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Bachelor's Thesis

Two Competing Forces:

Sociolinguistic and Phonotactic Influences on Phonological Variation in British Music

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### Abstract

Research on phonological variation in singing is almost exclusively grounded in the field of sociolinguistics, regarding the preference for Non-UK (Trudgill, 1983; Simpson, 1999) and UK variants (Beal, 2009). Though an introduction into possible phonotactic influences has been given by Morrissey (2008), it is only regarded as an alternative to already existing sociolinguistic analyses.

This thesis is an initial attempt to combine the two strands of linguistic research, describing the interplay of sociolinguistic and phonotactic influences on phonological variation by investigating the variation found in the idealistically contrasting genres of British Indie and mainstream music.

A sample of 42 songs was analysed for the variables /t/, intervocalic /t/, LOT, GOAT, BATH and rhoticity. Apart from rhoticity, all variables favour their Non-UK variants phonotactically and their UK variant sociolinguistically. The distribution of the UK and Non-UK variants of the variables was analysed for statistical significance and contextualised using sociolinguistic and phonotactic theory.

The results show a higher use of UK variables by the Indie genre than by the mainstream genre ( $p < 0.001$ ), as well as a more balanced distribution of variants. Also found was a higher use of UK variants by male singers within the Indie genre ( $p < 0.001$ ). The results suggest that there is a competitive interplay between sociolinguistic and phonotactic influences. The sociolinguistic influence comes out on top in the Indie genre, due to their focus on authenticity and the consequently strong influence of Audience Design. In the mainstream genre, the aim of authentication is missing, leading to the phonotactic influence overriding sociolinguistic influence.

**Keywords:** Phonological Variation, Sociolinguistics, Phonotactics, Audience Design, Ease of Articulation, Sonority, Indie Music, Mainstream Music, Authenticity, Style

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## 1. Introduction

Music plays a pivotal role in the lives of many people. For one, it can be enjoyed on purely aesthetic grounds, as is often the case with classical music, for instance. However, more often than not, it is used as a medium of communication as well, by carrying the singer's message through the lyrics of the songs. As music is a form of linguistic communication, it can be assumed that it is subject to linguistic influences and constraints comparable to those in normal speech. So far, studies on phonological variation in British music have largely focussed on the sociolinguistic influences involved. Trudgill (1983), later supported by Simpson (1999), argued that British bands tend to employ the USA-5 model, consisting of 5 distinct phonological features that can be linked to a stereotypical American accent. He ascribes this to the bands aiming to be associated with the prestige of the American music market. However, Trudgill's argumentation (1983) does not hold for the contemporary situation, as the American music market has lost its high prestige. Other studies suggest that some British singers tend to consciously retain their regional accent in order to show their resistance to commercialism and to attain a sense of authenticity (Beal, 2009). In the same vein, Coupland (2011, p. 573) argues that singing can be seen as a performance in which "performers construct and disseminate different vernacular values and identities" (573). Bell (1984), too, argues that speech style can be used as a means of identification.

Possible phonotactic influences on singing have been mostly ignored, and if addressed at all, were seen as an alternative instead of a supplementing explanation to the sociolinguistic approaches. One such explanation has been given by Morrissey (2008), who shortly introduced sonority as a possible influencing factor in the context of the USA-5 model. It can be taken as an alternative explanation to Trudgill's explanation regarding "Americanized" pronunciation.

This thesis aims to combine these two strands of influence in order to answer the following research question: In what way is phonological variation in British singing influenced by sociolinguistic and phonotactic forces, and how do these two forces relate to each other? To answer this question, this thesis compares the phonological variation found in the two British genres Indie and mainstream music. The two genres contrast idealistically, in that the focus on authenticity found in the Indie genre is absent for the mainstream genre, weakening the sociolinguistic influence. A sample of 42 songs from the two genres was analysed phonologically for their distribution of the variants of the variables /t/, intervocalic /t/, the lexical sets<sup>1</sup> LOT, BATH and GOAT, and rhoticity. In all cases the Non-UK variant is favoured phonotactically, while the UK variant is favoured sociolinguistically on the basis of authentication. Rhoticity is exceptional in the sense that its non-rhotic UK variant is favoured both phonotactically and sociolinguistically. Hence, it was analysed as a controlling variable. The observed distribution of the variants used was then checked for possible correlations with the variables genre and gender. Subsequently, the results from the two genres were put into a sociolinguistic and phonotactic context, outlining a possible interplay between the two strands of influence based on the distribution of the variants. This thesis suggests that there is a competitive interaction between the two strands of influence, with one overriding the other based on the communicative and sociolinguistic situation.

After putting the genres investigated into their idealistic and sociolinguistic context, Section 2 gives an overview of the concepts and frameworks needed to put the variation found in the study into context, focussing on Bell's framework of Audience Design (1984) and the phonotactic concepts of sonority and ease of articulation. The following sections 3 and 4 describe the methodology and results of the study on the phonological variation in British Indie and mainstream music. Section 5 will first treat both influences individually with

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<sup>1</sup> The concept of lexical sets was originally denoted by Wells (1982) and is now used widely to refer to vowel sets.

regards to both genres, before moving on to a discussion of a possible interaction between the two. This is followed by the conclusion in Section 6, including directions of further research.

## 2. Background

### 2.1 Genre and Authenticity

The term *genre* cannot be defined unambiguously and can be interpreted in several ways. The prevalent way of classifying musical genres is on the basis of music features, such as temporal, melodic, orchestration, tonality and texture, dynamic, acoustical and mechanical aspects (Armentano, De Noni, & Cardoso, 2017). The basic premise is that a genre is a kind of music that is accepted as such by the general community (Fabbri, 1999). Armentano et al. (2017) argue that it is a very subjective concept and contrasts it with the related notion of *music style*, which denotes associations of features and conventions with certain artists, regions or genres. Genres are generally seen as a way of structurally grouping music and artists into categories. For the aim of this thesis, I will focus on genre as a commercial and idealistic distinction, as this classification most clearly elucidates the separation between Indie and Mainstream music and best facilitates a sociolinguistic analysis of the phonological variation found in this study.

Indie music is defined by its origin in independent music labels (henceforth called Indie labels) and is thus fundamentally grounded in its form of organisation (Dolan, 2010; Hesmondhalgh, 1999). Indie labels are mostly independent from the large mainstream record labels, and identify themselves through their focus on the creative autonomy of their signed artists instead of on commercial and bureaucratic matters (Dolan, 2010). By doing so, they actively distance themselves from the major labels. However, it is hard to draw the line between what does and does not belong to the Indie genre, as full independency is hard to

achieve within the music industry (Hesmondhalgh, 1999). All labels, Indie labels included, are economically dependent on their music sales in order to be able to pay for their expenses, be it in varying degrees. So, it is not possible to define the Indie genre purely on economic grounds.

