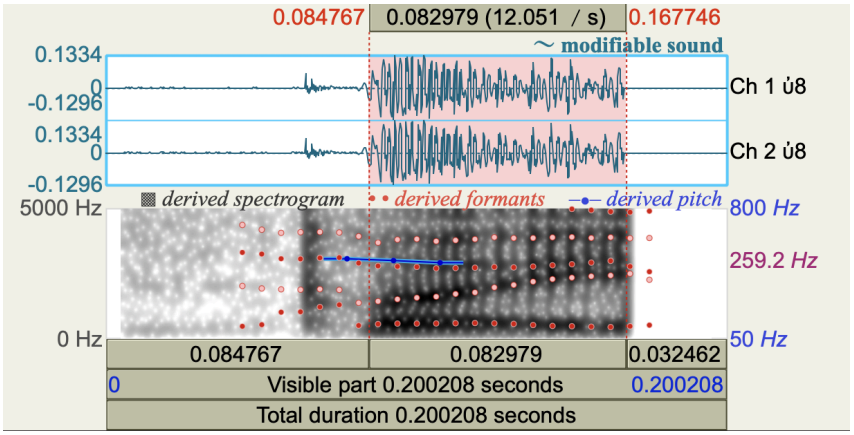
Additionally, we measured nine tokens of the FOOT vowel in the speech of the Newcastle speaker Tilly Lockey. The following eight tokens were extracted from the blogger's interview *"HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life" (Tilly Lockey, 2024, 27:56)*: *good* [1:57], *stood* [7:01], *put* [8:36], *pull* [8:44], *woman* [9:49], *look* [12:32], *took* [16:20], *fullest* [27:49]. The ninth token *bullet* [3:26] was found in the video . *Afterwards, we* extracted their midpoint F1 and F2 values in Hertz. F1 tells us how "open" the vowel is (higher F1 = more open), and F2 tells us how "front" it is (higher F2 = fronter). Across these nine tokens, the mean F1 was 494.6 Hz (SD = 42.1 Hz), and the mean F2 was 1469.7 Hz (SD = 417.0 Hz). In raw terms, the speaker's most open instance of FOOT (in "fullest") reached 544.6 Hz in F1, and the closest (in "woman") dropped to 434.7 Hz. On the front–back dimension, the backest token (in "woman") sat at an exceptionally low 864.6 Hz in F2, while the frontest (in "put") pushed up to an extremely high

1960.5 Hz. Classic British‑English FOOT (/ʊ/) typically falls around F1 ≈ 370 Hz, F2 ≈ 1350 Hz, representing a close, back, rounded vowel. The blogger's mean FOOT vowel (F1=494.6 Hz,F2=1469.7 Hz) is markedly different: it is significantly more open (F1 is over 120 Hz higher) and notably fronter (F2 is over 100 Hz higher) than the RP /ʊ/. This indicates a substantial shift away from the traditional close-back quality.

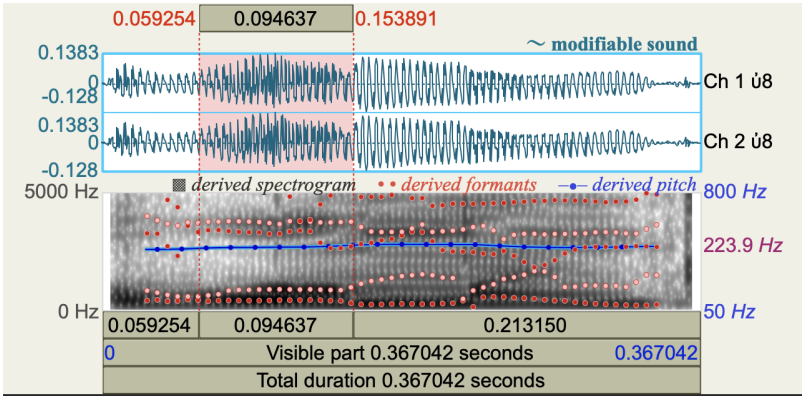
Moreover, traditional Geordie FOOT is well-known for its fronted and often unrounded quality, frequently transcribed as [ʉ], [ɨ], or even merging with STRUT for some speakers, particularly before /l/. Typical F1 values for Geordie FOOT can range from 400-550 Hz, and F2 values from 1300-1700 Hz or even higher (fronter). Tilly Lockey's mean F1 of 494.6 Hz fits comfortably within this range, suggesting a similar degree of openness to typical Geordie FOOT. Her mean F2 of 1469.7 Hz also aligns with the fronter realizations found in Geordie. This suggests that her FOOT vowel, in general, exhibits the characteristic Geordie fronting and lowering compared to RP. This general positioning is broadly consistent with the visual representation of FOOT for younger Newcastle speakers in Strycharczuk's study, where it occupies a central to front-central space. Tilly Lockey's mean F1 of 494.6 Hz aligns with the mid to slightly open-mid normalised F1 seen in their plot (estimated around -0.2 to +0.2), and her mean F2 of 1469.7 Hz corresponds to the fronter end of the F2 range depicted for Geordie FOOT in that study (estimated normalised F2 around 0 to +1.0), confirming its advanced and somewhat variable nature as documented by Strycharczuk and others.

Regarding the standard deviation for F1 (42.1 Hz), it is relatively low, indicating a fairly consistent degree of openness for this vowel. However, the standard deviation for F2 (417.0 Hz) is exceptionally large, highlighting a very high degree of variability in the front-back dimension. This wide scatter is particularly evident in the token "woman" (F2=864.6 Hz), which is realized as an extremely back vowel, far backer than even RP /ʊ/ and atypical for Geordie FOOT. This contrasts sharply with "put" (F2=1960.5 Hz), which is realized as an extremely front vowel, pushing towards the F2 space of high front vowels like /iː/. This extreme variability

in F2, especially the very back realization in "woman," suggests that while the height of Tilly Lockey's FOOT vowel is relatively stable in its lowered (compared to RP) position, its frontness is highly variable and likely heavily influenced by phonetic context or lexical factors, resulting in realizations that span an unusually wide range from very back to very front across different words. While the mean aligns with Geordie tendencies, the token "woman" presents a notable deviation from typical Geordie fronting of FOOT. Picture 25 and Picture 26 present the spectrograms of the words “put” and “woman”, realised by Tilly Lockey.



Picture 25. The spectrogram of Tilly Lockey’s realisation of the FOOT vowel in the word “put” [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 8:36]



Picture 26. The spectrogram of Tilly Lockey’s realisation of the FOOT vowel in the word “woman” [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 9:49]

In summary, this acoustic investigation of the STRUT and FOOT vowels in a modern Scouse (Darci Shaw) and Geordie (Tilly Lockey) speaker highlights both

shared Northern English trends in deviating from RP and distinct variety-specific phonetic features. Both speakers realize STRUT significantly fronter than RP; however, Lockey's Geordie STRUT is consistently advanced and even fronter than typical Geordie, while Shaw's Scouse STRUT is highly variable and clearly diverges from the traditional FOOT-STRUT merger towards a more open and fronted, albeit inconsistent, target. For the FOOT vowel, both speakers again demonstrate a more open and generally fronter articulation than RP /ʊ/. Shaw's Scouse FOOT reflects an ongoing evolution towards greater opening and fronting, moving beyond documented younger Scouse norms. Lockey's Geordie FOOT, while averaging a fronted quality consistent with its variety, exhibits exceptional variability in its front-back dimension, with some tokens realized as extremely back, atypical for Geordie. These analyses underscore that while contemporary Scouse and Geordie share certain phonetic trajectories for these lax vowels, they maintain unique characteristics and internal complexities, reflecting the ongoing dynamic evolution of these distinct regional accents.

2.1.2 Comparative Vowel Data: a Visual Overview

In Section 2.1, we looked closely at how two tense vowels (NURSE, FOOL) and two lax vowels (STRUT, FOOT) are realised in the contemporary Scouse speech of Darci Shaw and the Geordie speech of Tilly Lockey. Our findings show that these vowel sounds are pronounced differently in Scouse and Geordie compared to standard British English. Additionally, these pronunciations mix with older, traditional ways of speaking in these regions. We also checked our findings against existing large-scale studies that have looked at these accents before (namely, the research by Strycharczuk et al. conducted in 2020).

For the **NURSE vowel**, both speakers demonstrated markedly fronter and more open articulations than RP. Darci Shaw’s (Scouse) NURSE was exceptionally open (mean F1=697.4 Hz) and extremely fronted (mean F2=1769.9 Hz), diverging from traditional Scouse [øː] in terms of openness but aligning with or exceeding its frontness, and contrasting with the "centralized" description in Strycharczuk’s paper. Tilly Lockey’s (Geordie) NURSE was also open and very front (mean F1=563.1 Hz,

mean F2=1734.6 Hz), aligning with Strycharczuk's study's notion of it being "less lowered" (than extremely open variants) and its visual depiction of strong fronting in their Figure 5 in Strycharczuk's research, rather than "front-centralized." In Figure 1, we can see how differently the NURSE vowel is realised across the speakers' speech.

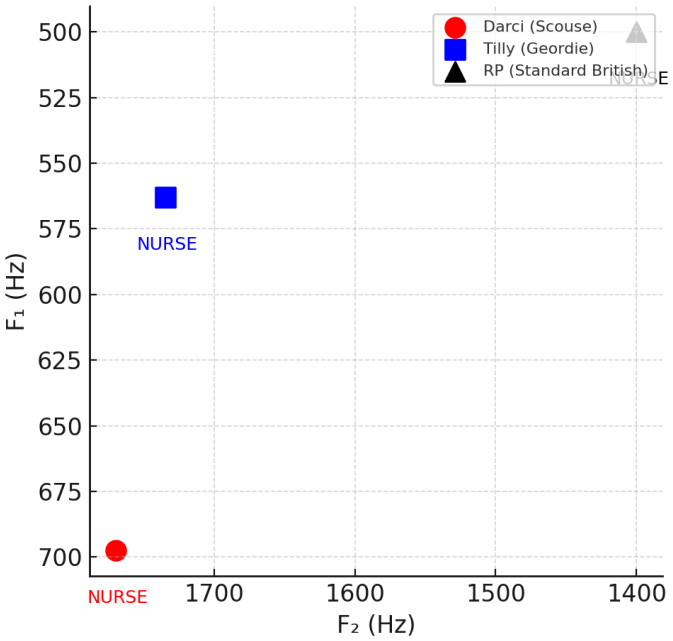


Figure 1. Acoustic plot of the NURSE vowel realised by Darci Shaw (Scouse) and Tilly Lockey (Geordie)

The **FOOL vowel** was characterized by extreme fronting in both accents. Darci Shaw's (Scouse) FOOL (mean F1=446.7 Hz, mean F2=1905.2 Hz) maintained this Scouse hallmark, though with a somewhat more open quality than the closest traditional forms and potentially more open than depicted in Figure 5 in Strycharczuk's study. Tilly Lockey's (Geordie) FOOL (mean F1=393.4 Hz, mean F2=2069.1 Hz) was also extremely fronted and close, aligning with traditional Geordie but contrasting sharply with Strycharczuk's description of Geordie FOOL as "less fronted" and backer. The tense vowel FOOL in Darci Shaw's and Tilly Lockey's speech is illustrated in Figure 2.

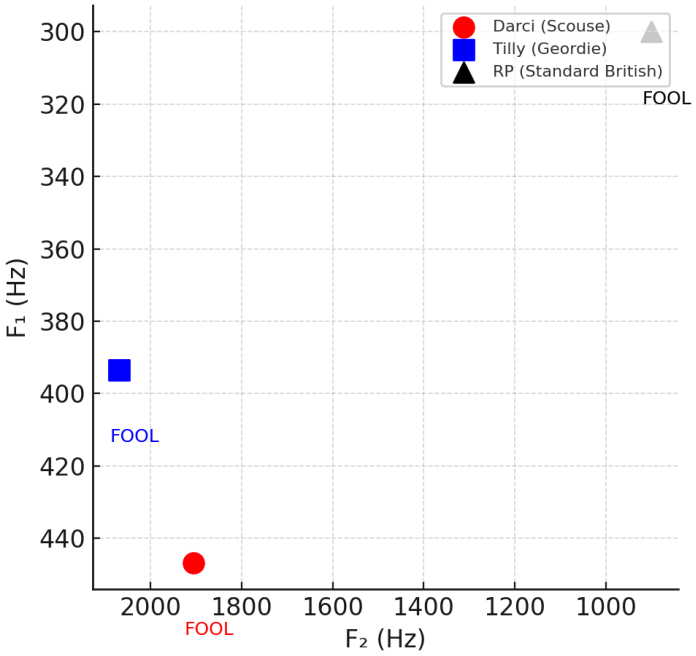


Figure 2. Acoustic plot of the FOOL vowel realised by Darci Shaw (Scouse) and Tilly Lockey (Geordie)

Regarding the lax vowels, Darci Shaw's Scouse **STRUT** (mean F1=642.5 Hz, F2=1522.8 Hz) was open, significantly fronted, highly variable, and clearly distinct from the traditional Scouse FOOT-STRUT merger. Tilly Lockey's Geordie **STRUT** (mean F1=569.8 Hz, F2=1451.3 Hz) was also fronted and somewhat raised compared to RP, consistent with and even exceeding the fronting reported in the 2020 study for Newcastle. The way the STRUT vowel is realised by both Darci Shaw and Tilly Lockey is illustrated in Figure 3.

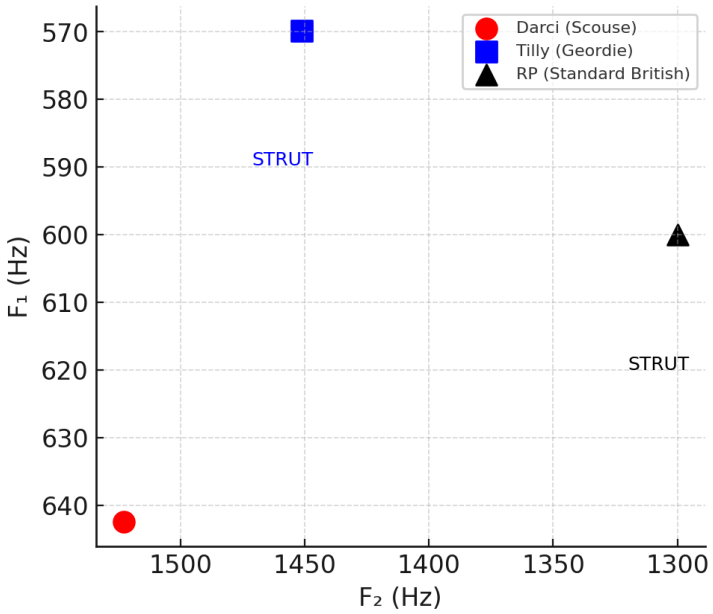


Figure 3. Acoustic plot of the STRUT vowel realised by Darci Shaw (Scouse) and Tilly Lockey (Geordie)

For the **FOOT vowel**, Darci Shaw's Scouse variant (mean F1=564.8 Hz, F2=1431.2 Hz) was substantially more open and fronter than RP, pushing beyond the openness and frontness documented for younger Scouse speakers in Strycharczuk's study. Tilly Lockey's Geordie FOOT (mean F1=494.6 Hz, F2=1469.7 Hz) was also more open and fronter than RP, aligning with the general front-central position in Strycharczuk's paper's Figure 3, but exhibited remarkable F2 variability. In Figure 4, we can observe the difference between the realisations of the FOOT vowel by the selected young speakers of Scouse and Geordie.

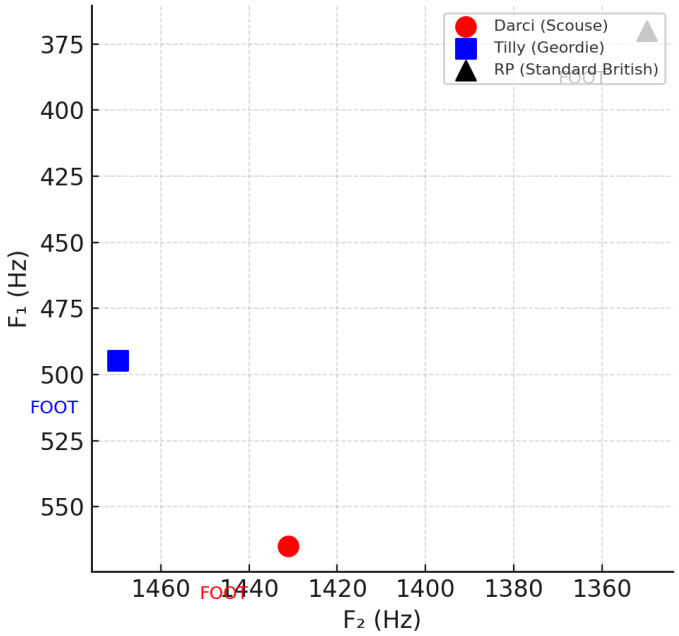


Figure 4. Acoustic plot of the FOOT vowel realised by Darci Shaw (Scouse) and Tilly Lockey (Geordie)

To visually synthesize these acoustic findings, Figure 5 presents a vowel plot of the mean F1 and F2 values in Hertz for the FOOL, FOOT, NURSE, and STRUT vowels as realized by Darci Shaw, Tilly Lockey, and reference RP targets. This plot allows for a direct comparison of the absolute acoustic positions of these vowels across the three varieties.

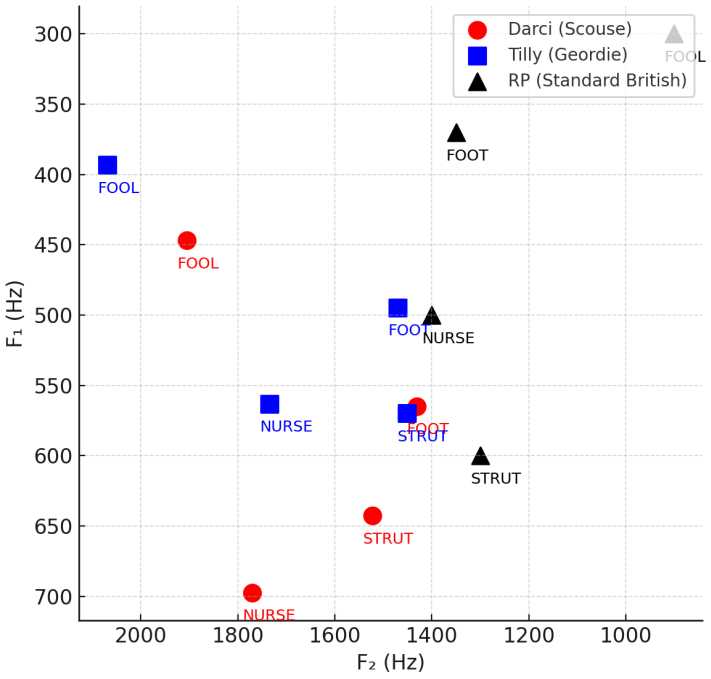


Figure 5. Acoustic vowel plot of FOOL, FOOT, NURSE, and STRUT vowels for Darci Shaw (Scouse, red circles), Tilly Lockey (Geordie, blue squares), and Received Pronunciation (RP, black triangles).