Another factor in the definition of the Indie genre, and which further distances it from the mainstream genre, is its idealistic background. The genre stems from punk music's opposition to the mainstream, both in an institutional and in an aesthetical sense. In its beginnings, it focussed on the "aesthetic of working class unity" (Hesmondhalgh, 1999, p. 40). Nowadays, its subversion and criticism is less focussed on specific groups, but it is still apparent as a form of critical discourse regarding the mainstream (Hesmondhalgh, 1999).

Moreover, it can be argued that aiming for independence and distance from the commercial music industry, and the focus on creative autonomy, is an element of identification that independent labels use to establish the authenticity of the bands signed by them. Dolan (2010, p.462) asserts that music is mostly connected to personal authenticity, which "might be a feeling of honesty, sincerity, realness." The autonomy of Indie bands in terms of production and creative development is part of what constitutes the image of authenticity that is often associated with them. This image can be based either on a band's true aesthetic choice, meaning a conscious choice to be "real" in their music, or it can be used in a more insincere manner, as a way of marketing a band when they move towards the mainstream (Dolan, 2010). In any case, there is some sort of motivation for authenticity for all Indie bands. The equally conscious move towards authentication by all bands leads to the assumption that it is manifested in the same constraints on linguistic variation. This assumption makes an internal classification within the Indie genre redundant for the aim of this thesis.

In line with Dolan (2010), Coupland (2014) notes that authenticity is in itself a slippery term. In the context of sociolinguistics, authenticity is traditionally linked to the vernacular

and the expression of *localness*. Eckert (2014) asserts that authenticity, through the use of the vernacular, is a case of non-referential indexicality, which postulates that sociolinguistic variables are indexed with a certain social meaning. In this vein, vernacular and local variables can be argued to be linked to authenticity.

## 2.2 Sociolinguistic Background

This thesis will follow Morrissey (2008) and Lacoste, Leimgruber and Beyer (2014) in treating the phonological variation investigated as one of style rather than accent, as authenticity “resides in the physical representation . . . and *performance* [emphasis added] of personal and socio-cultural identity and style” (Lacoste et al., 2014, p.8). The concept of accent tends to refer solely to the speaker’s natural vernacular way of speaking, disregarding sociolinguistic influences. Irvine (2001, p. 23) describes style as an accumulation of “the ways speakers, as agents in social (and sociolinguistic) space, negotiate their positions and goals within a system of distinctions and possibilities.” In the context of sociolinguistics, style implies an active role for the speaker, who positions himself within a social group through an “ideologically mediated” (Irvine, 2001, p. 24) way of speaking. Speech style is thus dynamic and continuously influenced by the social context (Coupland, 2007).

On a sociolinguistic level, singing is distinct from normal conversational speech in that it is a form of high performance. High performance is a marked form of verbal performance (Bauman, 1978). It is a conscious and planned form of speech, with a clear separation between the performer, who is placed in a more elevated position, and the audience (Bell & Gibson, 2011). Therefore, the communicative link between speaker and audience is not as immediate as in normal dialogic speech, as the two parties are not on the same communicative level and the communication is one-sided. Still, the audience influences the singer’s style, as the singer is continuously being assessed by the audience, based on their expectations regarding the performance (Bell & Gibson, 2011).

Coupland (2007, p.147) argues that high performance involves “communicative focusing”. Performances tend to show a higher level of reflexivity and awareness by both the audience and the performer. The focus shifts away from the content towards the form, due to a lack of spontaneity that renders language use more conscious and subjects it to a higher level of scrutiny (Bell & Gibson, 2011; Coupland, 2007). Bell and Gibson (2011, p. 557) furthermore argue that “performances tend to be for the audience, rather than simply to the audience”, which also leads to a higher focus on the form of the performance. The high level of reflexivity causes performers to be acutely aware of the social meaning that is connected to stylistic variants. They can thus use their language actively to position themselves socially (Bell & Gibson, 2011), making stylistic choices more salient (Coupland, 2007).

Mediated performances differ slightly from the form of staged performance investigated by Bell and Gibson (2011). The performances investigated in this thesis are all mediated, meaning they are recorded in a studio and, spatially, not performed immediately in front of an audience. The feedback is more delayed and distanced, and the reaction of the intended audience can only be anticipated (Bell & Gibson, 2011). Still, mediated performances are also directed with the intended audience in mind and they retain a similar relationship between performer and audience. Moreover, most staged performances are based on the studio versions of the songs performed, meaning they also stem from mediated performances with a more distanced audience. The mediated performances investigated in this study can thus be expected to be susceptible to the same sociolinguistic influences in respect to the audience as staged performances.

### **2.2.1 Audience Design**

Audience design (Bell, 1984; Bell, 2001) is a framework of sociolinguistics in performance that aims to explain the stylistic variation found in connection with the audience. It is based on Bell’s study of the language use of radio news in New Zealand, in which he found that news readers showed significantly different amounts of intervocalic /t/ voicing, depending on

the radio station that they were speaking on (Bell, 1984). Bell (2001) argues that only the different audiences can correlate with the shifts found in pronunciation, as all other external factors of the two radio stations investigated are identical.

Audience design postulates that speech is influenced both by the speaker's intrinsic characteristics and by other interlocutors. Each speaker encompasses intraspeaker and interspeaker variation. Intraspeaker variation is argued to derive from and reflect interspeaker variation, meaning that both have to be explainable in common terms (Bell, 1984). The speaker's characteristics, such as class, style or age, make up the social axis of linguistic variation and lead to interspeaker variation (Bell, 1984). Intraspeaker variation is reflected in the stylistic axis of linguistic variation. Bell argues that speakers "accommodate [their speech] primarily to their addressee" (1984, p. 145) and that speech is therefore primarily a response to the speaker's audience. The term *audience* does not only refer to the immediate and physically present addressees, but it also includes audiences that are unknown, unratified or unaddressed (Bell, 1984). These groups have an increasing role distance from the speaker, with the addressee being the closest (being known, ratified and addressed) and eavesdroppers being the furthest away (being unknown, unratified and unaddressed). The salience of the audience, and thus the resulting influence on the speaker's style, is subjective to the speaker and relative to the role distance that the speaker designates to it (Bell, 1984).