Furthermore, to contextualize these individual speaker findings within broader regional patterns, Figure 6 displays a normalised acoustic vowel space. This plot compares the mean realisations of the same four vowels for Darci Shaw and Tilly Lockey against aggregated data for general Liverpool English (GNE) and Geordie English (GNE), with formant values represented as normalised z-scores.

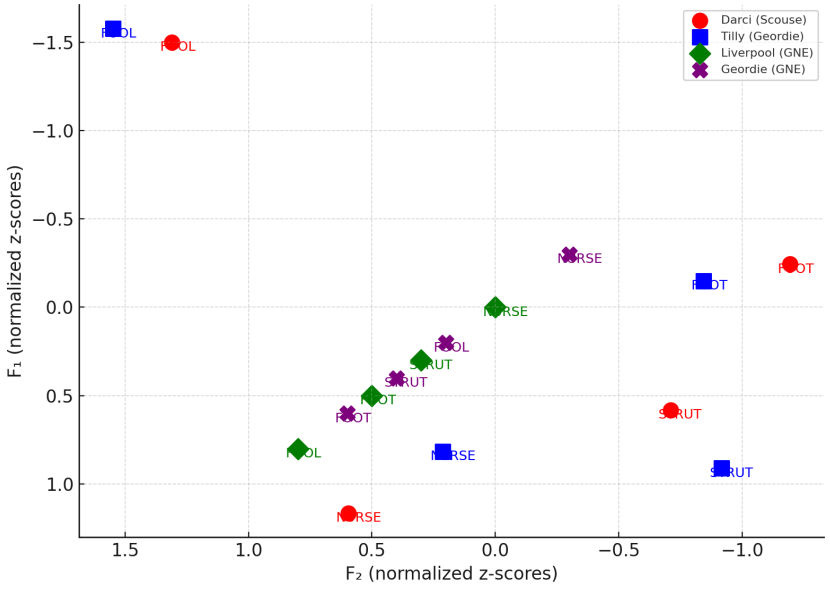


Figure 6. Normalised acoustic vowel space of Scouse and Geordie speakers compared to General Northern English (GNE) Data.

As illustrated in Figure 5, both speakers consistently deviate from RP, often towards a fronter articulation. Darci Shaw's vowels, particularly NURSE and STRUT, tend to occupy a more open space compared to Tilly Lockey's. Figure 6 further elaborates these patterns by showing, for example, that both speakers' FOOL vowels are extremely front, potentially even more so than the GNE averages. Conversely, for a vowel like NURSE, Darci Shaw's open realization contrasts with the closer Liverpool (GNE) average, while Tilly Lockey's fronted NURSE aligns more with, or is even fronter than, the Geordie (GNE) position. These visualisations collectively underscore the dynamic nature of these vowel systems, reflecting both adherence to and innovation upon regional phonetic norms. The detailed analyses in this section highlight that while broad Northern English tendencies like fronting are evident, Scouse and Geordie, as spoken by these individuals, maintain distinct phonetic profiles characterized by unique degrees of vowel height, frontness, and internal variability.

2.2 Sociolinguistic Observations.

As discussed in Chapter 1.4.3, language is not solely a tool for communication but also a powerful expression of identity, culture, and social positioning. The field of sociolinguistics, defined by the *Cambridge Dictionary* as “the study of how language is used by different groups in society,” and by Coupland and Jaworski (1997) as “the study of language in its social contexts and the study of social life through linguistics,” highlights the deep connection between language and the social environment in which it is embedded [12, p. 25-30]. Through this lens, regional accents such as Scouse and Geordie emerge not only as linguistic phenomena but also as markers of social belonging, prestige, and cultural representation.

This chapter examines how the Scouse and Geordie varieties function within their sociolinguistic contexts, focusing on how they are perceived by others, represented in media, and associated with social identities. These varieties are more

than sets of phonological features; they reflect broader societal attitudes, regional pride, and, at times, social inequality. The perception of an accent can be influenced by historical associations, media portrayals, and underlying power dynamics, revealing the cultural narratives that shape attitudes toward regional speech.

2.2.1 Impact of Social Identity on Variety Features.

As it has already been stated, language is not only a means of communication but also a reflection of social identity. Accents, as a key aspect of spoken language, often serve as markers of regional, cultural, and social belonging. In the case of the Scouse and Geordie varieties, accent features are deeply intertwined with speakers' sense of identity and their connection to the communities of Liverpool and Newcastle. This chapter explores how social identity influences the development, maintenance, and perception of accent features in these two varieties. It examines the way in which social factors such as class, local pride, historical experiences, and media portrayals shape the pronunciation patterns and linguistic behaviors associated with Scouse and Geordie. Understanding the relationship between social identity and accent features offers valuable insights into how language both reflects and constructs the social realities of its speakers.

According to the sources we have studied, the Scouse variety is strongly associated with working-class identity. This accent has been linked to negative stereotypes, particularly in forensic settings, where it is sometimes associated with criminality. Such perceptions contribute to the lower social status attributed to Scouse speakers, reinforcing existing prejudices and biases. As noted in research published in *Frontiers in Communication*, these associations perpetuate harmful stereotypes, further marginalizing individuals who speak with this accent and influencing their treatment in various social and professional contexts.

Despite the persistence of stereotypes, many Scousers embrace their accent as a badge of honor. The distinctiveness of the Scouse accent, with its unique vowel shifts and consonantal features, becomes a way for speakers to express pride in their heritage and to resist homogenization by more socially prestigious southern varieties, such as Received Pronunciation (RP). As a result, accent maintenance and even

accent exaggeration can serve as acts of social positioning, signaling loyalty to local identity over external prestige [5].

In contrast, historically, the Geordie variety was seen as low in status but high in solidarity, closely tied to Newcastle's industrial heritage, especially coal mining and shipbuilding. While it was associated with friendliness and authenticity, it also faced stigmatization in certain professional and educational settings. However, recent studies show a shift in this perception. A 2015 survey indicated that Geordie is no longer rated as low status, with its attractiveness and prestige increasing. This change is partly due to the dialect's use in media and branding, which has boosted its visibility and cultural significance. Overall, Geordie is now recognized as an important part of regional identity and cultural expression, with its evolving perception reflecting broader social changes.

Social identity plays a significant role in the maintenance and spread of Geordie features. Younger speakers, despite exposure to national and global varieties through media, continue to use distinctive Geordie forms as a way of expressing local pride and solidarity. The perception of Geordie speech as warm and genuine reinforces its value within the community, encouraging speakers to retain local pronunciation patterns even when linguistic convergence with mainstream accents might seem socially advantageous.

2.2.2 Perceptions of Scouse and Geordie Varieties in Broader British Society.

The portrayal of Scousers in media has long been a subject of debate, with the accent itself often serving as a symbol of working-class identity in Liverpool. However, as reflected in various online discussions, including comments on *Reddit*, the Scouse accent frequently carries negative connotations, perpetuating stereotypes that paint Liverpudlians as criminals, untrustworthy, or work-shy. These stereotypes are deeply embedded in media portrayals, which have frequently linked Scouse characters with criminality, anti-social behavior, or low-class status. As one Reddit user pointed out, the representation of Scousers often reduces them to caricatures of "thieving, work-shy scallies," a trope that remains prevalent despite the changing landscape of media production.

Furthermore, in many TV shows and films, Liverpool serves as a backdrop for gritty, crime-ridden narratives, reinforcing negative stereotypes. Even characters with more sympathetic traits tend to embody attributes associated with these stereotypes. For example, *Red Dwarf*'s protagonist, Lister, despite being portrayed as a slob and a working-class figure, is ultimately depicted as a noble character. This juxtaposition, as noted by commenters, highlights the complexity of Scouse characters but also reveals the continued reliance on traditional representations of the working class. Furthermore, even in advertisements, such as a Ring Doorbell campaign, Scouse accents are still used to depict "idiot thieves," while more polished Southern accents are paired with the role of the "intelligent homeowner" [36].

However, some users noted that not all portrayals are negative. For instance, Jodie Comer's character in *Help* is seen as a resilient and witty Scouser, breaking away from the traditional mold of the tough, criminal figure. This reflects a shift towards more nuanced representations of Scousers, showcasing their strength, humor, and resilience rather than reinforcing old stereotypes. Similarly, the discussion around the lack of authentic Scouse representation in media — such as the frustration expressed over non-Scouse actors portraying Scousers — points to a growing awareness of the need for more authentic portrayals of regional identities. There is a clear desire for Scousers to play themselves, to share their unique experiences and accents without being pigeonholed into stereotypical roles.

We have also analysed the representation of the Geordie variety in media. Recent trends show a more positive and nuanced representation of Geordie speakers. In modern media, Geordie is often celebrated for its distinctiveness, warmth, and authenticity. The dialect is frequently associated with friendliness, humor, and a sense of community, which aligns with the positive perception of the Geordie people as approachable and down-to-earth. Shows like *Geordie Shore* have brought attention to the accent, though often in a more controversial, party-centric context [39]. Despite this, such shows have contributed to the dialect's visibility and commercial appeal.

Moreover, the accent is quite positively described by the users of various forums we have read (namely, *Reddit, Quora*). People frequently point out that they

might have difficulty understanding the variety. However, there are few stereotypes that link the accent with [35].

Additionally, Geordie is increasingly used in advertising and branding, capitalizing on its regional charm to evoke a sense of local pride and authenticity. The use of Geordie speech in media has also been tied to the commodification of the dialect, where elements of the accent are seen as a mark of regional identity, helping to enhance its prestige.

In conclusion, the sociolinguistic study of Scouse and Geordie highlights how regional accents function far beyond mere linguistic markers; they embody complex narratives of social identity, cultural pride, and shifting public perceptions. As media representation continues to evolve, so does the social meaning attached to these varieties. While Scouse still battles entrenched stereotypes, recent efforts point toward a growing recognition of the need for authentic and diverse portrayals. Meanwhile, Geordie's transformation into a valued symbol of friendliness and regional identity demonstrates the powerful role that media and public attitudes play in shaping the prestige of local speech. Together, these developments illustrate the dynamic relationship between language, society, and cultural change.

CONCLUSIONS

The study, "Experimental phonetic research of Liverpool English and Newcastle English," set out to provide an up-to-date instrumental profile of the segmental phonetic features of contemporary Scouse and Geordie, and to determine whether these two distinct Northern English varieties are diverging, converging, or undergoing internal restructuring. Our specific objectives included defining and classifying these varieties, exploring their geographical and historical contexts, analyzing differences based on existing studies, investigating sociolinguistic factors, cataloging diagnostic vowel sounds, compiling a corpus of spontaneous speech from young female speakers, analyzing variables for phonetic similarities, and comparing formant means with Received Pronunciation (RP) baselines and previously published studies — namely, the research by the research Strycharczuk et al. (2020).

The methodology centered on an acoustic analysis of vowel tokens extracted from spontaneous speech recordings (public interviews and vlogs) of the two selected young female speakers. For each target vowel (NURSE, FOOL, STRUT, and FOOT), a set of tokens was identified, and their midpoint F1 and F2 formant values were measured in Hertz using Praat software. F1 values were interpreted as correlating with vowel openness (higher F1 indicating a more open articulation), and F2 values with vowel frontness (higher F2 indicating a fronter articulation). For each vowel set per speaker, the arithmetic mean, range (minimum and maximum values), and sample standard deviation (SD) for F1 and F2 were calculated. These acoustic findings were then systematically compared against established descriptions of RP vowels, traditional phonetic characterizations of Scouse and Geordie, and the specific acoustic data and interpretations presented in Strycharczuk's study.

The analysis revealed distinct phonetic patterns for the target vowels in both speakers, showing significant deviations from RP and complex relationships with traditional accent features and the findings of Strycharczuk et al. (2020).

For the **NURSE vowel**, Darci Shaw (Scouse) exhibited a mean F1 of 697.4 Hz (SD = 58.0 Hz) and a mean F2 of 1769.9 Hz (SD = 283.9 Hz). This positions her NURSE vowel as significantly more open (F1 nearly 200 Hz higher) and

substantially fronter (F2 over 350 Hz higher) than the RP NURSE (typically F1≈500 Hz, F2≈1400 Hz). Compared to traditional Scouse NURSE, often described as a close-mid front vowel [øː] or [eː]-like (F1≈350-450 Hz), Darci Shaw's realization is considerably more open. This aligns with Strycharczuk's description of Scouse NURSE as "lowered." However, her mean F2 indicates extreme fronting, contrasting with the findings in the article by Strycharczuk et al. (2020), which characterise the sounds as “centralised”. Our data for Darci Shaw, with tokens like "journey" (F2=2191.0 Hz), firmly place her NURSE in a very front, not central, space. Tilly Lockey (Geordie) produced NURSE with a mean F1 of 563.1 Hz (SD = 38.5 Hz) and a mean F2 of 1734.6 Hz (SD = 308.7 Hz). This is also more open and substantially fronter than RP NURSE. Strycharczuk characterized Geordie NURSE as "less lowered and front-centralized." Our findings for Tilly Lockey's F1 (563.1 Hz) are consistent with it being "less lowered" than Darci Shaw's extremely open variant, but her mean F2 of 1734.6 Hz indicates a strongly *front* rather than "front-centralized" position, a finding supported by the high F2 in Figure 5 for Newcastle NURSE in 2020 research. Both speakers thus show a very fronted NURSE, deviating from RP and Strycharczuk's textual claim of centralisation for Scouse, with Scouse being markedly more open.

The **FOOL vowel** analysis also showed significant deviations from RP (typically F1≈300 Hz, F2≈800-1200 Hz). Darci Shaw (Scouse) had a mean F1 of 446.7 Hz (SD = 77.0 Hz) and a mean F2 of 1905.2 Hz (SD = 312.1 Hz). This is much more open and vastly fronter than RP. Her mean F2 strongly aligns with the extreme fronting characteristic of traditional Scouse FOOL ([yː] or [ʉː], F2≈1600-2200+ Hz), as also highlighted in Strycharczuk’s research which describes Liverpool FOOL as "strongly fronted." However, her mean F1 is somewhat more open than the closest traditional Scouse variants and potentially more open than the very close position depicted for Liverpool FOOL in Figure 5 in Strycharczuk’s paper. Tilly Lockey (Geordie) produced FOOL with a mean F1 of 393.4 Hz (SD = 67.0 Hz) and a mean F2 of 2069.1 Hz (SD = 309.8 Hz). This positions her FOOL as extremely fronted and maintaining a close articulation, aligning with traditional Geordie fronted FOOL.

This starkly contrasts with Strycharczuk's research's description and Figure 5 depiction of Newcastle FOOL as "less fronted, typically closer to a back or near-back realization." Our findings for Tilly Lockey show an unequivocally and extremely front FOOL, not a back or near-back one. Both speakers thus exhibit extreme FOOL fronting, a shared deviation from RP, but Tilly Lockey's Geordie FOOL is closer and, on average, even fronter than Darci Shaw's Scouse FOOL in these datasets, contrary to the relative frontness suggested by Strycharczuk for these varieties.

Regarding the **lax vowels**, Darci Shaw's Scouse **STRUT vowel** (mean F1=642.5 Hz, F2=1522.8 Hz) was found to be more open and significantly fronter than RP STRUT (F1≈600 Hz, F2≈1300 Hz), exhibiting high variability and a clear departure from the traditional Scouse FOOT-STRUT merger (an [ʊ]-like vowel). Strycharczuk findings acknowledge this historical merger for Liverpool; thus, Darci Shaw's unmerged and phonetically distinct STRUT indicates a notable shift in contemporary Scouse. Tilly Lockey's Geordie **STRUT vowel** (mean F1=569.8 Hz, F2=1451.3 Hz) was also fronter and slightly less open (more raised) than RP, consistent with Strycharczuk's data for Newcastle STRUT which described it as "lowered" (meaning a low F1 relative to FOOT, but in absolute terms, her F1 is close to RP STRUT) and fronted. Our data shows Tilly Lockey's STRUT as even more advanced in fronting than the general Geordie data cited in Strycharczuk's paper.

For the **FOOT vowel**, Darci Shaw's Scouse realization (mean F1=564.8 Hz, F2=1431.2 Hz) was substantially more open and somewhat fronter than RP FOOT (F1≈370 Hz, F2≈1350 Hz), appearing even more open and slightly fronter than the younger Scouse speakers documented in Strycharczuk's study (F1≈450-500 Hz, F2≈1200-1400 Hz). Tilly Lockey's Geordie FOOT (mean F1=494.6 Hz, F2=1469.7 Hz) was also more open and notably fronter than RP, aligning with the general front-central positioning for younger Newcastle speakers in Figure 3 in Strycharczuk's research, but exhibiting extreme F2 variability with some tokens being atypically back for Geordie.

The sociolinguistic observations explored in Chapter 2.2 provide crucial context for these phonetic findings. It was noted that Scouse, while often associated

with negative stereotypes in broader British society and media, particularly linking it to working-class identity and sometimes criminality, is simultaneously embraced by its speakers as a strong emblem of local pride and heritage. This complex social evaluation may contribute to both the maintenance of distinctive features and the innovative, variable patterns observed in Darci Shaw's speech. In contrast, Geordie has generally experienced a more positive shift in perception, increasingly associated with friendliness, authenticity, and regional charm, leading to enhanced media visibility and cultural prestige. This positive valuation might encourage the confident use of distinctive Geordie features, such as the advanced fronting observed in Tilly Lockey's speech, as markers of a valued local identity. These differing sociolinguistic landscapes likely interact with the phonetic systems, influencing how speakers use and potentially modify their accents in the public sphere.

This study contributes to the sociophonetics of contemporary Scouse and Geordie English by providing detailed acoustic data on key vowel targets for two young female speakers. The findings illustrate the ongoing evolution of these accents, highlighting shared tendencies such as the significant fronting of FOOL, NURSE, and STRUT vowels away from RP, but also accent-specific qualities in terms of vowel height and the degree and consistency of fronting. The deviations from some of the characterizations in 2020 research [37], particularly regarding the centralization of Scouse NURSE and the backness of Geordie FOOL, underscore the importance of ongoing research with new speakers, as accent features can be dynamic and subject to change or greater individual variation than broad surveys might capture. The notable variability observed in several vowels, particularly in the F2 dimension for both speakers, suggests complex influences on vowel production.