A speaker's style design is always and primarily dependent on the response of the audience, since language is naturally dialogic (Bell, 2001). Bell (1984) terms this the responsive dimension of style design, as style shift is seen as a response to an extralinguistic situation. Bell's analysis of responsive style design, like other analyses on the effect of the addressee, is partly based on Giles' Accommodation Theory, which explains a speaker's convergence or divergence from the speech of their interlocutors as a way of implementing their intended distance from the addressee, as well as their wish for approval by the addressee (e.g. Giles, Coupland & Coupland, 1991; Trudgill, 1983).

Audience design as described above assumes an active and responsive audience, towards which the speaker orients his speech. This situation, however, is not given for recorded music, as analysed in this thesis, as there is no immediate responsive audience. To cater for such situations that do not fall under the scope of audience design, Bell proposes a second, initiative axis of style shift, and it is this axis that is most prevalent in the stylistic variation of recorded music. Initiative style design, or referee design, assumes that “style can also be used as a dynamic force to redefine an existing situation” (Bell, 1984, p. 161). Therefore, it can be used as a tool of identification and identity construction.

In most cases of initiative style shift, the speaker responds to a physically absent reference group, which Bell terms the *referee*. In these instances, language is not only influenced by extralinguistic factors, but it is also used in itself to influence a situation, supporting the idea of a reciprocal relation between speech and the situation in which it occurs. It is important to note here that referee design also assumes an audience to which the speaker responds. However, this audience is not assumed to be as active as in responsive style design, as the focus is put more on the positioning of the speaker in relation to an (intended) audience and his subsequent identification process. Initiative style design lends itself to the analysis of recorded music through the shift in focus away from an active audience and towards the speaker’s process of identification in relation to the audience. Style is argued to either shift away from that of the audience and towards that of a referee group or not. The referee group influences speech, even though it is usually absent. Referee design can occur in two ways, depending on whether the speaker is part of the referee group. Bell calls these two strands ingroup and outgroup referee design, respectively.

Bell argues that, when using ingroup referee design, “a speaker takes the initiative to deliberately reject identification with the immediate addressee, and identifies instead with an external referee” (Bell, 1984, p. 187). Reasons to do so are usually found on a socio-political level. As an example, Bell (1984) names a student sticking to variables usually used

amongst his peer group when talking to his teachers, instead of switching to more standard variables. The student's behaviour can be seen as a form of dissociation and distancing from the addressee by using markers of his own ingroup. Hence, ingroup referee design leads to a speaker shifting towards the style of his own ingroup when talking to members of an outgroup, as a way of distancing himself from that outgroup. Ingroup referee design is usually spontaneous and short-lived in that it is an immediate reaction to the physically present interlocutor and in that it does not usually extend beyond that the communicative situation that it occurs in.

In contrast, outgroup referee design refers to a speaker adopting the speech style of an outgroup which is connected to a form of prestige or values important to the speaker (Bell, 1984). By doing so, the speaker diverges from his normal speech style towards that of an outgroup, as a way of identification. This shift can be either short-term or long-term. In short-term outgroup referee design, the shift is for an immediate purpose. The speaker switches to an outgroup's more prestigious and powerful style, for example to win an argument (Bell, 1984). However, such a shift can also be long-term, for example when a certain variety holds more prestige than others. An example is the use of RP English as a prestigious variety in New Zealand (Bell, 1984). Long-term outgroup referee design occurs when the superiority or desirability of a referee group is a prevailing opinion within the ingroup. Because both speaker and addressee agree on the status of the referee group, the style shift can be prolonged (Bell, 1984).

Various studies (Trudgill, 1983; Simpson, 1999) suggest that British singers employ phonological features typically associated with American dialects, due to the position that America holds in the music market. The American accent is viewed as the most prestigious in the area of music and singing, due to America's large influence in this area (Trudgill, 1983). According to outgroup referee design, the British singers would employ the Americanized features in order to identify with and reflect the prestige and values associated with these

features within this context. Here, an approximation of a general American accent is enough to evoke these values and the sense of prestige, as the United States are removed from British both linguistically and culturally (Bell, 1984). However, with the rise of British bands like the Beatles, and a general rise of national music markets, America seems to have lost some of its prestige and power in the music industry (Trudgill, 1983). Therefore, it is questionable whether outgroup referee design is sufficient to explain the Americanization of the British singers' pronunciation, especially regarding more recent artists and songs.

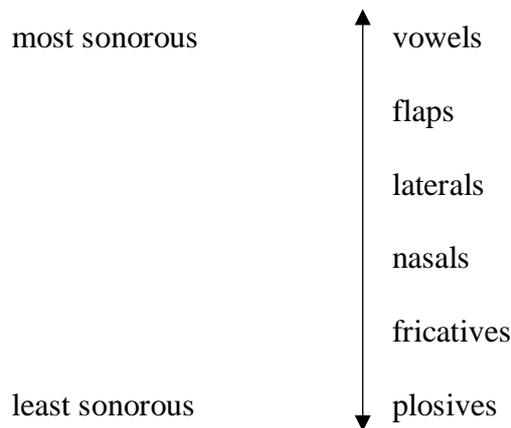
Bell (1984) furthermore argues that some bands use a more local pronunciation to "reclaim identity with the addressee" (p. 195) and thus supports Trudgill's analysis of British punk music (1983). Trudgill (1983) asserts that punk music has been predominantly catering to its audience of British urban working-class youth, which ultimately led to a reduction of Americanized features and the use of low-status British pronunciations. This study is in line with audience design, as the punk bands investigated seem to have shifted towards the style used by their intended audience.

## **2.3 Phonotactic Background**

As argued above, a large part of the studies done on phonological variation in singing focus on sociolinguistic influences. However, singing can also be influenced on a phonotactic level. Though this line of research is still sparse, Morrissey (2008) has, in his sociolinguistic study, briefly touched upon the phonetic issues of sonority and ease of articulation.

### **2.3.1 Sonority**

Sonority, as a phonetic concept, links sounds to their relative loudness and perceived strength (Burquest, 1998). The difference in sonority between the sound groups is traditionally captured in a sonority scale, which ranks sounds based on their sonority from most to least sonorous, with vowels on one end and plosives on the other (Burquest, 1998, p.149).



*Figure 1.* Sonority Scale. Adapted from Burquest (1998).