In conclusion, this study provides a detailed acoustic snapshot of selected tense and lax vowels in the speech of a young Scouse and a young Geordie speaker. The study shows how traditional traits of the selected varieties, changing speech patterns, and individual variation are all closely connected. Both speakers demonstrate significant departures from RP for all vowels analyzed, often involving marked fronting and shifts in vowel height. While the research revisits initial

hypotheses and compares findings with large-scale studies like the study by Strycharczuk et al. (2020), it particularly highlights that both varieties exhibit highly dynamic vowel systems, with specific vowels like FOOL and NURSE being realized in ways that are often even more advanced or variable than some previous general descriptions. This underscores the importance of continuous empirical investigation with individual speakers to track the evolving phonetic landscapes of regional English accents.

РЕЗЮМЕ

Представлене дослідження присвячено акустичному аналізу та порівняльній характеристиці двох варіантів Британської англійської мови — ліверпульського (скауз) та ньюкаслського (джорді). Дослідження зосереджене на порівняльному аналізі ключових напружених (NURSE, FOOL) та ненапружених (STRUT, FOOT) голосних звуків у сучасних варіантах англійської мови – ліверпульському (скауз, на прикладі мовлення Дарсі Шоу) та ньюкаслському (джорді, на прикладі мовлення Тіллі Локі). Актуальність теми зумовлена необхідністю створення актуального інструментального профілю фонетичних особливостей сучасних північноанглійських варіантів англійської мови, зокрема у мовленні молодого покоління. Крім цього, ми перевірили гіпотезу про фонетичне нівелювання (зближення) чи збереження відмінностей цих двох варіантів. Розуміння цих аспектів є важливим для сучасної діалектології, соціофонетики та вивчення мовної варіативності і змін.

Об’єктом дослідження є спонтанне мовлення молодих носіїв ліверпульського (скауз, на прикладі мовлення Дарсі Шоу, 2002 р.н.) та ньюкаслського (джорді, на прикладі мовлення Тіллі Локі, 2005 р.н.) варіантів англійської мови. Предметом роботи є акустичні характеристики (формантні значення F1 та F2) голосних таких голосних, як NURSE, FOOL, STRUT та FOOT та їх реалізація у зазначених варіантах.

Мета нашого дослідження полягає у виявленні, акустичному аналізі та порівняльній характеристиці реалізації вищезгаданих голосних у мовленні молодих носіїв скаузу та джорді. Задля досягнення мети, було виконано наступні завдання:

- визначено та класифіковано ці різновиди;
- досліджено їхні географічний та історичний контексти;
- проаналізовано відмінності на основі існуючих досліджень;
- вивчено соціолінгвістичні фактори;
- виділено й упорядковано діагностичні голосні звуки;

- укладено корпус спонтанного мовлення молодих жінок-носіїв обраних варіантів англійської мови;
- проведено відбір та акустичний аналіз (вимірювання F1 та F2) токенів цільових голосних у мовленні Дарсі Шоу та Тіллі Локі за допомогою програми Praat;
- проаналізовано змінні для фонетичних подібностей та порівняння середніх значень формант з еталонними даними нормативної британської вимови та раніше опублікованими дослідженнями — зокрема, дослідженням, проведеним лінгвістами Стричарчук П., Лопес-Ібанесом М., Браун Г., Ліманом А. у 2020 році.
- проаналізовано отримані результати на предмет наявності фонетичних відмінностей або спільних рис у реалізації голосних між двома досліджуваними варіантами англійської мови, а також виявлення можливих ознак нівелювання.

Представлена робота складається зі вступу, двох розділів – теоретичного і практичного, висновків, списку літератури та фактичного матеріалу дослідження, а також додатків.

На основі проведеного дослідження можна зробити висновок, що реалізація напружених та ненапружених голосних у мовленні молодого покоління носіїв скаузу та джорді демонструє складну взаємодію традиційних діалектних рис, індивідуальної варіативності та потенційних нових тенденцій. Спостерігаються як спільні напрямки відхилення від стандартної вимови у Великобританії, так і збереження або навіть посилення унікальних характеристик кожного акценту.

Акустичний аналіз голосних виявив наступні ключові особливості. Для голосного **NURSE**, обидві мовиці демонструють значно передню та відкритішу реалізацію порівняно з RP (F1≈500 Hz, F2≈1400 Hz). У Дарсі Шоу (скауз) NURSE є надзвичайно відкритим та переднім (сер. F1=697.4 Hz, сер. F2=1769.9 Hz). Це відкритіше за традиційний скаузький [øː] і узгоджується з описом "знижений" у дослідженні Стричарчук у 2020, але його сильне

просування вперед суперечить характеристиці "централізований" з тієї ж праці. У Тіллі Локі (джорді) NURSE також відкритий та дуже передній (сер. F1=563.1 Hz, сер. F2=1734.6 Hz). Її F1 відповідає опису "менш знижений" дослідженні 2020 року порівняно з дуже відкритими варіантами, а високий F2 підтверджує сильне просування, а не "передньо-централізованість", що також візуально підтверджується на рис. 5 в аналізі Стричарчук у 2020 році.

Голосний **FOOL** в обох мовців також суттєво відрізняється від RP (F1≈300 Hz, F2≈800-1200 Hz), головним чином через екстремальне просування вперед. У Дарсі Шоу (скауз) FOOL є відносно відкритим для /uː/ та дуже переднім (сер. F1=446.7 Hz, сер. F2=1905.2 Hz, за даними 8 токенів), що відповідає традиційному скаузькому просунутому [yː] або [ʉː] та опису "сильно просунутий" у дослідженні Стричарчук. Однак, F1 Дарсі Шоу є дещо відкритішим, ніж у найзакритіших традиційних варіантах та потенційно відкритішим, ніж зображено на рис. 5 в статті Стричарчук. У Тіллі Локі (джорді) голосний звук FOOL є закритим та надзвичайно переднім (сер. F1=393.4 Hz, сер. F2=2069.1 Hz, за даними 9 токенів). Це різко контрастує з описом "менш просунутий, ближчий до заднього" у результатах дослідження Стричарчук та рис. 5 у їхній праці. Однак, варто зазначити, що цей звук узгоджується з традиційними описами ньюкаслського просунутого FOOL.

Щодо ненапружених голосних, **STRUT** у Дарсі Шоу (скауз) є більщ відкритим та значно переднішим (сер. F1=642.5 Hz, сер. F2=1522.8 Hz), ніж в англійській літературній вимові, з високою варіативністю та відходом від традиційного злиття FOOT-STRUT у скаузькому варіанті, яке згідно з дослідженням Стричарчук існує в ліверпульському варіанті. У Тіллі Локі (джорді) STRUT також більш передній, але менш відкритий (більш піднятий) (сер. F1=569.8 Hz, сер. F2=1451.3 Hz), ніж в англійській літературній вимові. Крім того, у вимові блогерки цей звук характеризується послідовністю та сильнішим просуванням, що суперечить типовому джорді згідно з результатами дослідження Стричарчук про піднятий та просунутий STRUT у Ньюкаслі. Голосний **FOOT** у Дарсі Шоу (скауз) (сер. F1=564.8 Hz, сер. F2=1431.2 Hz) є

суттєво відкритішим та дещо переднішим, ніж реалізація цього звуку в нормативній британській вимові, що продовжує задокументовану тенденцію в скаузі до відкритості та просування в аналізі Стричарчук у 2020 році. У Тіллі Локі (джорді) FOOT (сер. F1=494.6 Hz, сер. F2=1469.7 Hz) також більш відкритий та помітно передніший за звук в літературній вимові, що узгоджується із загальним передньо-центральним положенням в аналізі Стричарчук (рис. 3).

Таким чином, дане дослідження доводить, що сучасні молоді носії ліверпульського та ньюкаслського варіантів англійської мови демонструють як збереження ключових традиційних рис своїх акцентів, так і розвиток нових тенденцій, які частково узгоджуються, а частково відрізняються від висновків у праці Стричарчук П., Лопес-Ібанеса М., Браун Г., Лімана А. у 2020 році. Хоча для всіх досліджених голосних спостерігаються спільні напрямки відхилення від нормативної британської вимови (зокрема, тенденція до просування вперед), повного фонетичного нівелювання між скаузом та джорді не виявлено. Варто зазначити, що для кожного з досліджуваних варіантів зберігаються специфічні характеристики висоти голосних, точного ступеня просування та особливостей варіативності, що свідчить про незалежну еволюцію цих діалектних систем у межах ширших тенденцій розвитку північноанглійських варіантів англійської мови. Це дослідження підкреслює важливість акустичного аналізу мовлення окремих інформантів для фіксації актуального стану регіональних акцентів та має потенціал для подальшого вивчення динаміки мовних змін.

Дослідження також торкається соціолінгвістичних аспектів. Узагальнюючи, ми можемо зазначити, що скауз, попри негативні стереотипи, залишається важливим елементом місцевої ідентичності, тоді як джорді демонструє зростання престижу та позитивного сприйняття, що відображається у його використанні в медіа. Це підкреслює зв'язок між фонетичними реалізаціями, соціальним сприйняттям та культурною динамікою регіональних акцентів. Наше дослідження підкреслює важливість акустичного аналізу для

фіксації актуального стану регіональних акцентів та має потенціал для подальшого вивчення динаміки мовних змін.

REFERENCES

1. Accent Bias Britain. (2025, May). *Accents in Britain*. Retrieved from: https://accentbiasbritain.org/accents-in-britain/.
2. Baugh, A. & Cable, T. (2002). The History of the English Language. Upper Saddle River, New Jersey: Prentice Hall, 91–92. Retrieved from: https://www.academia.edu/30355120/A_History_of_the_English_Language_by_Albert_C_Baugh_and_Thom
3. BBC. (2005, January 11). *Voices: The Liverpool accent*. Retrieved from: https://www.bbc.co.uk/liverpool/content/articles/2005/01/11/voices_liverpoolaccent_feature.shtml
4. Beal, J. C. (2009, June). Enregisterment, commodification and historical context: "Geordie" versus "Sheffieldish". Retrieved from: https://eprints.whiterose.ac.uk/id/eprint/8758/1/Beal_8758.pdf
5. Boland, P. (2008). The Construction of Images of People and Place: Labelling Liverpool and Stereotyping Scousers. Retrieved from: https://www.sciencedirect.com/science/article/abs/pii/S0264275108000966
6. Britain, D. J. (2012). English in England. Retrieved from: https://www.researchgate.net/publication/260087964_English_in_England
7. Buchstaller, I., Corrigan, K. P., Holmberg, A., Honeybone, P., & Maguire, W. (2013). *T-to-R and the Northern Subject Rule: Questionnaire-based spatial, social and structural linguistics*. Retrieved from: nesps.pdf
8. Bueno-Amaro, J. (2015, December). “What ye divin't knaa aboot the canny lads and lasses back yem”: A Study of Language and Identity in the Geordie Variety of English. Retrieved from: https://www.researchgate.net/publication/287976983_What_ye_divin%27t_knaa_aboot_the_canny_lads_and_lasses_back_yem_A_Study_of_Language_and_Identity_in_the_Geordie_Variety_of_English
9. Cambridge Dictionary. Retrieved from: https://dictionary.cambridge.org/dictionary/english/sociolinguistic

10. Castro, A. M. B. (2008) The degree of institutionalisation and acceptance of certain English dialects. Universidad de Jaén. Retrieved from: https://www.scribd.com/doc/4935751/English-Dialects
11. Collins, B., Mees, I.M. (2019). Practical Phonetics and Phonology: A Resource Book for Students. Routledge English language introductions series, ISSN 2644-0237, pp. 193–194. Retrieved from: https://www.researchgate.net/publication/342990040_BEVERLEY_COLLINS_INGER_M_MEES_PAUL_CARLEY_Practical_English_phonetics_and_phonology_4th_edn_Routledge_English_Language_Introductions_London_New_York_Routledge_2019_ISBN978-1-138-59150-9
12. Coupland, N., Jaworski, A. (1997). Sociolinguistics: A Reader and Coursebook. Retrieved from: https://link.springer.com/book/10.1007/978-1-349-25582-5
13. Crystal, D. (2019). The Cambridge Encyclopedia of the English Language.
14. Erbanová, P. (2011). *The intelligibility of the Geordie dialect*. Masaryk University. Retrieved from: https://is.muni.cz/th/kl0sp/Geordie_dialect_BP.pdf
15. Graham, F. (1987). The New Geordie Dictionary. Retrieved from: https://archive.org/details/newgeordiedictio0000unse/page/n49/mode/2up
16. Hughes, A., Trudgill, P., & Watt, D. (2012). English Accents and Dialects: An Introduction to Social and Regional Varieties of English in the British Isles. Retrieved from: https://www.academia.edu/111299360/Arthur_Hughes_Peter_Trudgill_and_Dominic_Watt_2012_English_Accents_and_Dialects_An_Introduction_to_Social_and_Regional_Varieties_of_English_in_the_British_Isles

17. Johnstone, B. (2011). Language and place, 203. Retrieved from: https://www.cambridge.org/core/elements/language-and-place/E95116DA21FDDFCDF4DFE5375765514C
18. Kortmann, B., Langstrof, C. (2012). Regional varieties of British English, 122-123. Retrieved from: https://www.academia.edu/92295235/Regional_varieties_of_British_English
19. Language of Merseyside. (2018). *Irish influence*. Retrieved from: https://languageofmerseysideg5.wordpress.com/irish-influence/
20. Leonard, M. (2014, June 18). Irish cultural expression in Liverpool. BBC Legacies. Retrieved from: https://www.bbc.co.uk/legacies/immig_emig/england/liverpool/article_1.shtml
21. Levis, M. J., Zhou, Z. (2018). Accent. Retrieved from: https://www.researchgate.net/publication/322574501_Accent
22. MacKenzie L., Bailey G., Turton D. (2022, May) Towards an updated dialect atlas of British English. Retrieved from: https://www.cambridge.org/core/journals/journal-of-linguistic-geography/article/towards-an-updated-dialect-atlas-of-british-english/07AD1E071645452F33A118B08E038CD6
23. Maguire, W. (n.d.). *Geordie*. School of Philosophy, Psychology and Language Sciences, University of Edinburgh. Retreived from: http://www.lel.ed.ac.uk/~wmaguire/Geordie.html
24. Mahlknecht, E. (2025). *Phonological features*. *Scouse – Liverpool English*. Retrieved from: https://scousesite.wordpress.com/phonological-features/
25. McArthur, T. (2002). Oxford Guide to World English. New York: Oxford University Press. Retrieved from: https://openlibrary.org/books/OL3656273M/The_Oxford_guide_to_world_English
26. McSweeney, D. (2012, October 15). *A trip through Liverpool's rich Irish history*. *The Guardian*. Retrieved from:

https://www.theguardian.com/uk/the-northerner/2012/oct/15/blogpost-liverpool-irish-festival

27. Montgomery, C. (2018, January). The Perceptual Dialectology of England. Retrieved from: https://www.researchgate.net/publication/322228815_The_Perceptual_Dialectology_of_England

28. Montiel-McCann, C., Lampropoulou, S., Cooper, P., & Byrne, R. (2025). Pink rollers and fake tan: Counterhegemonic gender identity in the enregisterment of the *Scouse bird* persona, 52-70. Retrieved from: https://benjamins.com/catalog/jlpop.24011.mon?srsltid=AfmBOorHpV81LR7ZD0gruDX2f2eSksKBvncfy0T207Nsiq3cspIkfQN7

29. Newcastle University Library Guides. (2023). *Tyneside and Northumbrian dialect resources* (LibGuide page). Retrieved from: https://libguides.ncl.ac.uk/c.php?g=130223&p=851119

30. Newell, S. (2004). Who wants to be a Geordie?

31. Pace-Sigge, M. (2003). Intonation in Scouse. Retrieved from: https://www.researchgate.net/publication/302303299_Intonation_in_Scouse

32. Paver, A., Wright, D., Braber, N., Pautz, N. (2025) Stereotyped accent judgements in forensic contexts: listener perceptions of social traits and types of behaviour. Retrieved from: https://www.frontiersin.org/journals/communication/articles/10.3389/fcomm.2024.1462013/full

33. Pearce, M. (2015, June). The Ethnonym Geordie in North East England. Retrieved from: https://www.researchgate.net/publication/277662037_The_Ethnonym_Geordie_in_North_East_England

34. Perini, G. (2017) *A sociolinguistic study of UK varieties of English: A case study of Liverpool English*. Master's thesis, Università degli Studi di Padova. Retrieved from: https://thesis.unipd.it/bitstream/20.500.12608/28484/1/Giada_Perini_2017.pdf

35. Quora. (n.d.). *Why does everyone hate the Geordie accent? Should I try to lose it so I sound better?* [Online forum post]. https://www.quora.com/Why-does-everyone-hate-the-Geordie-accent-Should-I-try-to-lose-it-so-I-sound-better

36. Reddit. (2023, June 20). *Liverpool and Scousers in the media* [Online forum thread]. Reddit. https://www.reddit.com/r/Liverpool/comments/14emvy2/liverpool_and_scousers_in_the_media/

37. Strycharczuk, P., López-Ibáñez, M., Brown, G., Leemann, A. (2020, July 15). General Northern English. Exploring Regional Variation in the North of England With Machine Learning. Retrieved from: https://www.frontiersin.org/journals/artificial-intelligence/articles/10.3389/frai.2020.00048/full

38. Toren, H. (2015). Urbanization, standard language, dialect. Retrieved from: https://dergipark.org.tr/en/pub/iutded/issue/17078/178713

39. Wood, H. (2017). The politics of hyperbole on Geordie Shore: Class, gender, youth and excess. *European Journal of Cultural Studies*, 20(6), 637–653. Retrieved from: https://journals.sagepub.com/doi/abs/10.1177/1367549416640552

Supportive Materials

Software Tool:

Boersma, P., & Weenink, D. (n.d.). *Praat: Doing phonetics by computer* [Computer software]. Version retrieved from: http://www.fon.hum.uva.nl/praat

Audio-Visual Material:

YouTube. (2025). Dave's Cave. *This City is Ours Jack McMullen & Darci Shaw interview 2025.* Retrieved from: https://youtu.be/2mZZPa8O6uo?si=_uhuP6xNtK8JfbvJ