The sound categories are ranked internally, too. Sonority is influenced by vocal cord vibrations and the restriction of the air flow through the vocal tract (Burquest, 1998). Thus, low vowels are more sonorous than high ones and voiced fricatives and plosives are more sonorous than their voiceless counterparts (Burquest, 1998). The influence of the air flow also motivates the assertion that unrounded vowels are more sonorous than their rounded counterparts, as argued by Morrissey (2008). When the lips are unrounded, more air can escape from the vocal tract, leading to a higher amplitude and a stronger sound.

### **2.3.2 Ease of Articulation**

Phonological variation is not only influenced by sonority, but also by ease of articulation. Shariatmadari (2006) terms this the *Ease of Articulation Hypothesis*. This hypothesis is based on the principle of minimal effort, which postulates that it is a universal axiom that energy is always to be preserved as much as possible (Shariatmadari, 2006). Thus, speech energy is only expanded when it is needed for communicative need. The aim for minimal effort motivates the assumption that effort on the side of the speaker contests with effort on the side of the listener, as influenced by the speaker's communicative clarity. The amount of energy used in speech is based on the need to be understood by the communication partner and thus also influenced by the context (Shariatmadari, 2006). When both conversation partners are familiar with the context of the situation, it can be expected that the speaker would use a more

reduced form than when the topic of conversation is unfamiliar, as less information has to be transmitted. For instance, the pronunciation of the German phrase 'Ich habe es' can be pronounced as both [ɪx? ha:bə ?es] or as the much shorter [xaps], depending on how expected the utterance of that phrase is in the context of the conversation. Evidence for the Ease of Articulation hypothesis can also be found in the frequent reduction of function words, which tend to hold the least information in utterances as compared to content words. Moreover, ease of articulation can be argued to be motivation for assimilation. Processes like intervocalic voicing and regressive and progressive voicing facilitate pronunciation, as the speaker has to put less effort into the transition between phonemes (Burquest, 1998).

Though not researched explicitly, the Ease of Articulation Hypothesis can be expected to have an effect on singing, as it is, like normal speech, a form of communication. However, the extent to which it affects singing can be expected to differ slightly, as there is a different dynamic between the effort on the part of the speaker and on the part of the listener. In singing, the actual communicative need is lower than in speech. In speech, communication, or the effective transmission of a message, is the primary concern and purpose. In singing, however, the focus is much more on the performance and on the creative presentation, and less on the actual communication of a message (Coupland, 2007). As stated above, singing leads to a higher focus on form than on content. Though most songs arguably have a message that the singer wants to communicate to the audience, it is not the primary, and certainly not the only, aim of the songs. This argument is supported by the fact that, in contrast to normal conversations, only very few songs are devoid of repetitions and much less information is transmitted in the same time frame, showing that the communicative potential that a song holds is never fully exploited. Thus, the need for communicative clarity can be assumed to have a lower influence than the aim for minimal effort, leading to a higher use of variants that are easier to articulate.

### 3. Methodology

#### 3.1 Data Collection

For this study, a sample of 42 songs was taken from altogether 14 bands<sup>2</sup>, with each band, genre and gender being represented equally in the data. For the Indie bands, the songs were taken from their earliest album to ensure maximum distance from the mainstream, as Indie bands tend to move towards the mainstream with increasing popularity. The auditory annotation of the variants used was based on the orthographic transcripts of the relevant song lyrics. The lyrics were originally taken from the website [genius.com](http://genius.com) and subsequently checked for correctness. Then, they were annotated for all potential sites of the variables studied. Since song lyrics are often repetitive in nature, all repetitions of clauses, as well as words in identical contexts, were removed from the transcripts, to avoid repeated realisations leading to skewing of the data.

Several potential sites were excluded from the transcripts altogether. One of the sites of variation excluded is the filler ‘oh’, which occurs repeatedly throughout the song lyrics analysed. Though it is theoretically part of the lexical set GOAT, it is, in all its realisations in the transcript, used as an acoustic filler. Hence, it can be argued to be subjected to more liberal phonological constraints, making it unsuitable for this study. Moreover, consonant clusters, /t/ preceded by fricatives and plosives and /t/ following nasals were excluded from the /t/-variable as these environments are very resistant to glottal stops and are thus nearly exclusively realised as [t] in all varieties of English (Schleef, 2013). Also taken out were all words that block t-glottaling due to their stress pattern (Schleef, 2013). Lastly, reduced function words were excluded as potential sites for the lexical sets GOAT, LOT and BATH, as these are usually realized as a schwa in these instances.

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<sup>2</sup> Throughout this study, the term ‘bands’ includes all bands and singers investigated.

The variables used for the acoustic annotation were based on the USA-5 model as introduced by Trudgill (1983) and further conceptualised by Simpson (1999). As stated in Section 1, the USA-5 model is a set of five American variants that Trudgill (1983) and Simpson (1999) argue to be frequently adopted by British singers. Alterations have been made to the model to better fit the purpose of this thesis. The variation analysed is based on the vowel variation as described by Hughes, Trudgill and Watts (2012), and can be summarized as followed:

Table 1

*Set of variants used*

	UK	Non-UK
/t/ Non-IntV	[ʔ,t]	[t]
/t/ IntV	[ʔ,t]	[ɾ]
LOT	[ɒ]	[ɑ]
GOAT	[əʊ]	[oʊ]
BATH	[ɑ:]	[æ]
Rhoticity	-	+

The Non-UK variants analysed are the /t/-variant [t], the alveolar flap [ɾ], the three lexical sets LOT, GOAT and BATH, and the presence of rhoticity. In all variables chosen, with the exception of rhoticity, the Non-UK variant is either more sonorous or easier to articulate. The lexical set PRICE, as indicated in the USA-5 model, was excluded, as there is only a very slight difference in sonority and ease of articulation. It has been replaced by the lexical set GOAT, which shows a higher contrast in terms of ease of articulation. Also, all instances of

the /t/-variable were added instead of only those in intervocalic position, as UK accents allow for a glottal stop to occur as a variant alongside [t] (Hughes et al., 2012).

### 3.2 Data Analysis

After the song lyrics were transcribed and adapted to fit this study, the lyrics were annotated for all potential sites of the variables. Subsequently, the songs were annotated for the variant used with the help of the programme ELAN<sup>3</sup> (Brugman & Russel, 2004; The Language Archive, 2017). ELAN allows for a time-aligned annotation, and thus facilitates later re-analyses as well as more detailed reviews of specific realisations of a variant.