YouTube. (2025). em wallbank. *Em Wallbank chats to the cast of A Thousand Blows - Part 1.* Retrieved from: https://youtu.be/Zn41uI4mTq4?si=-Ui9NwMcO30JdXna

YouTube. (2020). everymanplayhouse. *Love, Liverpool // Letter 6 // A Thank You from Darci Shaw.* Retrieved from: https://youtu.be/h74fD-3sQ7g?si=gA94BOBfgjlavo2n

YouTube. (2025). HeyUGuys. *A Thousand Blows | Hannah Walters, Darci Shaw, Morgan Hilaire | Fighting through history.* Retrieved from: https://youtu.be/jEemUzYzH30?si=hOnnvLudBG20yzmM

YouTube. (2019). ITV News. *Darci Shaw: Meet the teenage actor starring with Renée Zellweger in Judy Garland biopic.* Retrieved from: https://youtu.be/SfFOQqvneZE?si=YaD5mbpDERg6renu

YouTube. (2021). On Demand Entertainment. THE IRREGULARS: Harrison Osterfield, Thaddea Graham & Darci Shaw Talk New Netflix Series! Retrieved from: https://youtu.be/jwvTMGVo5Z4?si=S6wLxZSDw7Yp1plO

YouTube. (2021). Onic Player. *Thaddea Graham, Darci Shaw & Harrison Osterfield Full 'THE IRREGULARS' Interview*. Retrieved from: https://youtu.be/0-i9pWRAKZ4?si=Nr0cpOc31o5aE1Vo

YouTube. (2021). Screen Rant Plus. *Thaddea Graham, Darci Shaw & Harrison Osterfield Interview: The Irregulars*. Retrieved from: https://youtu.be/sX99sJlsUVw?si=WXxCNObwwXISvRqf

YouTube. (2022). The Fan Carpet. *UK Premiere: Phoebe Dynevor, Darci Shaw, David Morrissey | The Colour Room (The Fan Carpet)*. Retrieved from: https://youtu.be/9zzYwnpApiE?si=qcSRn-ggXfgpwf7E

YouTube. (2024). The Upcoming. *Darci Shaw interview at The Colour Room premiere in London.* Retrieved from: https://youtu.be/m2uVWAXmtMo?si=25LKDnvLHHa9L9_r

YouTube. (2025). The Upcoming. *Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama*. Retrieved from: https://youtu.be/NRG3GXLbgNM?si=jxo5pXhq0VnYAEP0

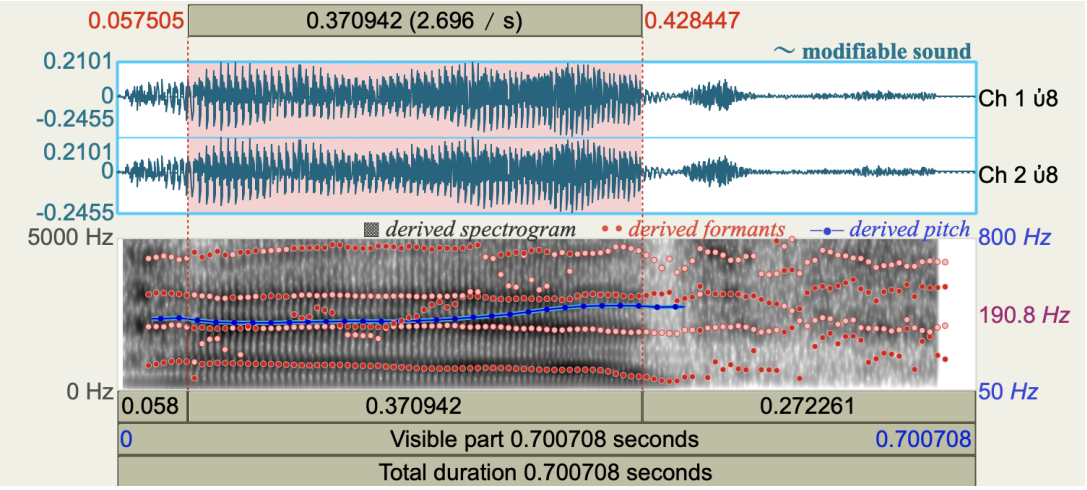
YouTube. (2025). Tilly Lockey. *Dubai vlog! Losing my arms + speaking at the biggest global AI conference.* Retrieved from: https://youtu.be/b7i-i_dkCeE?si=heMPcbHcB7WDO8kb

YouTube. (2024). Tilly Lockey. *HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life.* Retrieved from: https://youtu.be/oS314vz08zc?si=DHbyNeiApAXImrZN

YouTube. (2024). Tilly Lockey. *how I went from being the shyest in the room to speaking on stages to thousands - shy girl advice!* Retrieved from: https://youtu.be/qB7-EM8guaM?si=75x5GAEkEzCaeEX8

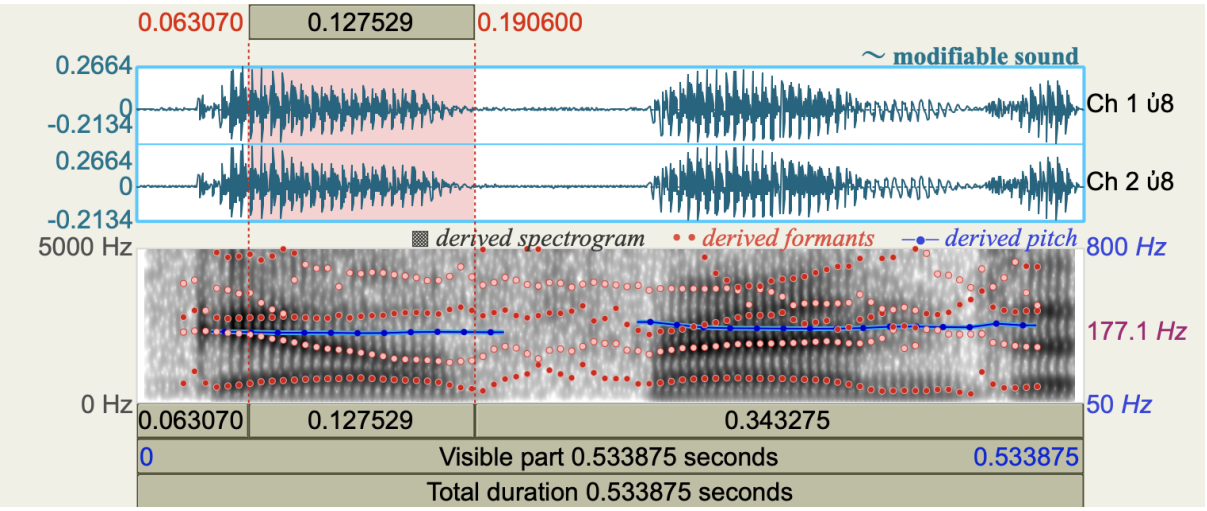
APPENDICES

Appendix 1



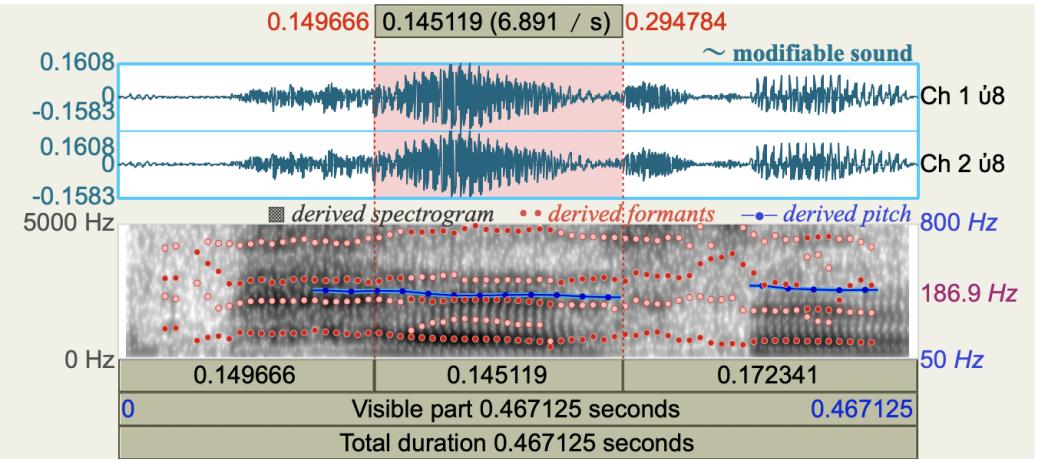
Picture. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "heard" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 2:46]

Appendix 2



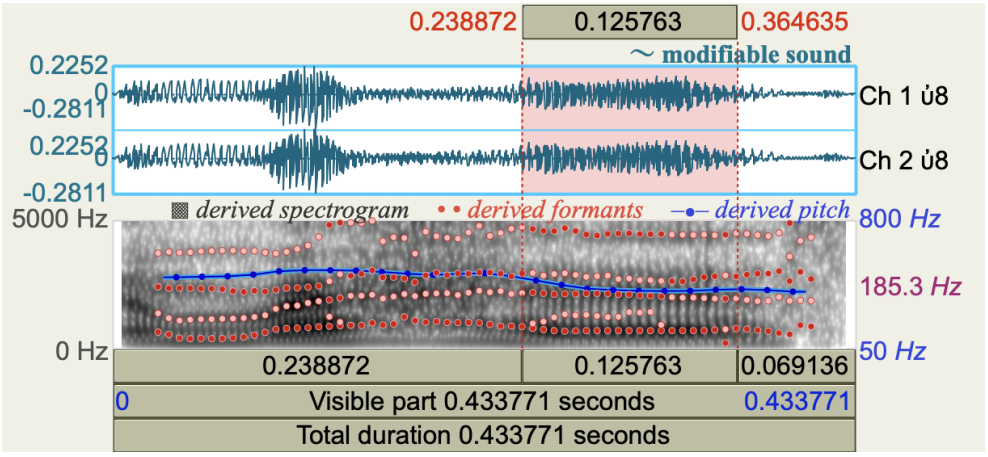
*Picture. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "girlfriend" [*The Upcoming. *Darci Shaw interview at The Colour Room premiere in London, 2024, 3:57]*

Appendix 3



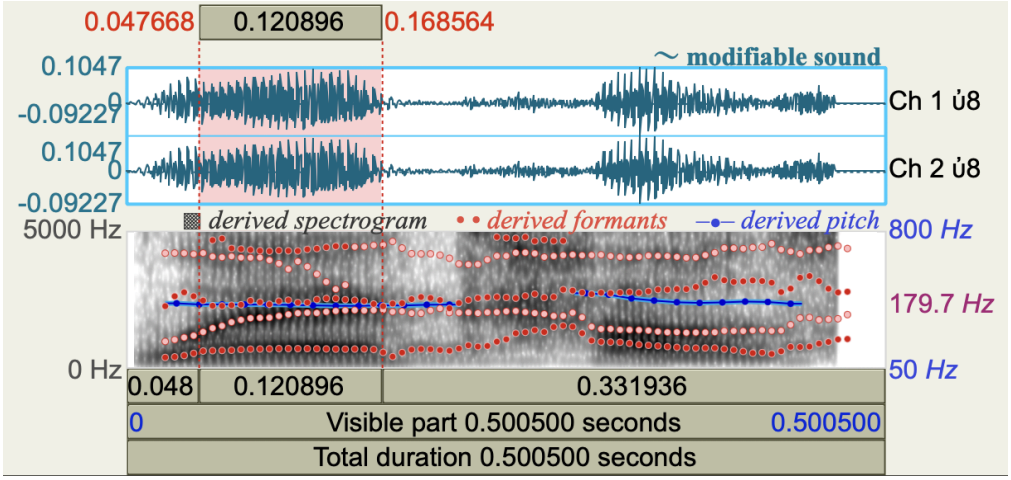
Picture. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "person" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview 2025, 0:41]

Appendix 4



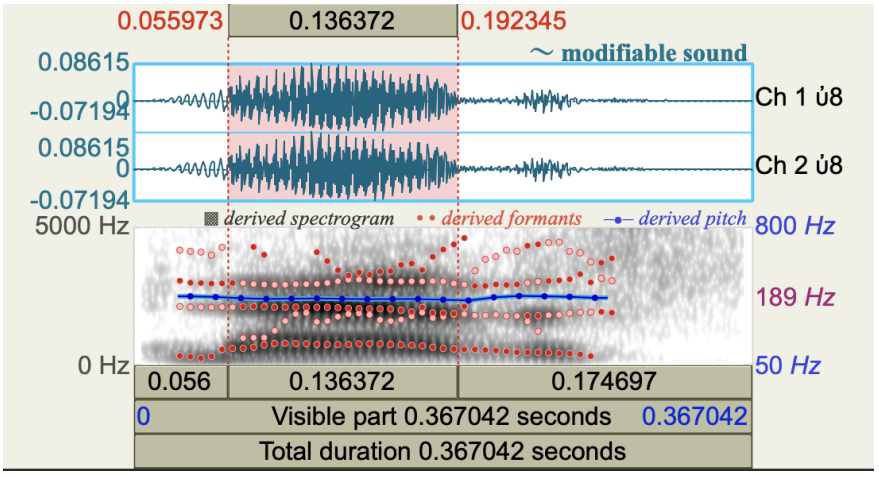
Picture. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "rehearsals" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview 2025, 2:27]

Appendix 5



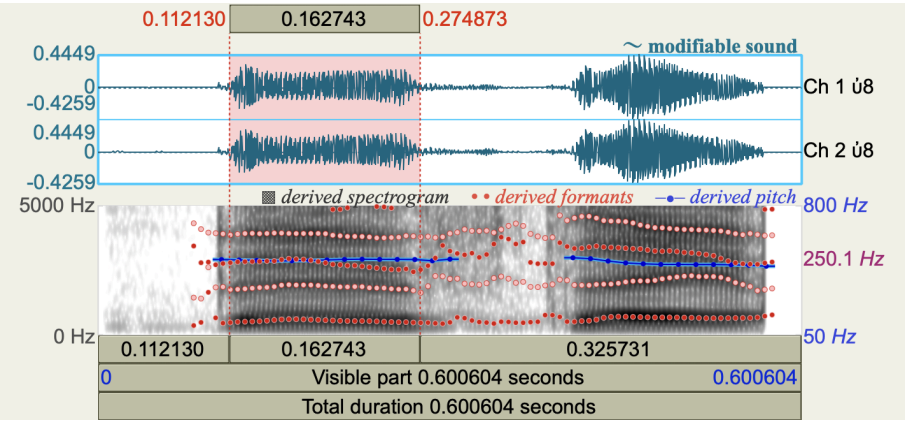
Picture. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "workhouse" [HeyUGuys. A Thousand Blows | Hannah Walters, Darci Shaw, Morgan Hilaire | Fighting through history, 2025, 2:05]

Appendix 6



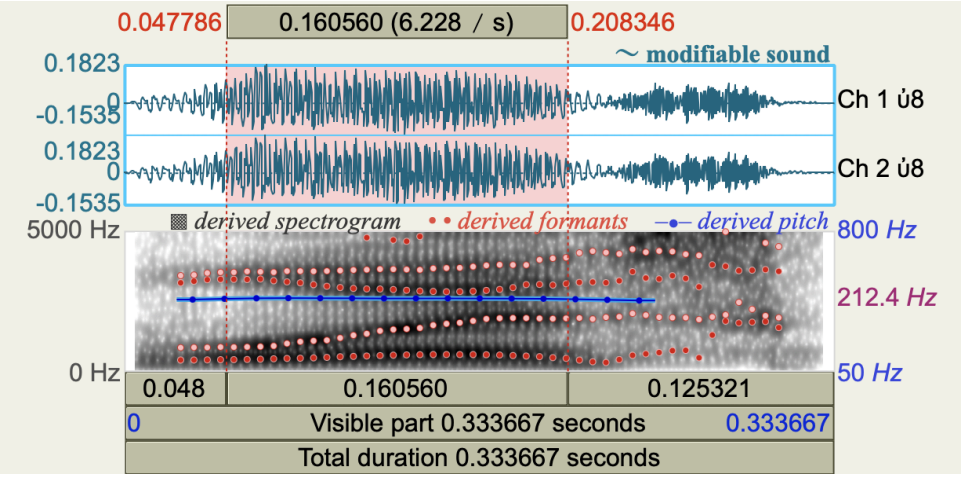
Picture. The spectrogram of Darci Shaw's realisation of the NURSE vowel in the word "nervous" [On Demand Entertainment. THE IRREGULARS: Harrison Osterfield, Thaddea Graham & Darci Shaw Talk New Netflix Series!, 2021, 2:04]

Appendix 7



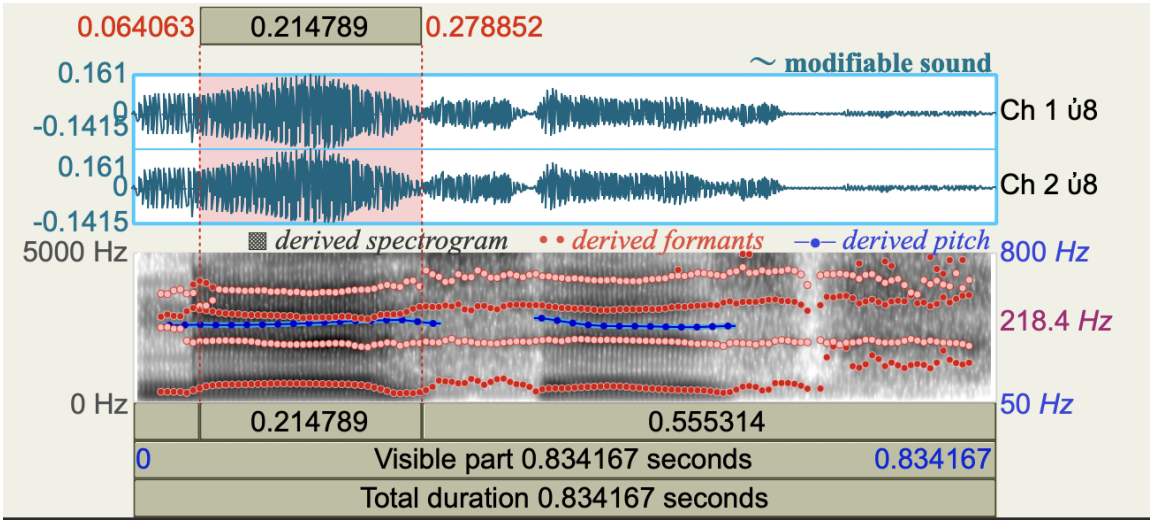
Picture. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "birthday" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 9:28]