The annotation yielded altogether 1807 tokens of the variants. The tokens were subsequently imported into a spreadsheet and further coded for the following variables:

- band, song and context (facilitate reanalysis and qualitative reconsiderations)
- genre (the bands are classed as either Indie or Mainstream)
- variable (/t/, intervocalic /t/, LOT, GOAT, BATH and rhoticity)
- gender (if the group consists of members of multiple genders, the gender of the lead vocalist was chosen)

Gender was added to the analysis as an independent variable, in order to be able to rule it out as a correlating factor for the phonological variation investigated. If a band consisted of members of multiple genders, the gender of the lead vocalist was chosen because they can be expected to have the most influence on the construction of a band's identity and on the indexing of authenticity, if it occurs. Also, none of the bands investigated include background vocalists with other accents, making this system of annotation sufficient for the aim of this thesis.

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<sup>3</sup> Programme by the Max Planck Institute for Psycholinguistics, The Language Archive, Nijmegen, The Netherlands, retrieved from <http://tla.mpi.nl/tools/tla-tools/elan/>

After the analysis, the data was transferred into charts visualising the distribution of the variants used within the two genres. Moreover, the overall distribution of the variants and the variant distribution for each variable were checked for significant correlations with the help of *IBM SPSS*, using Pearson's chi-squared test with an  $\alpha$ -value of 0.05. For the statistical analysis, all realizations of rhoticity have been excluded, as it is an exceptional variable in the sense that both influences would lead to the use of the non-rhotic variant. Thus, the rhoticity variable is only used as a point of indication for the co-existence of both influences. Also statistically analysed, using Pearson's chi-squared test ( $\alpha=0.05$ ), was the correlation of the variant used and the gender of the band's singer controlled for genre, and the correlation of the variant used and gender controlled for genre and variable.

Also briefly investigated was the use of Non-UK features in the normal speech of the singers by means of an acoustic analysis of interview recordings. This step was taken to be able to compare the difference in pronunciation between singing and speech, and to ensure that the use of Non-UK features by the singers can be ascribed to phonotactic influence as argued in this thesis.

### **3.3 Methodological limitation**

The scope of this thesis did not allow for a second independent person to check the annotation and analyses done in this study, as time and financial means are lacking. Thus, a possible slight inaccuracy and bias in the annotation cannot be foreclosed. However, each variable was checked thoroughly and in very unclear cases a second opinion was sought for in order to minimize this possibility as much as possible.

#### 4. Results

The data presented in Table 2 and Table 3 shows the percentage-wise distribution of all variants analysed in this study for the two genres investigated. As seen in Table 2, the distribution of the variants in the Indie genre data indicates an overall higher use of UK than Non-UK features. This pattern also holds for each variable individually, and is especially noticeable for the variables LOT and BATH and rhoticity. For both /t/ variables, the distribution is more balanced, but the UK variants are still used more frequently.

Table 2

*Percentages of variants used for the variables analysed in the Indie genre*

Variable	<u>UK</u>		<u>Non-UK</u>	
	<i>n</i>	%	<i>n</i>	%
/t/	83	52.2	76	47.7
/t/ IntV	51	54.3	43	45.7
LOT	88	82.2	19	17.8
GOAT	86	58.9	60	41.1
BATH	17	74.0	6	26.0
Rhoticity	291	98.3	5	1.7
Total	616	74.7	209	25.3

Table 3 shows the distribution of the variants used for the data from the Mainstream genre. Here, there is an overall higher use for the Non-UK variants. This preference also holds for all variables individually, with the exception of rhoticity. While all other variables show only a 7.2% to 34.1% use of the UK variants, the UK variant of rhoticity is used in 93.1% of all realizations.

Table 3

*Percentages of variants used for the variables analysed in the Mainstream genre*

Variable	<u>UK</u>		<u>Non-UK</u>	
	<i>n</i>	%	<i>n</i>	%
/t/	19	11.9	141	88.1
/t/ IntV	16	17.4	76	82.6
LOT	41	22.9	138	77.1
GOAT	16	7.2	206	92.8
BATH	3	13.0	20	87.0
Rhoticity	285	93.1	21	6.9
Total	380	38.8	602	61.2

### **/t/-variable**

The variants [ʔ] and [t] were used nearly equally in the data of the Indie genre, with the former being used in 52.2% and the latter in 47.7% of all cases. In the data of the Mainstream genre, the variant [t] was used much more frequently, in 88.1% of all realizations.

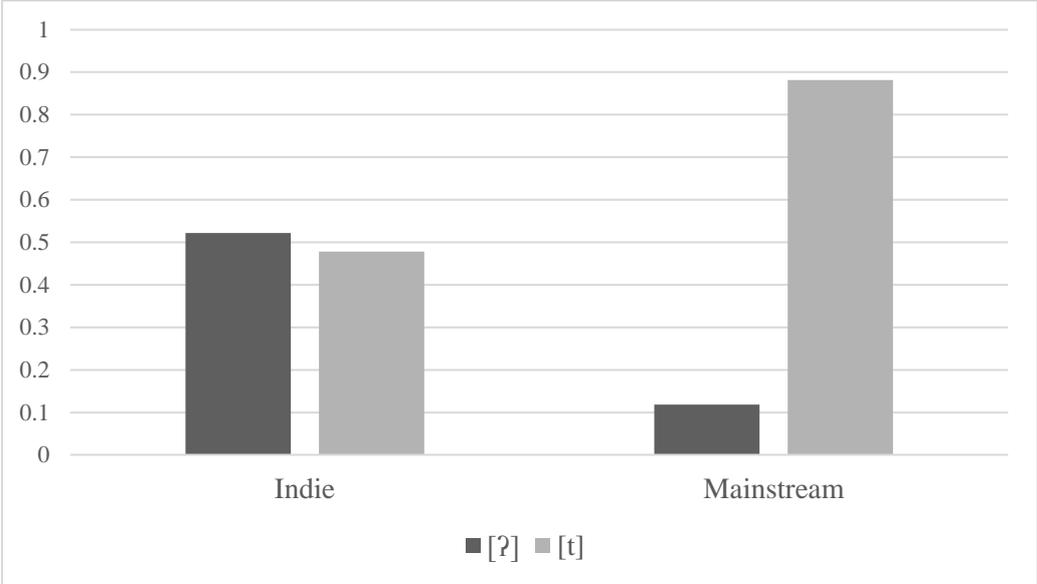


Figure 2. Distribution of /t/ variants.

In intervocalic contexts, the data of the Indie genre indicates a slight preference for the variants [ʔ] and [t], which was found in 54.2% of all realizations. In the data of the Mainstream genre, the variable [r] was highly preferred and used in 82.6% of all realizations.

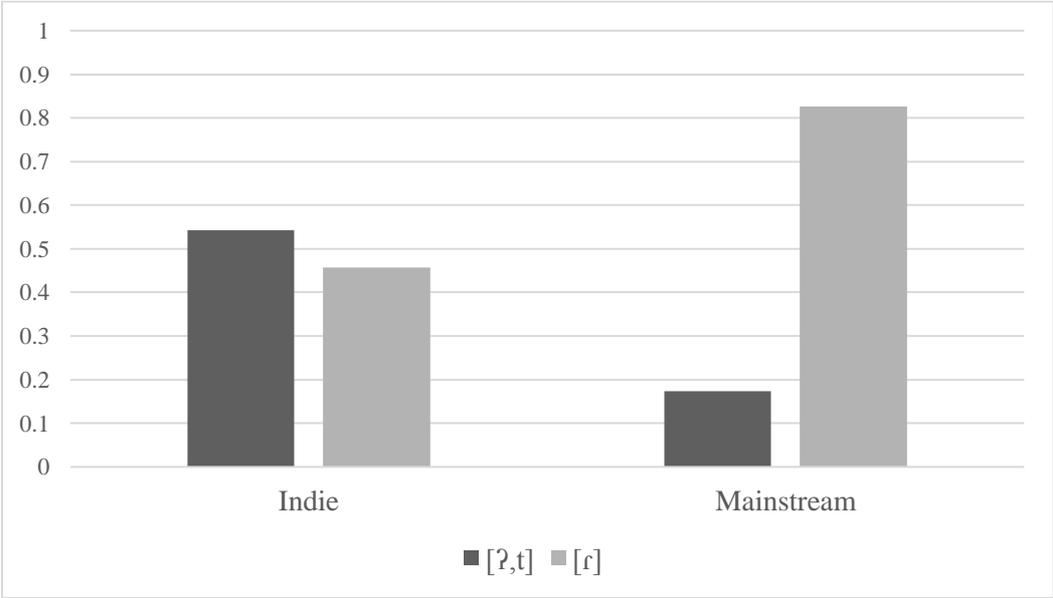


Figure 3. Distribution of variants of /t/ in intervocalic contexts.

### Lexical set LOT

In the data of the lexical set LOT, the two genres show contrasting results. In the data of the Indie genre, the variant [ɒ] is preferred and found in 82.2% of all realizations. In the Mainstream genre data, [ɑ] is preferred, in 77% of all realizations.

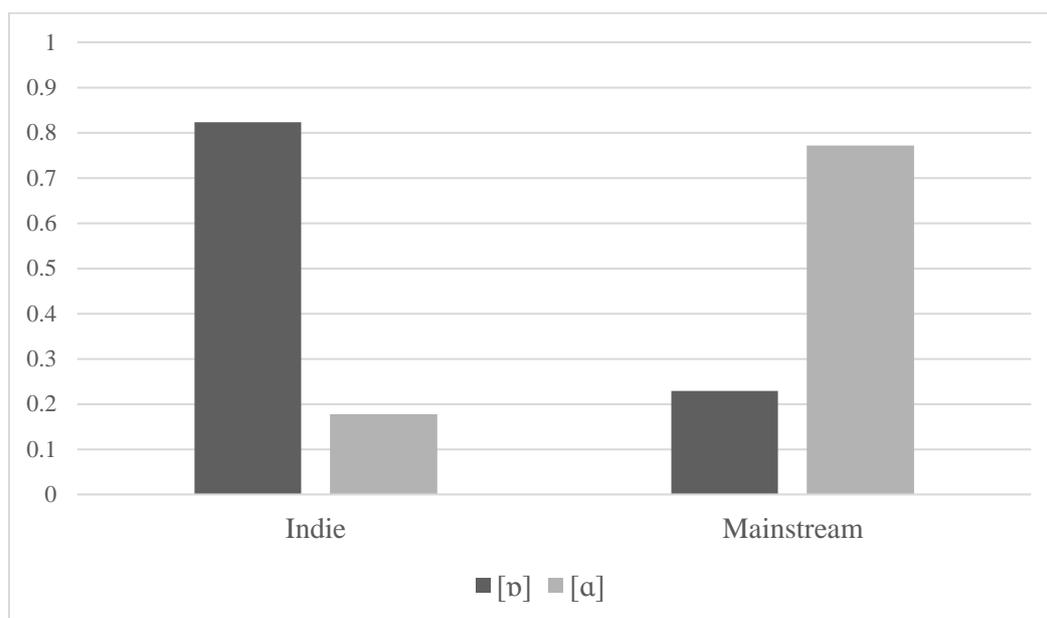


Figure 4. Distribution of LOT variants.

### Lexical set GOAT

In the data, the lexical set GOAT was realized as either [əʊ] or [oʊ]. In the data of the Indie genre there was a slight preference for [əʊ], found in 58.9% of all cases. In the Mainstream genre data, [oʊ] was highly preferred, used in 92.7% of all realizations.

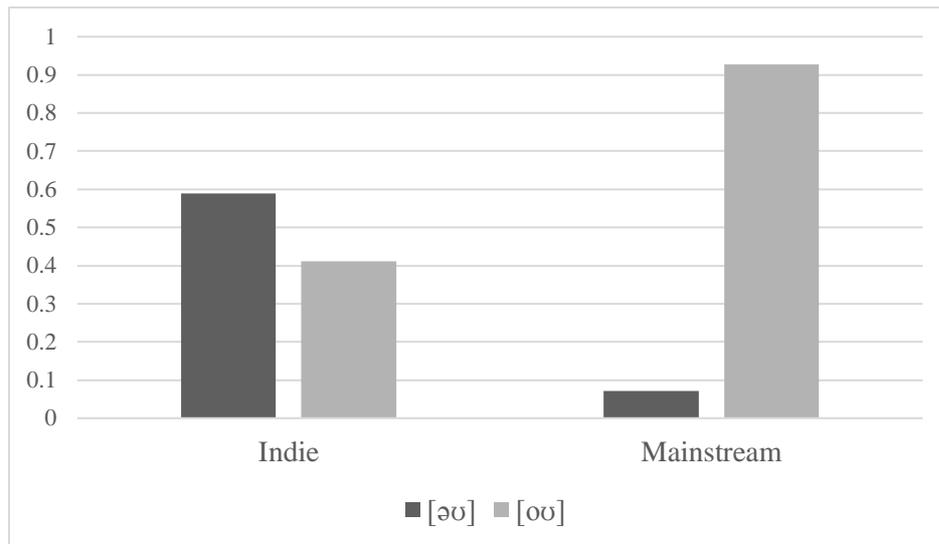


Figure 5. Distribution of GOAT variants.