Appendix 8



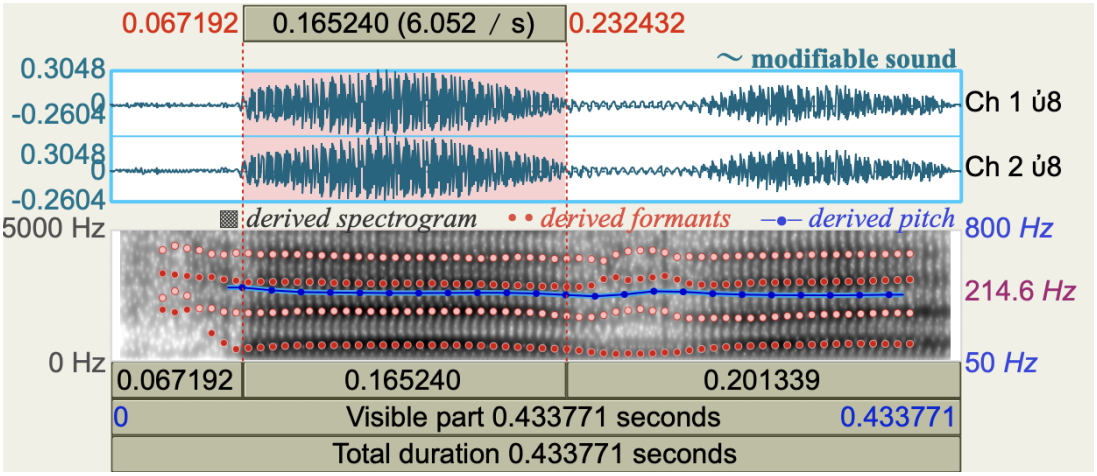
Picture. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "worst" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 0:47]

Appendix 9



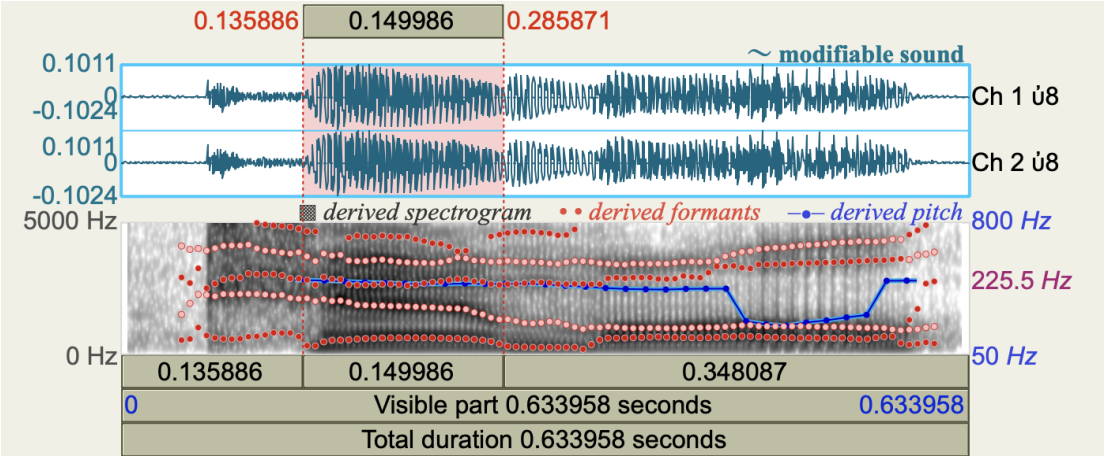
Picture. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "nurses" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 3:14]

Appendix 10



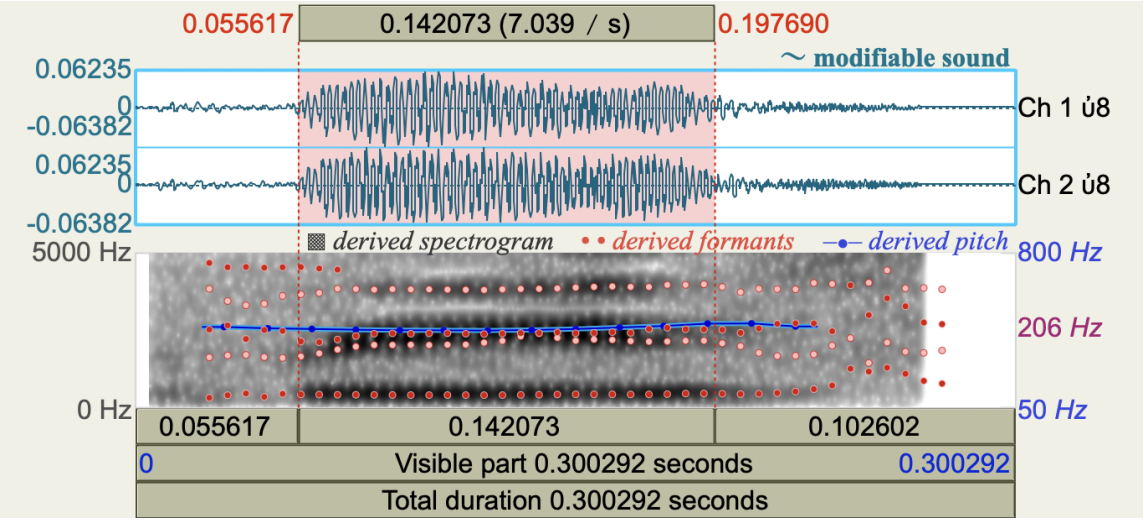
Picture. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "further" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 7:58]

Appendix 11



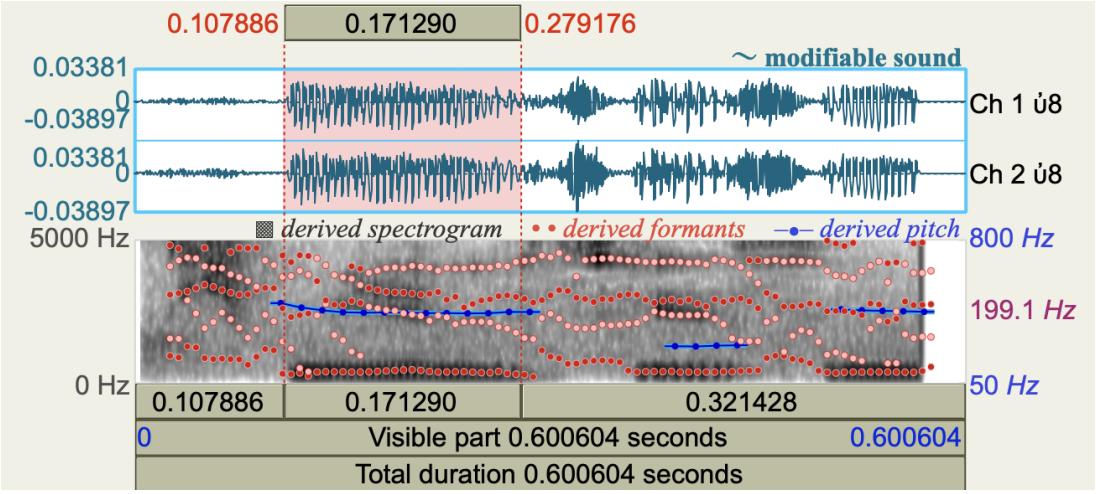
Picture. The spectrogram of Tilly Lockey's realisation of the NURSE vowel in the word "turmoil" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 10:11]

Appendix 12



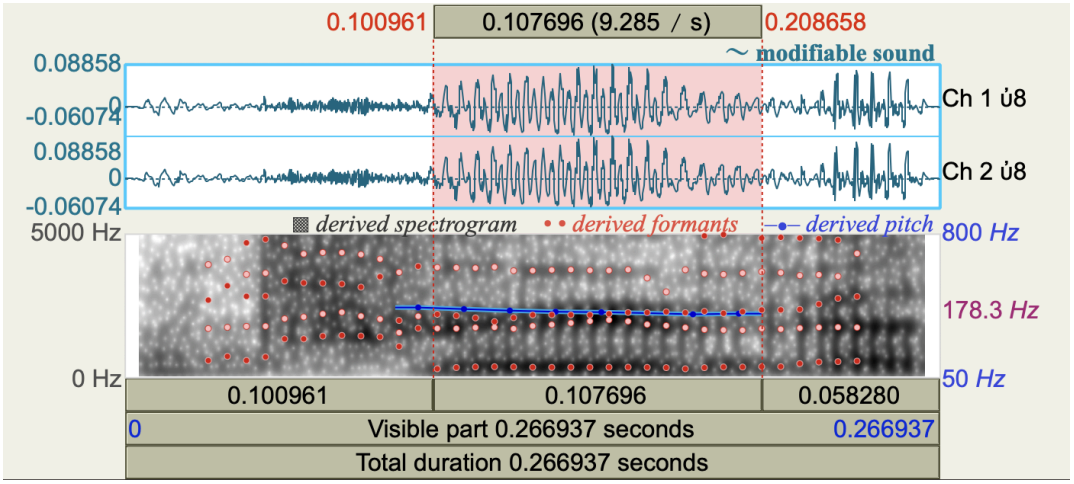
Picture. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "roof" [everymanplayhouse. Love, Liverpool // Letter 6 // A Thank You from Darci Shaw, 2020, 0:10*]*

Appendix 13



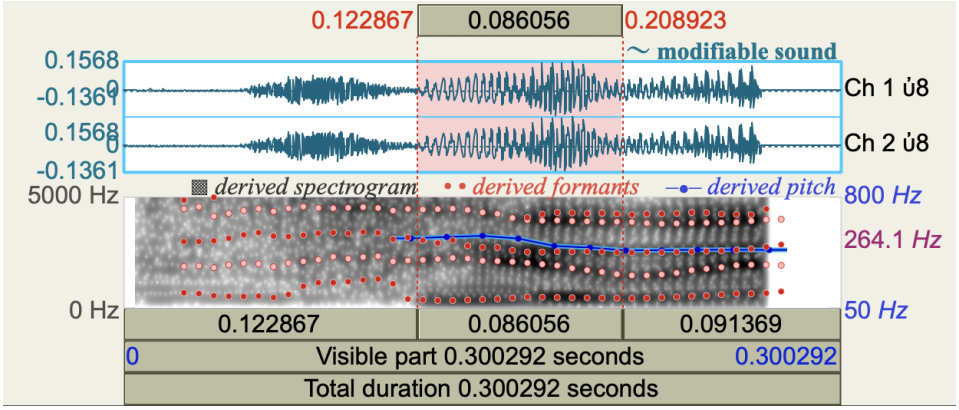
Picture. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "communities" [everymanplayhouse. Love, Liverpool // Letter 6 // A Thank You from Darci Shaw, 2020, 0:44*]*

Appendix 14



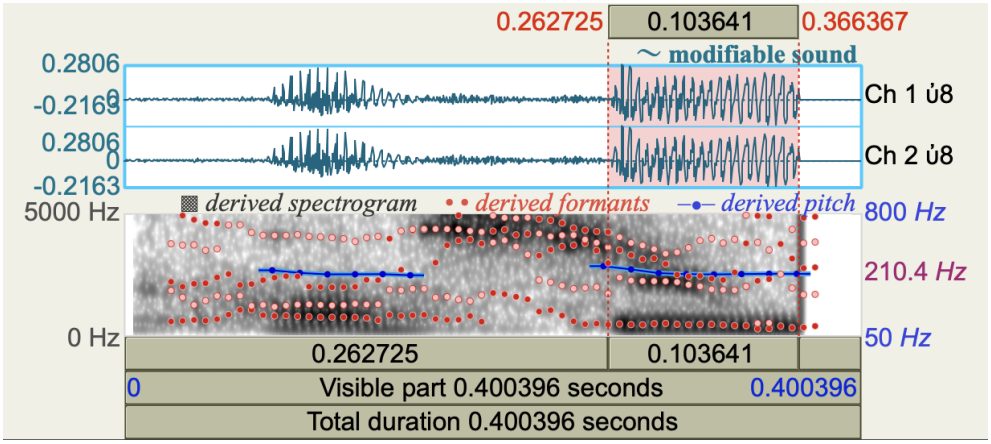
*Picture. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "prove" [*The Upcoming. *Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama*, 2025, *7:14]*

Appendix 15



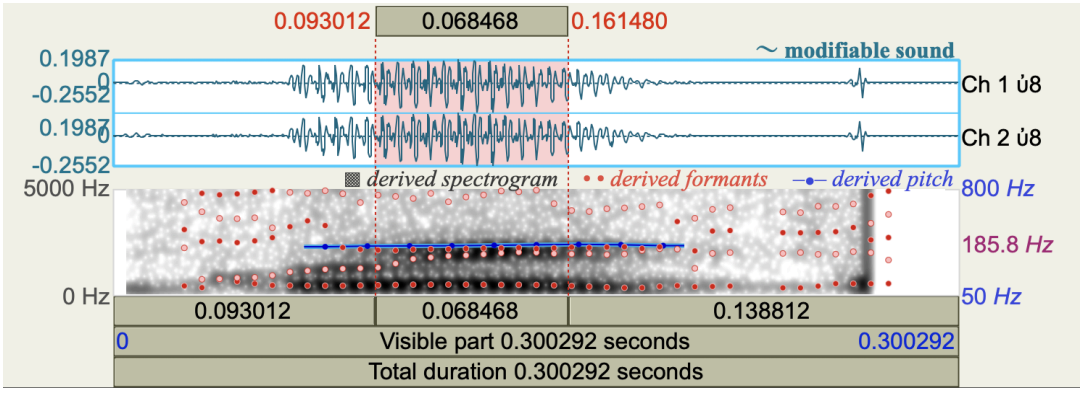
*Picture. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "two" [*The Upcoming. *Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama*, 2025, *8:03]*

Appendix 16



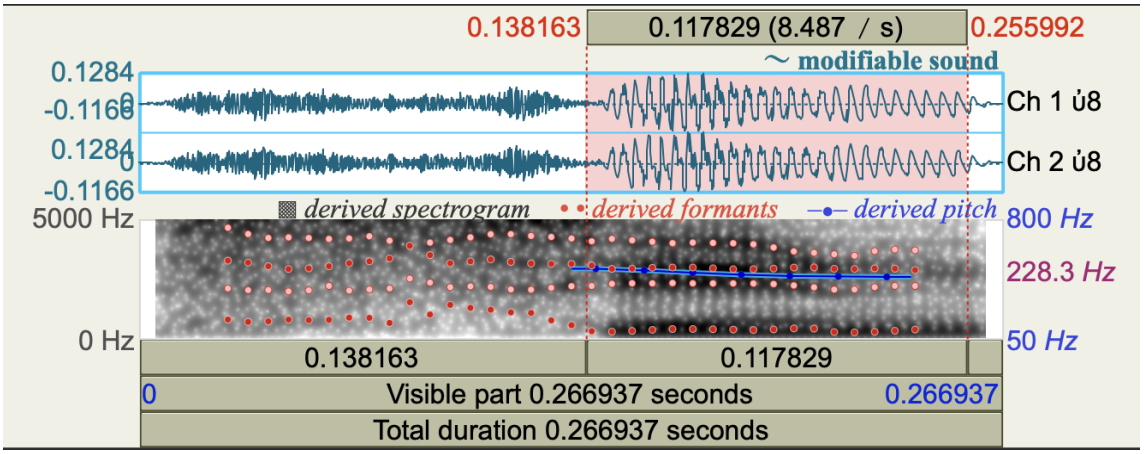
*Picture. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "costume" [*Onic Player. *Thaddea Graham, Darci Shaw & Harrison Osterfield Full 'THE IRREGULARS' Interview*, 2021, 4:57]

Appendix 17



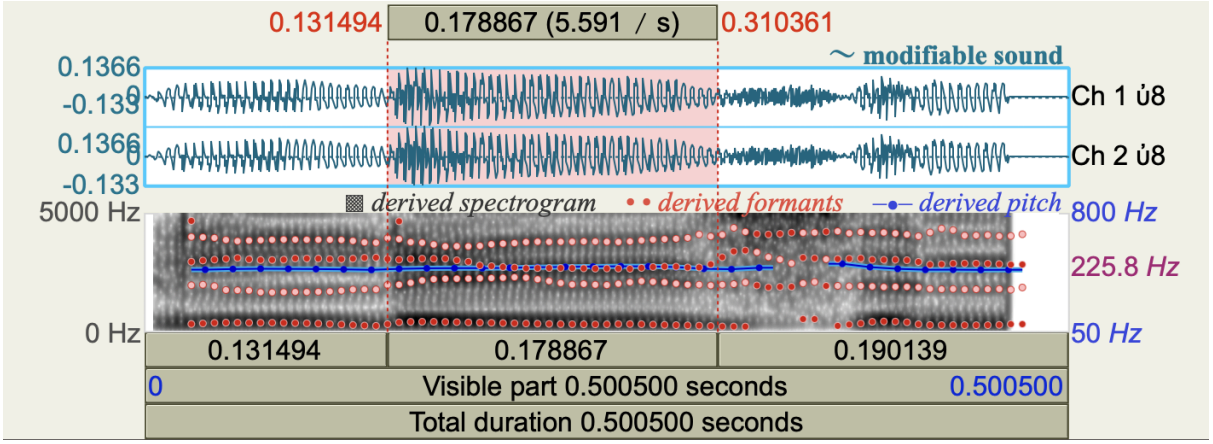
Picture. The spectrogram of Darci Shaw's realisation of the FOOL vowel in the word "group" [Screen Rant Plus. Thaddea Graham, Darci Shaw & Harrison Osterfield Interview: The Irregulars, 2021, 8:25]