### Lexical set BATH

For the lexical set BATH, the data of the Indie genre indicates a clear preference for the variable [ɑ:], which is used in 73.9% of the realizations. In the Mainstream genre data, the variable [æ] is highly preferred, being used in 87% of all realizations.

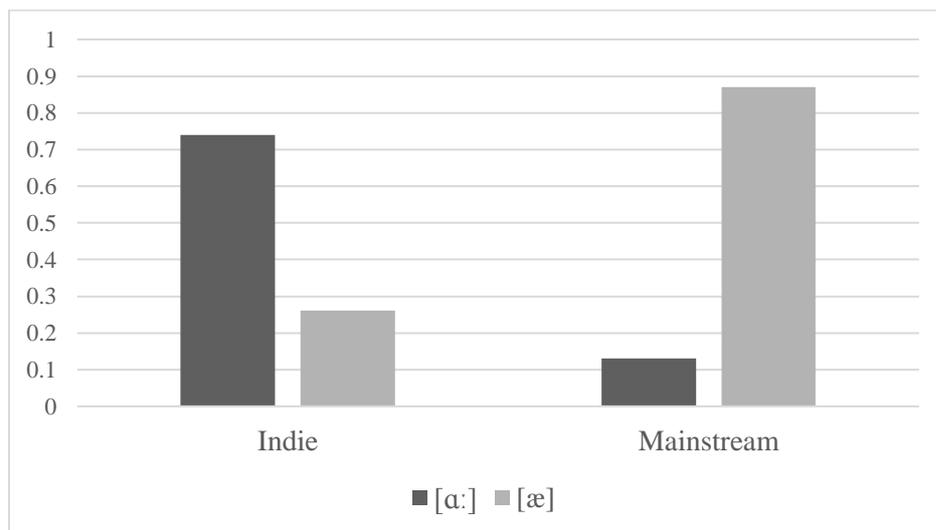


Figure 6. Distribution of BATH variants.

## Rhoticity

The rhoticity variable is either realized as its rhotic or its non-rhotic variant. The distribution of the data shows a clear preference of the non-rhotic variant for both genres, with 98.3% in the Indie genre data and 93.1% in the Mainstream genre data.

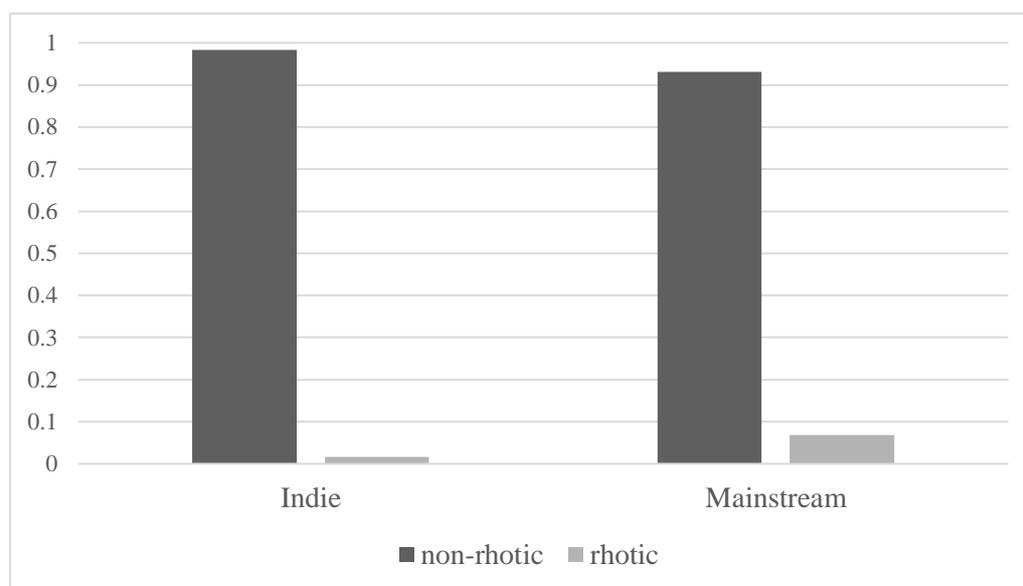


Figure 7. Distribution of rhoticity variants.

## Correlation of Variant Used and Genre

A chi-squared test of independence was performed to examine the relation between genre and the variant used across all variables except rhoticity. The relation was highly significant,  $\chi^2(1, N= 1205) = 252.65, p < 0.001$ , with the Indie genre being positively correlated with the use of UK variants, and the mainstream genre being positively correlated with the use of Non-UK variants. This pattern of correlation is also significant for all variables individually, with  $\chi^2(1, N= 319) = 59.62, p < 0.001$  for the /t/-variable,  $\chi^2(1, N=186) = 252.65, p < 0.001$  for the /t/-variable in intervocalic contexts,  $\chi^2(1, N= 368) = 117.49, p < 0.001$  for the lexical set GOAT,  $\chi^2(1, N= 286) = 62.25, p < 0.001$  for the lexical set LOT and  $\chi^2(1, N= 46) = 17.34, p < 0.001$  for the lexical set BATH.

### **Correlation of Variant Used and Gender**

A chi-squared test of independence was also performed to analyse the relation between gender and the variant used, showing a highly significant correlation within the Indie genre,  $\chi^2(1, N= 529) = 13.85, p < 0.001$ , with male singers showing a higher use of UK variants.

When looking at each feature individually, a significant correlation could be found for the variables intervocalic /t/ and LOT with  $\chi^2(1, N= 94) = 4.93, p = 0.026$  and  $\chi^2(1, N= 107) = 23.88, p < 0.001$ , respectively. For the variables /t/, BATH and GOAT there was no correlation of variant used and gender, with  $\chi^2(1, N= 159) = 2.62, p = 0.105$ ,  $\chi^2(1, N= 23) = 0.37, p = 0.544$  and  $\chi^2(1, N= 146) = 0.1, p = 0.757$ , respectively.

Within the mainstream genre, there also was no significant correlation between gender and variant used,  $\chi^2(1, N= 676) = 0.16, p = 0.685$ .

## **5. Discussion**

The previous chapter has outlined the distribution of UK and Non-UK variants across the two genres investigated, indicating a highly significant correlation between genre and realisation.