Appendix 18



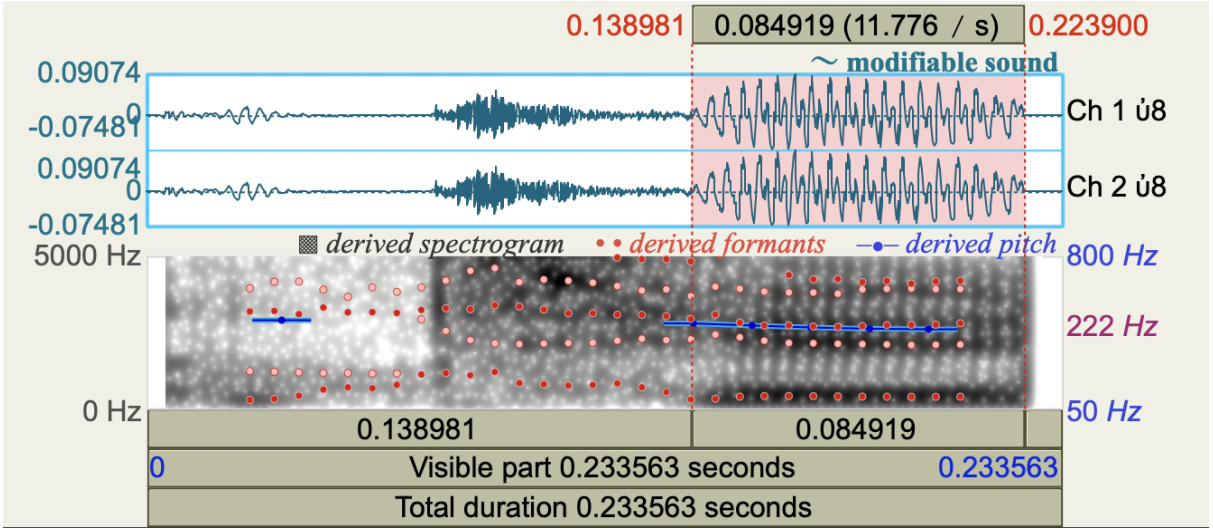
Picture. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "soon" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 1:34]

Appendix 19



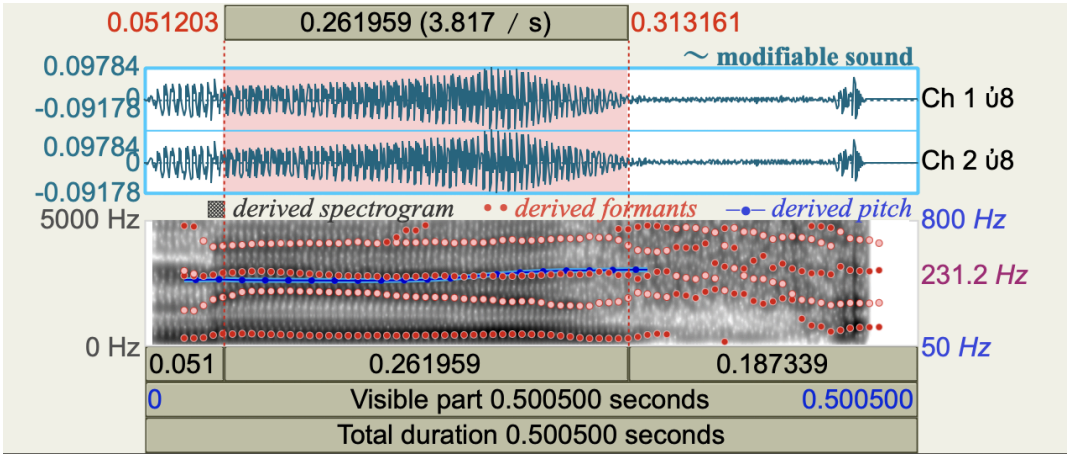
Picture. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "losing" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 3:46]

Appendix 20



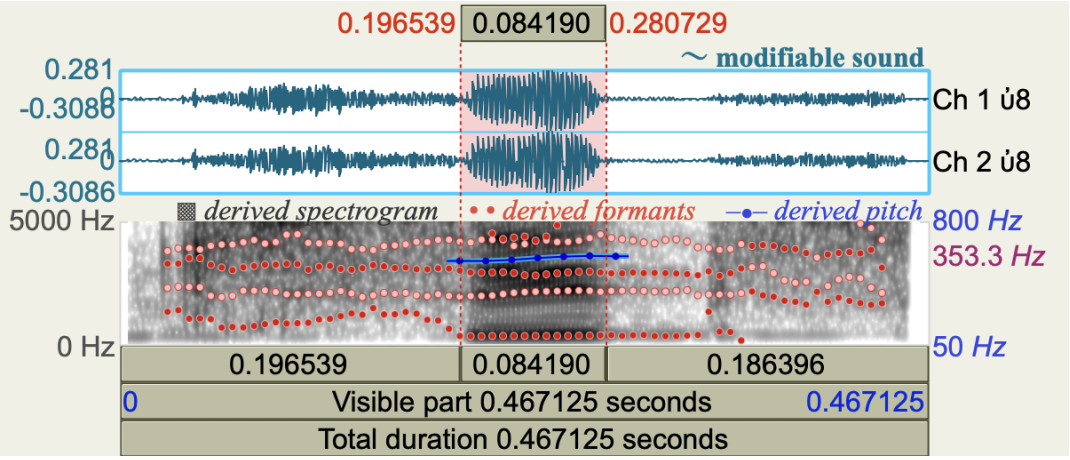
Picture. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "too" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 5:11]

Appendix 21



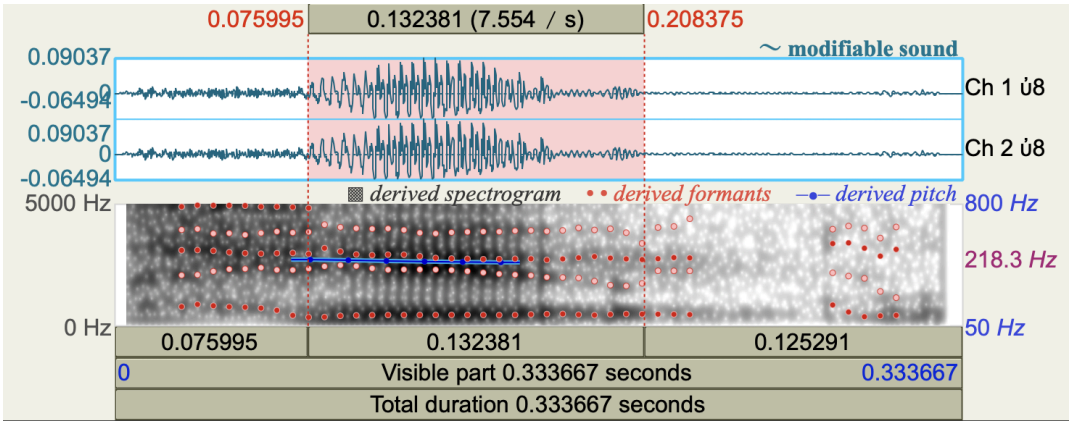
Picture. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "move" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 11:32]

Appendix 22



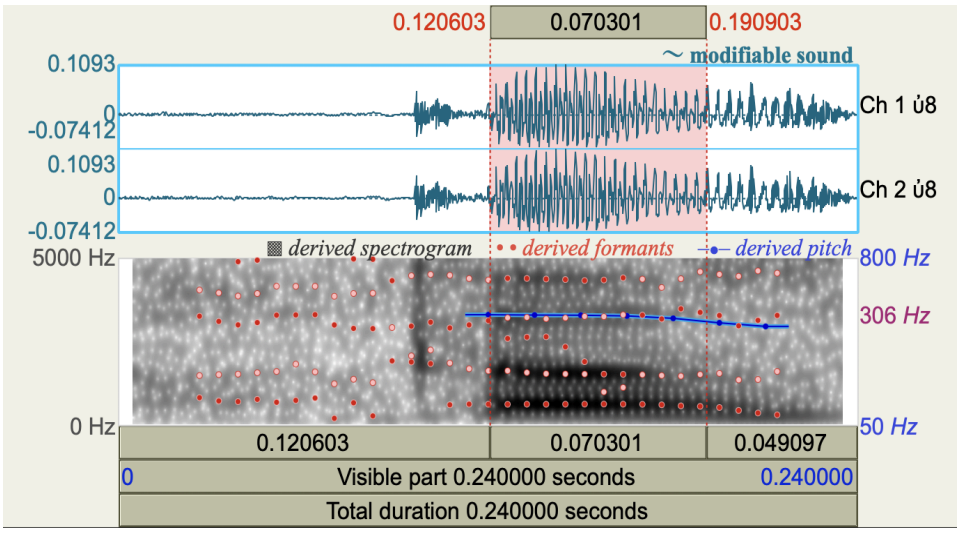
Picture. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "suits" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 12:38]

Appendix 23



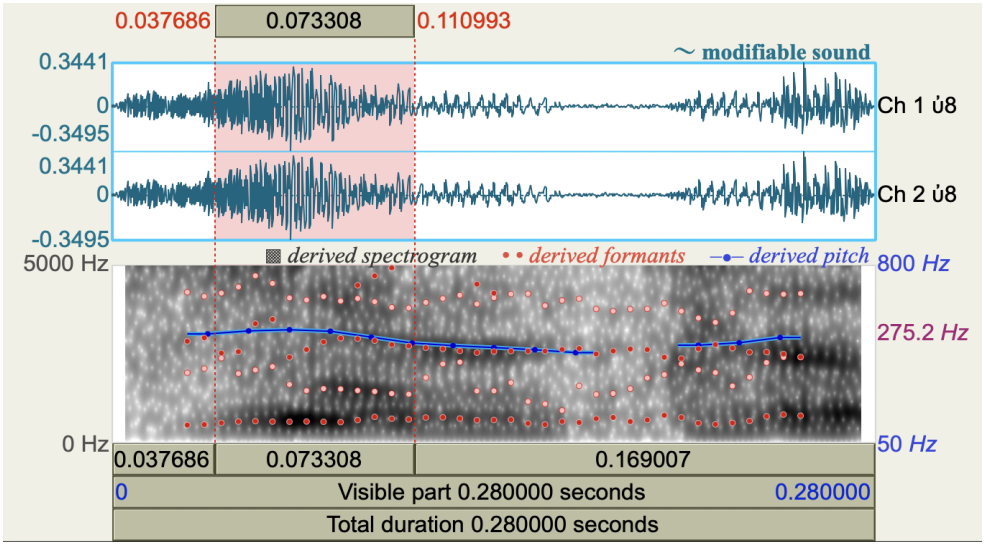
Picture. The spectrogram of Tilly Lockey's realisation of the FOOL vowel in the word "who" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 13:54]

Appendix 24



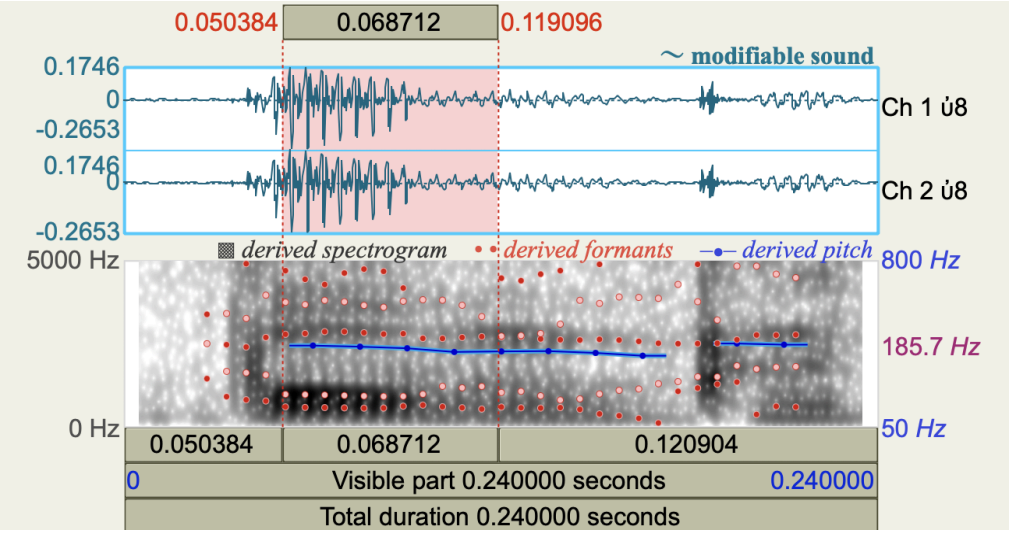
*Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "does" [*Dave's Cave. *This City is Ours Jack McMullen & Darci Shaw interview, 2025, 2:32]*

Appendix 25



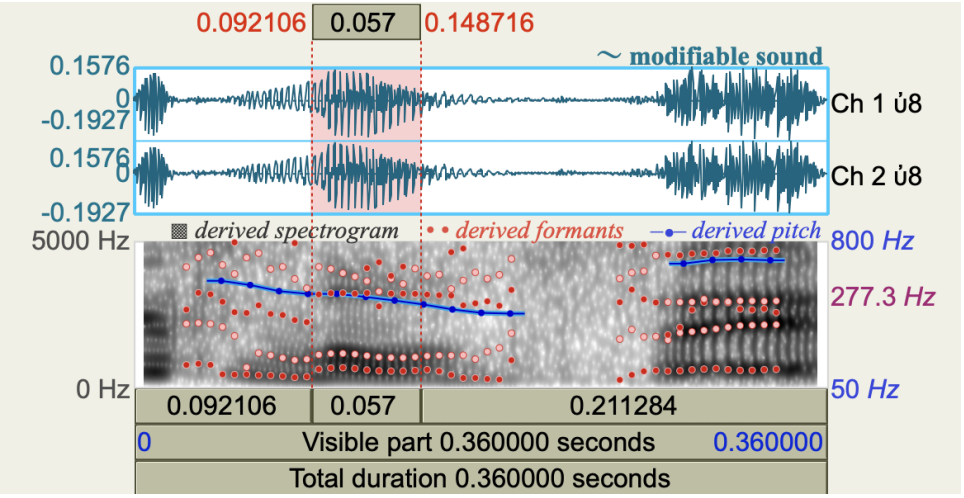
*Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "some" [*Dave's Cave. *This City is Ours Jack McMullen & Darci Shaw interview, 2025, 2:44]*

Appendix 26



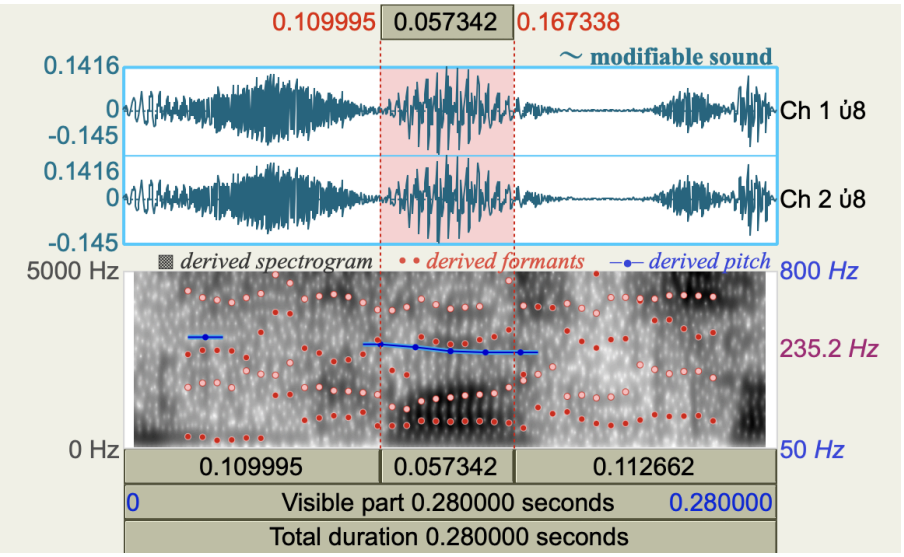
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "bumping" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview, 2025, 2:58]

Appendix 27



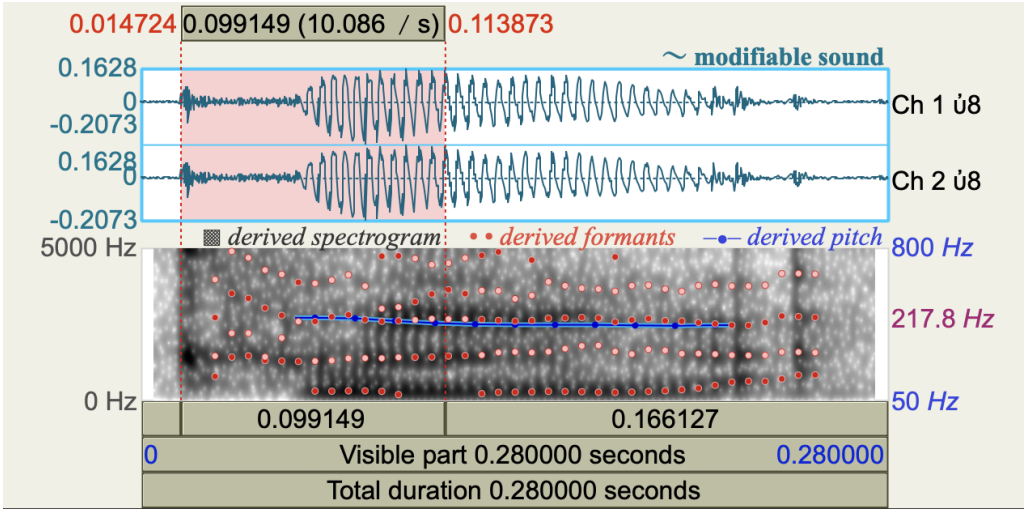
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "loved" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview, 2025, 3:02]

Appendix 28



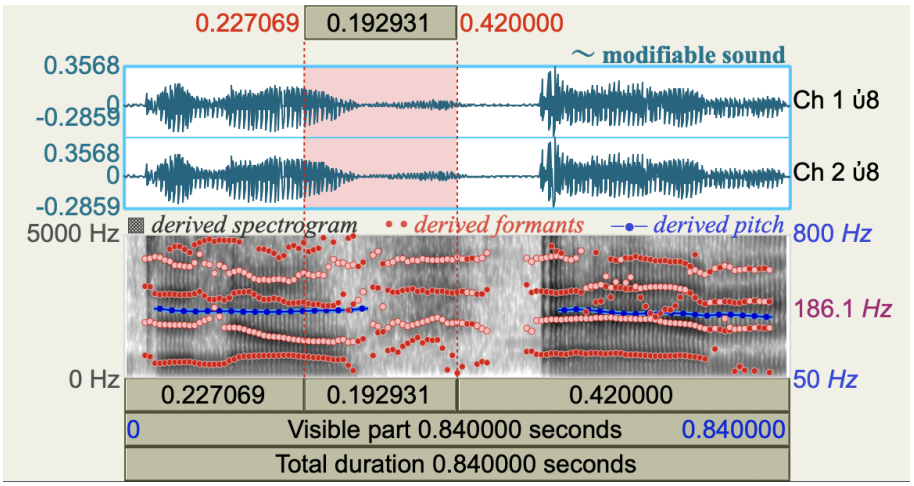
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "such" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview, 2025, 3:03]

Appendix 29



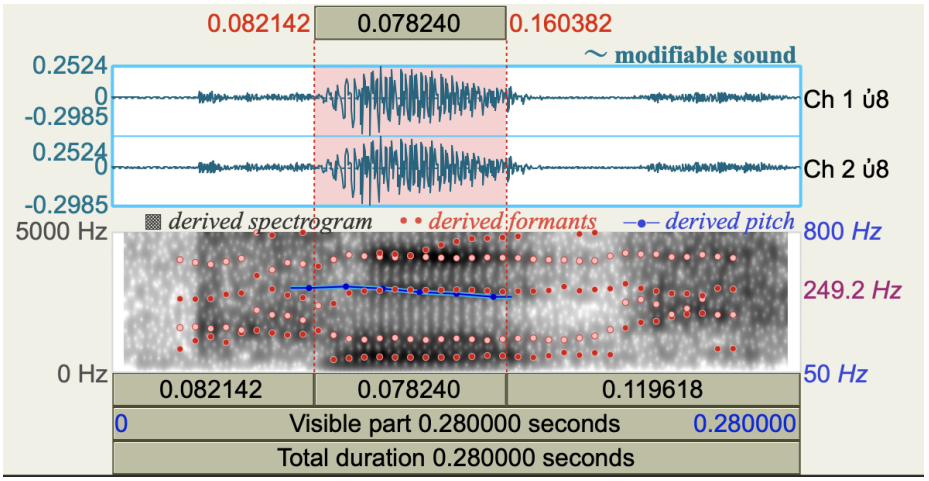
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "come" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 0:19]

Appendix 30



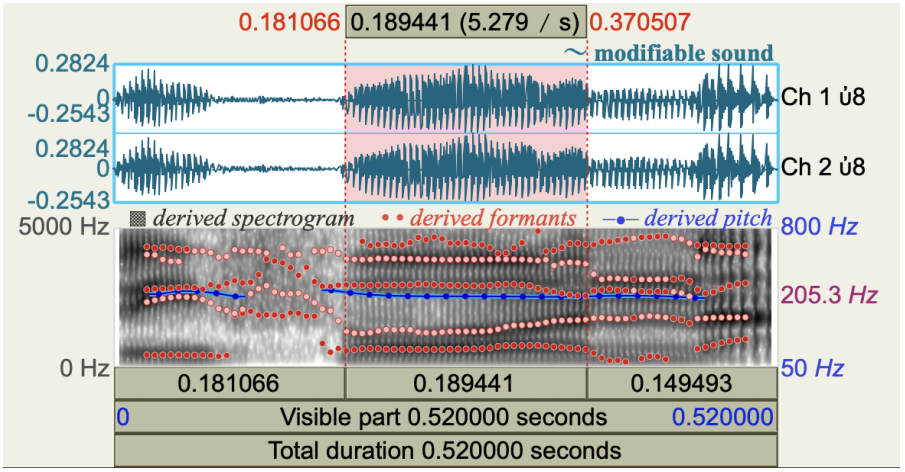
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "lovely" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 1:37]

Appendix 31



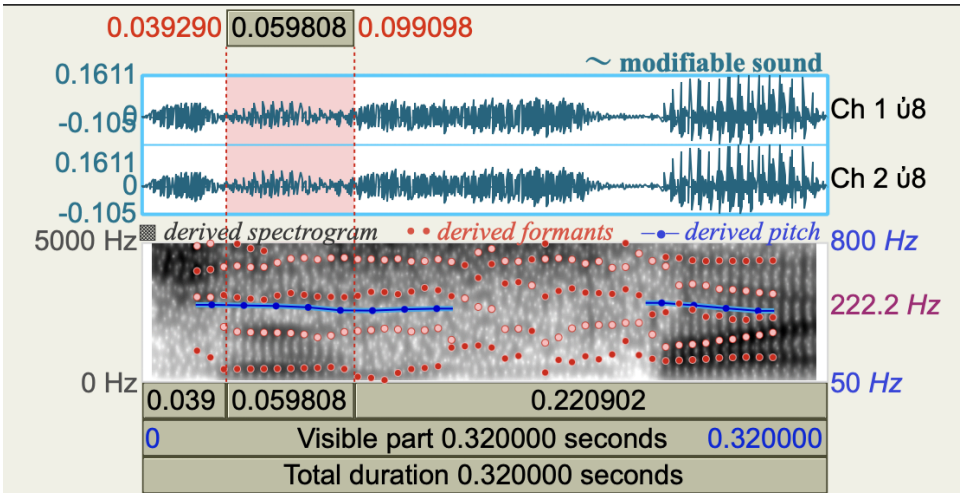
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "cut" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 2:05]

Appendix 32



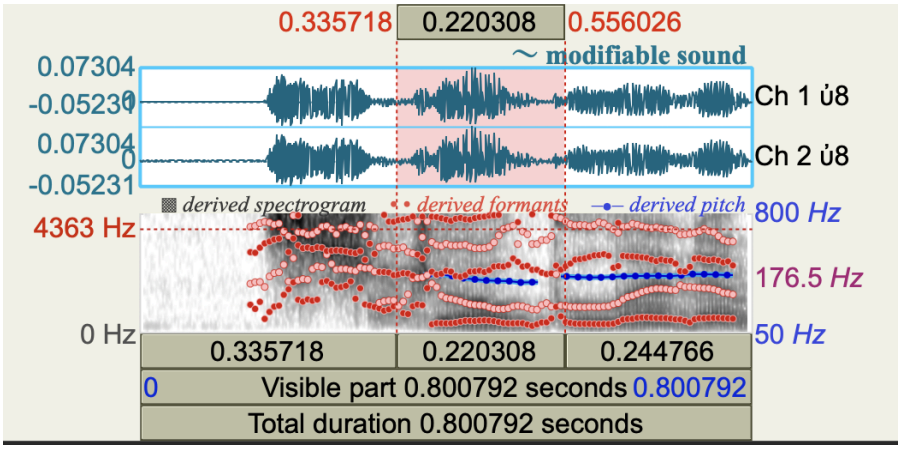
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "fun" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 2:20]

Appendix 33



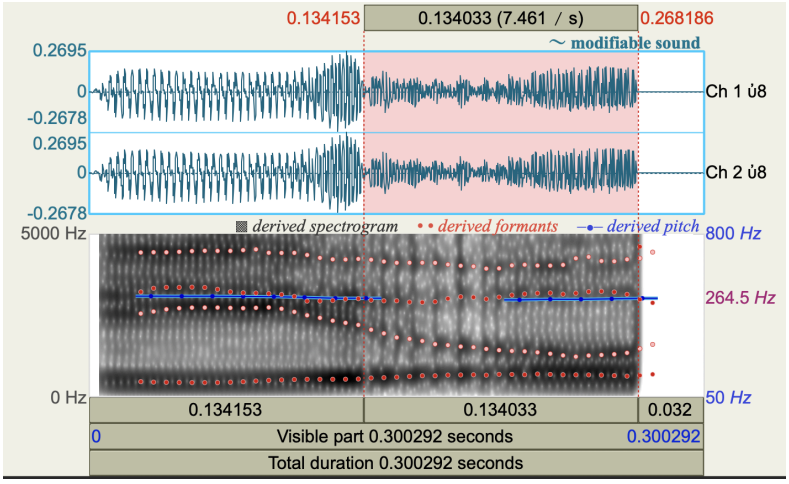
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "just" [HeyUGuys. A Thousand Blows | Hannah Walters, Darci Shaw, Morgan Hilaire | Fighting through history, 2025, 4:02]

Appendix 34



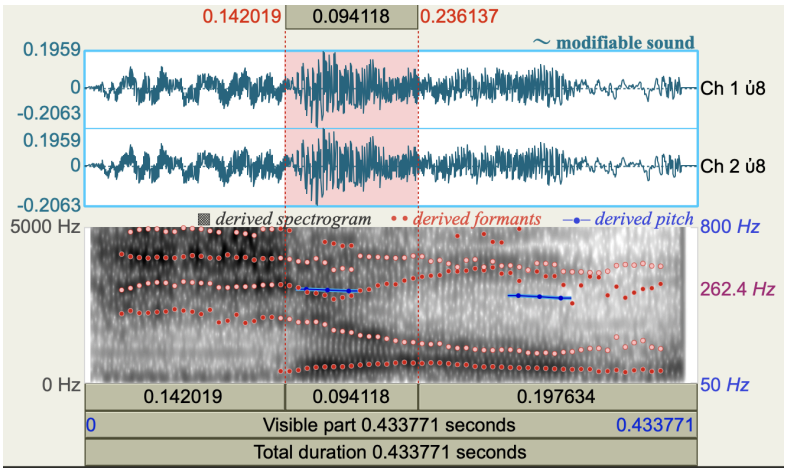
Picture. The spectrogram of Darci Shaw's realisation of the STRUT vowel in the word "struggling" [The Upcoming. Darci Shaw, Morgan Hilaire & Hannah Walters interview on A Thousand Blows: Period drama, 2025, 2;15]

Appendix 35



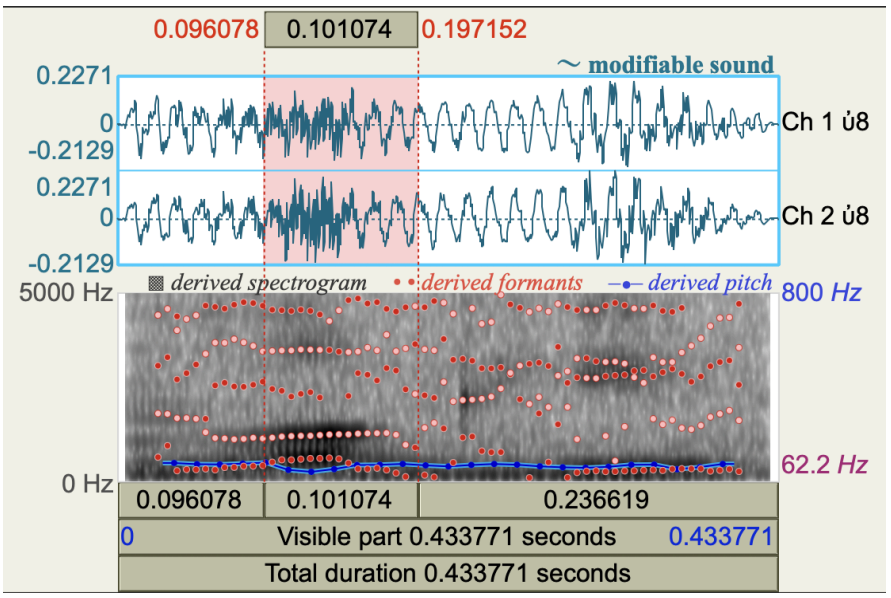
Picture. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "up" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 0:53]

Appendix 36



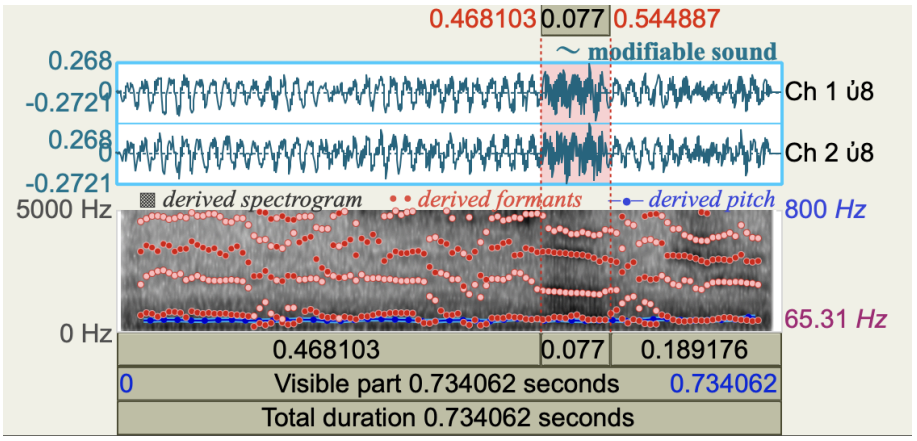
Picture. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "shuttle" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 0:54]

Appendix 37



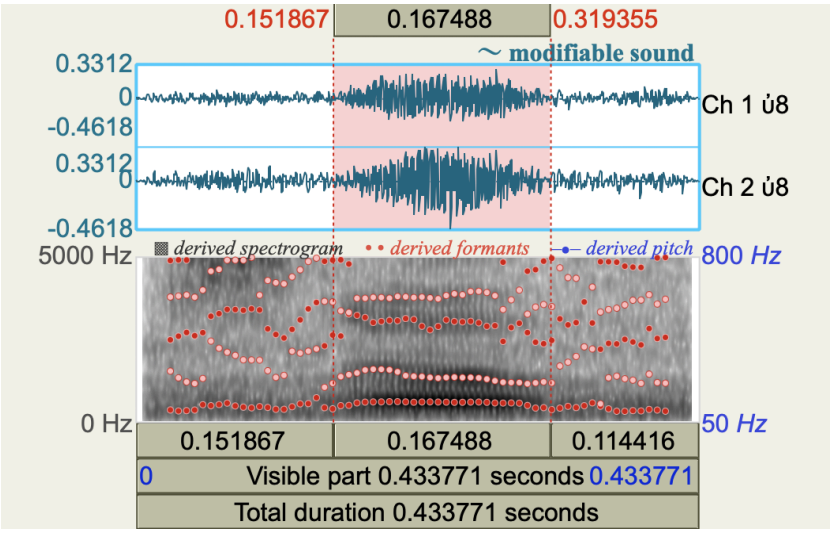
Picture. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "lucky" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 10:47]

Appendix 38



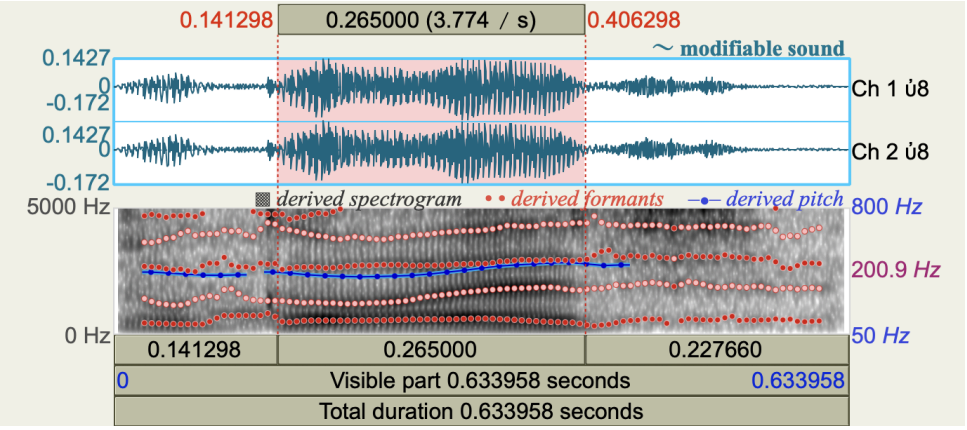
Picture. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "such" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 10:53]

Appendix 39



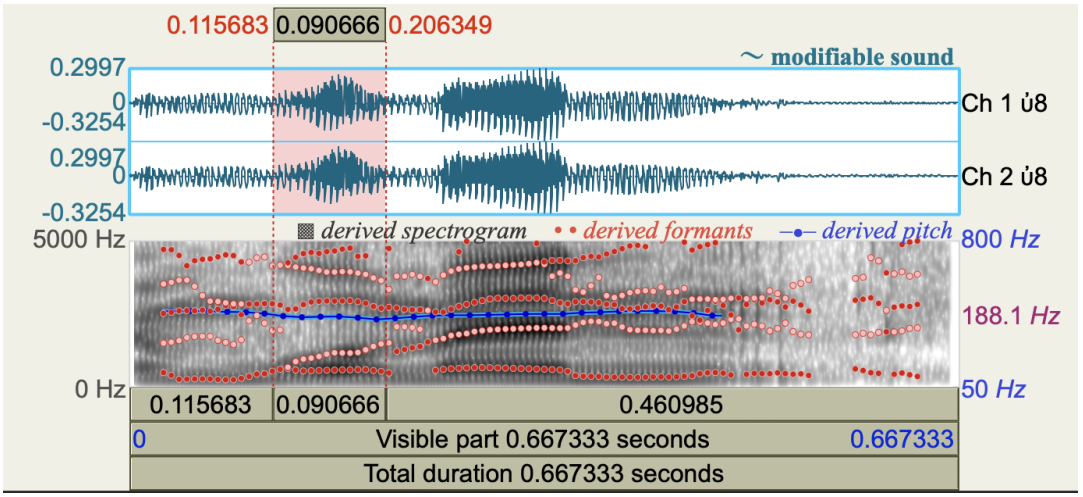
Picture. The spectrogram of Tilly Lockey's realisation of the STRUT vowel in the word "stuff" [Tilly Lockey. Dubai vlog! Losing my arms + speaking at the biggest global AI conference, 2025, 11:47]

Appendix 40



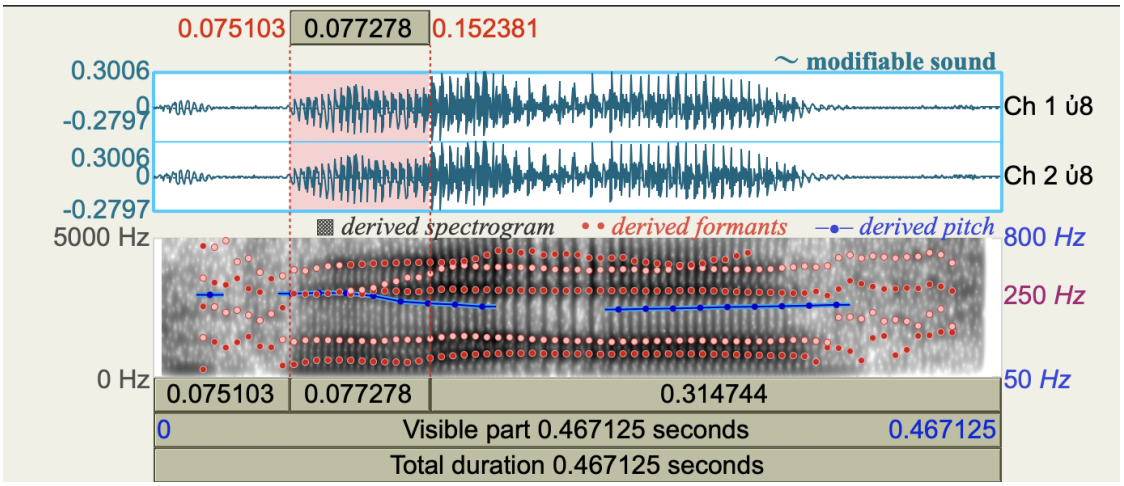
Picture. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "good" [The Fan Carpet. UK Premiere: Phoebe Dynevor, Darci Shaw, David Morrissey | The Colour Room, 2022, 10:14]

Appendix 41



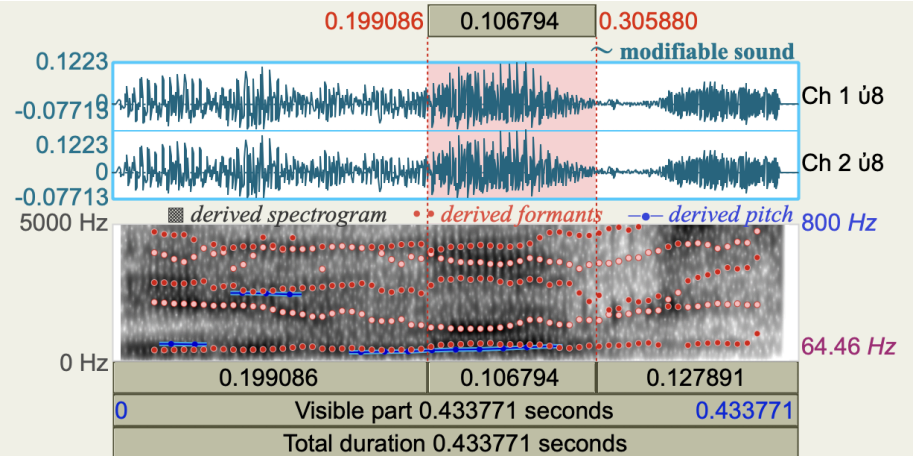
Picture. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "woman" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 0:15]

Appendix 42



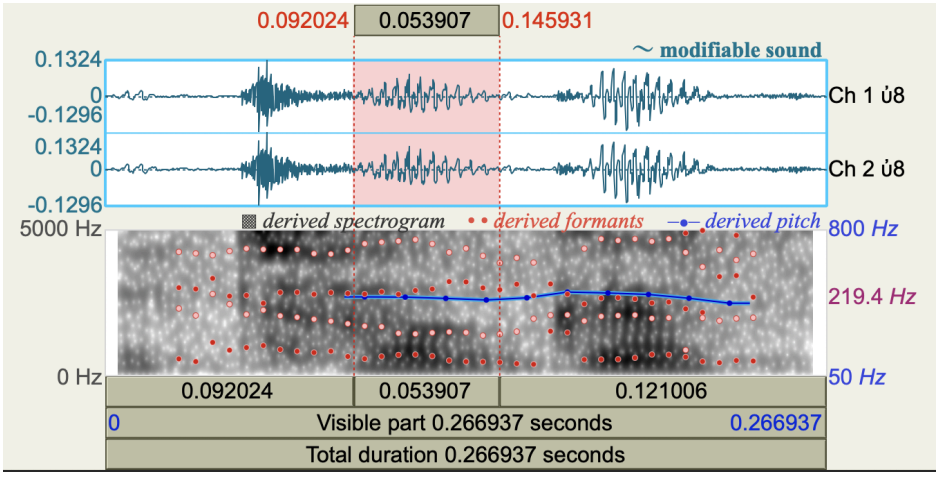
Picture. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "pull" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 2:17]

Appendix 43



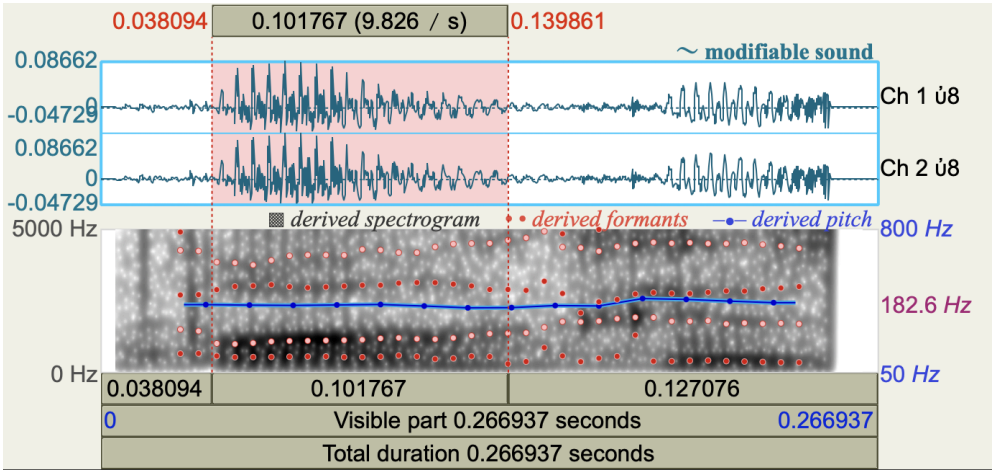
Picture. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "look" [em wallbank. Em Wallbank chats to the cast of A Thousand Blows - Part 1, 2025 6:44]

Appendix 44



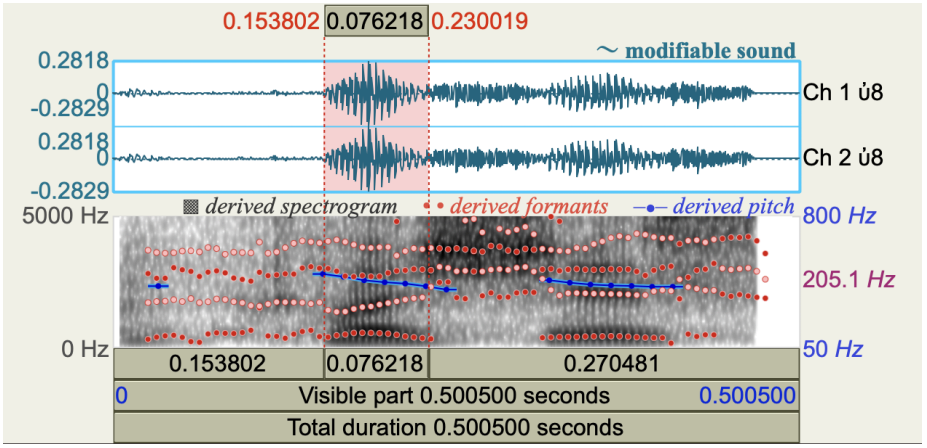
Picture. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "took" [Dave's Cave. This City is Ours Jack McMullen & Darci Shaw interview 2025, 2025, 2:41]

Appendix 45



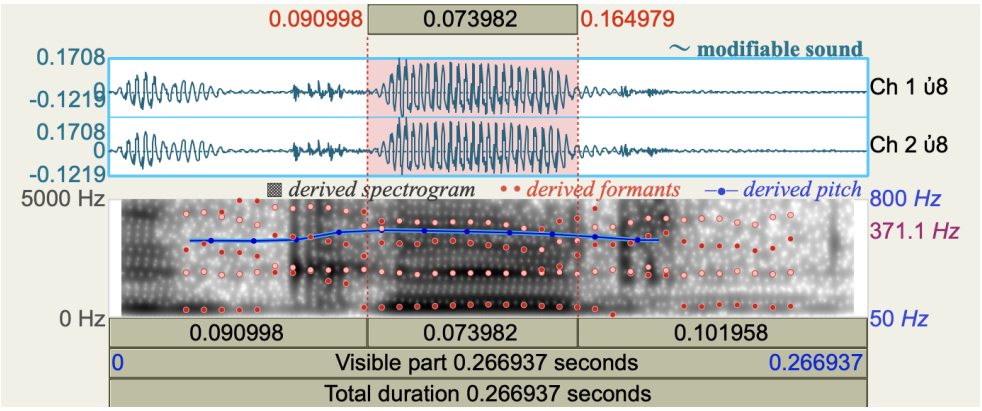
Picture. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "book" [HeyUGuys. A Thousand Blows | Hannah Walters, Darci Shaw, Morgan Hilaire | Fighting through history, 2025, 2:27]

Appendix 46



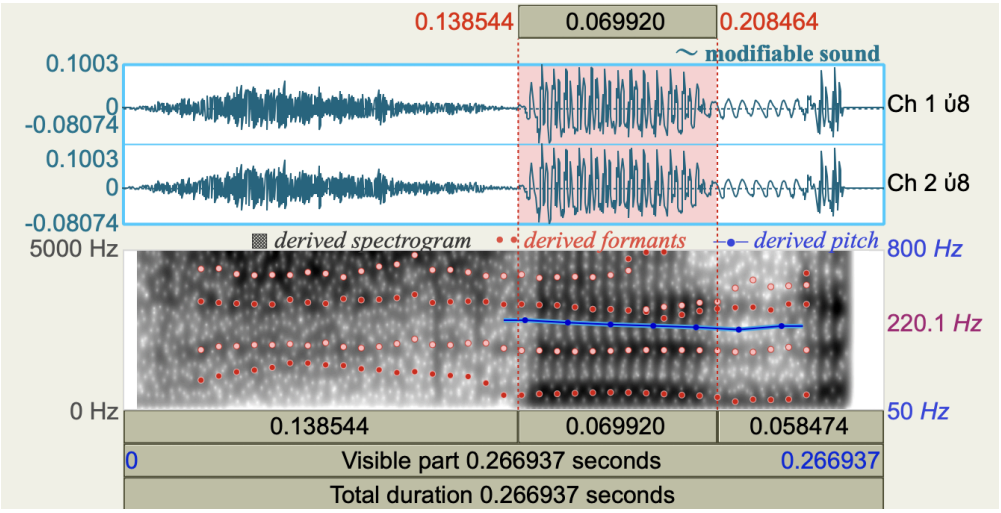
Picture 23. The spectrogram of Darci Shaw's realisation of the FOOT vowel in the word "pushes" [The Upcoming. Darci Shaw interview at The Colour Room premiere in London, 2024, 0:35]

Appendix 47



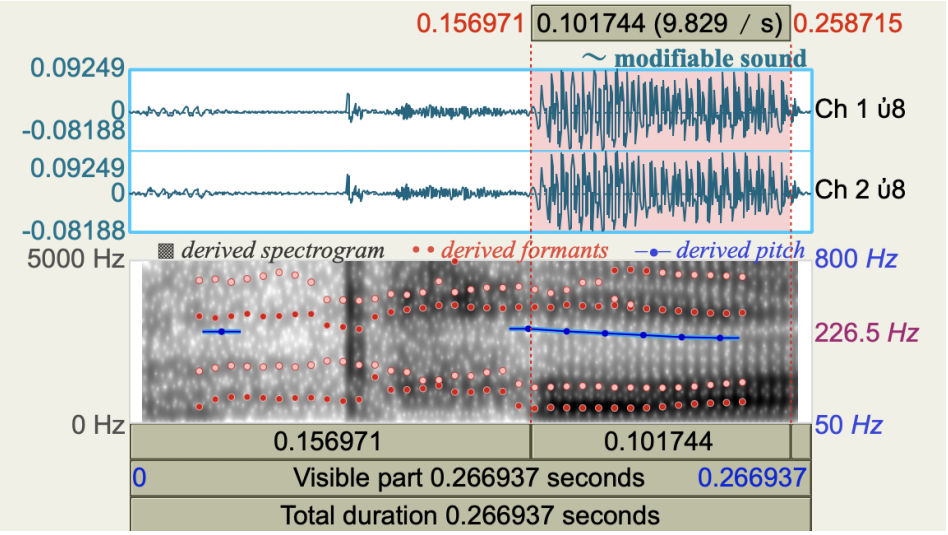
Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "good" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 1:57]

Appendix 48



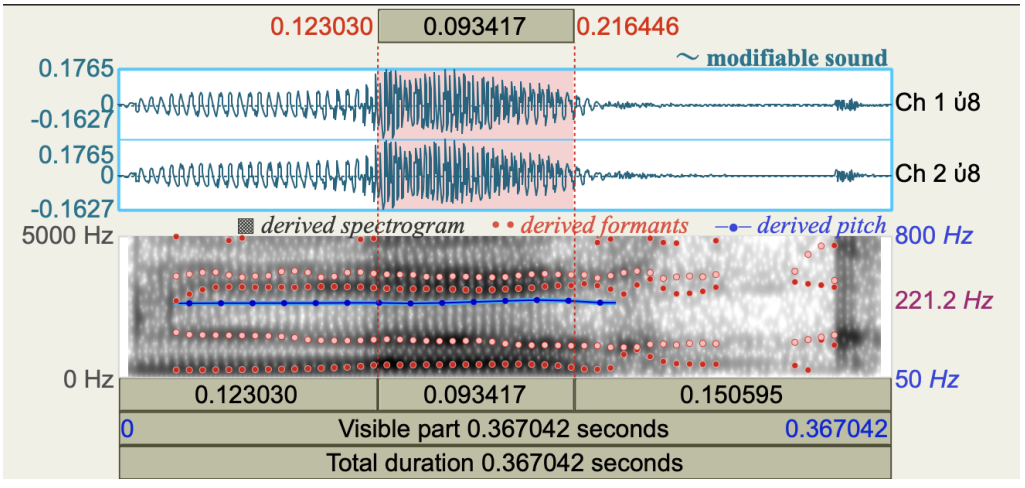
Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "stood" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 7:01]

Appendix 49



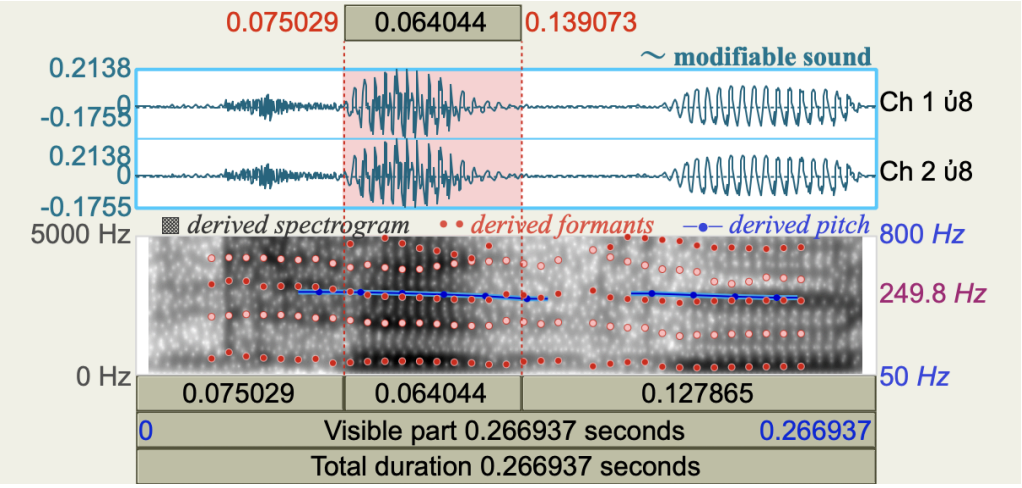
Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "pull" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 8:44]

Appendix 50



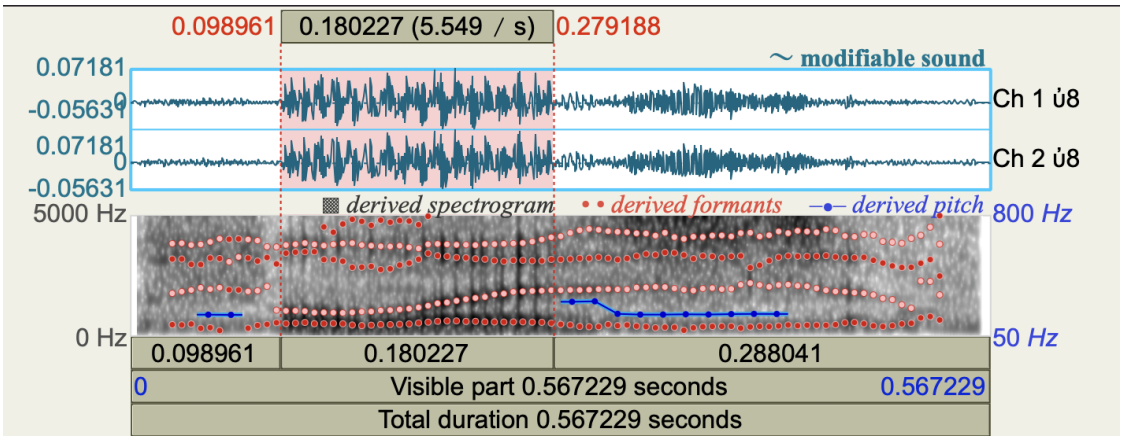
Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "look" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 12:32]

Appendix 51



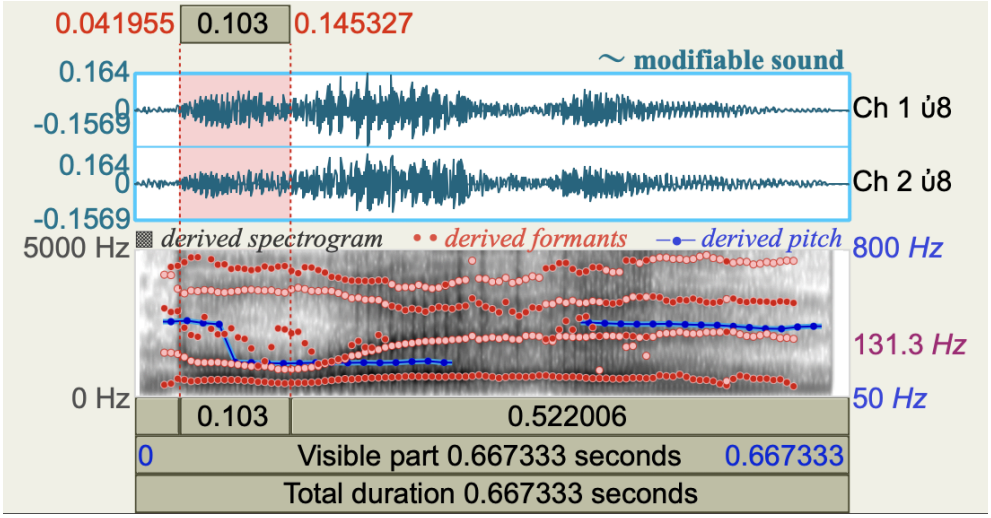
Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "took" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 16:20]

Appendix 52



Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "fullest" [Tilly Lockey. HOW I LOST MY HANDS! growth, adaptability and drive - Tilly Lockey deep dive on life, 2024, 27:49]

Appendix 53



Picture. The spectrogram of Tilly Lockey's realisation of the FOOT vowel in the word "bullet" [Tilly Lockey. how I went from being the shyest in the room to speaking on stages to thousands - shy girl advice!, 2024, 3:26]