The Indie genre shows a positive correlation with the use of UK variants, while the mainstream genre is positively correlated with the use of Non-UK variants. Interestingly, the variable rhoticity behaves differently from the other variables, in that both genres show a strong preference for the use of the UK variant. Moreover, gender is shown to be a significant correlating factor in the Indie genre, but not in the mainstream genre.

### **5.1 Authenticity by Referee Design**

The preference for UK variants found in the Indie genre can be explained using Bell's framework of Audience Design (1984). The framework postulates that stylistic variation is

responsive and is open to influence by extralinguistic situations like the audience or the communicative context. As a form of mediated performance, recorded music usually has no active audience towards which the singers could orient themselves. As stated in Section 2.2, feedback is much more fragmented and usually only received at a later point, for example at concerts or through newspaper reviews. Thus, within the context of Audience Design, the phonological variation investigated in this thesis is most likely a case of referee design, which makes up the initiative style axis of Audience Design. According to referee design, style is used as a way of redefining a situation and thus as a way of identity construction by orienting towards or away from an external referee group, which can be either the speaker's ingroup or an outgroup. Ingroup referee design can be rejected in the case of British Indie music, as it would postulate that the speaker always rejects identification with the immediate addressee and instead uses features associated with his ingroup in order to identify with them. However, this is not the case in British Indie music, as the singers seem to use the same style regardless of their audience. Also, an immediate rejection and reaction to the audience is impossible, due to the fact that the audience is generally distanced and only allows fragmented feedback, leading to the rejection of ingroup referee design as an approach to analyse the phonological variation in British Indie music.

Instead, British Indie music is much more accessible to the workings of what Bell (1984) calls short-term outgroup referee design. The increased use of the more "local" UK variants can be lead back to the bands aiming to be associated with values connected to Britain, or in this case to the British working class specifically. Trudgill (1983, p.155) argues that punk bands used to intentionally use low-status pronunciations to "aid identification with (...) the British working-class youth", in order to gain covert prestige. The Indie genre is historically connected to punk music, sharing its aversion to the mainstream, and thus idealistically connected to the British working class.

In line with the findings of Trudgill (1983), it can be argued that Indie music used to be a case of responsive audience design back when the connection to punk music was stronger and the direct audience was still primarily constrained to the British working class. However, these findings do not hold for the Indie genre in its contemporary context. Though the connection to the British working class still prevails, the audience of Indie bands is generally much more international, due to an overall rise in popularity of the genre and the rise of streaming services in the previous years. The change in audience leads to a rejection of responsive audience design, as argued by Trudgill (1983), and leads to short-term outgroup referee design being a possible cause for the high use of UK variants by the Indie bands investigated.

As stated in Section 2.2.2, short-term outgroup referee design posits that a speaker adopts the speech style of an outgroup which is connected to a form of prestige or values important to the speaker, as a way of identifying with the outgroup and the values connected. In the case of British Indie music, the outgroup can be identified as the working class. The British working class is historically associated with their subversive position with regard to the mainstream and is seen as the most authentic and honest part of the British population (Beal, 2009). By using a more “local” pronunciation, Indie bands thus aim to be associated with the working class in order to connect to the values of authenticity connected to that outgroup. As the audience is not only confined to Britain, and thus often linguistically and culturally removed from the bands’ origin, using a general UK variant is enough to evoke the sense of authenticity associated with the British working class, even if the accent used is strictly speaking not the one used by the working class (Bell, 1984). One supporting study was done by Beal (2009), who investigated the British Indie band Arctic Monkeys and argues that they index authenticity and identity by using their own local Sheffield accent. The Kooks, too, use a Northern sounding accent in their songs, even though they are originally from Brighton. For instance, in their songs investigated in this thesis, both bands continuously use

the variant [ʊ] instead of the more standard variant [ʌ] for the lexical set STRUT, which is a very salient and stereotypically Northern feature. By doing so, the bands can be argued to further strengthen the perceived connection to the working class, again supporting the asserted workings of referee design on British Indie bands.

An alternative explanation to referee design has been given by Eckert (2014), who argues that the use of local variants is a case of indexicality. Though she argues that a “local” pronunciation can be used as a way of indexing authenticity, indexicality cannot properly explain the variation found in the Indie genre, as it would postulate that each band would use their own vernacular accent. However, this is not the case, as seen in the pronunciation of The Kooks as described above.

### **5.1.1 The role of gender in the Indie genre**

Surprisingly, the statistical analyses did not rule out gender as a correlating variable. Instead, the gender of the band’s singer has shown a highly significant correlation with the overall distribution of variants within the Indie genre, with male singers showcasing a higher use of UK variants than female singers. Though this correlation might be surprising at first glance, the fact that it only occurs within the Indie genre supports the hypothesis that the Indie genre is primarily influenced by sociolinguistic influences through the aim of authentication. The Indie genre is much more strongly associated with masculinity than with femininity, stemming from the fact that the “alternative rock culture is sexually (...) insular” (Hesmondhalgh, 1999, p.46), and the stereotypical association of the working class with “blue-collar masculinity and machismo” (Beal, 2009, p.230). The tendency of bands like Arctic Monkeys and The Kooks to use a Northern English accent also supports the influence of masculinity on authenticity, as the North is the region stereotypically associated with the British working class, and thus by extension also with values of masculinity. Hence, it can be assumed that the authenticity connected to the working class is also (at least partially) rooted

in masculinity, which is then reflected in a stronger sociolinguistic influence on the male singers than on the female singers.

## 5.2 Phonotactic Influences

In the data analysed, the bands in the mainstream genre always show a high preference for the Non-UK variants. With the exception of rhoticity, which will be discussed below in more detail, the use of Non-UK variants lies between 77.1% and 92.8%.

As stated in Section 2, Trudgill (1983) has attributed the use of Non-UK features (which he has termed Americanized features) to the workings of Audience Design. He argues that British bands use an Americanized accent because they aim to be associated with the prestige connected to the American music market. However, the prestige of the American music market seems to have diminished in the last decades with the rise of local music markets, making Audience Design insufficient as an explanation of the still persistent preference of Non-UK variants by singers in the mainstream genre. Moreover, it does not explain the lack of the Non-UK variable of rhoticity in the data.

When comparing the variants for each of these variables, it is striking that the Non-UK variant is favourable on phonotactic grounds in all cases except rhoticity, either on the ground of sonority or ease of articulation. Thus, instead of looking for an explanation on sociolinguistic grounds, the variation found for bands in the mainstream genre can be attributed to phonotactic influences.

### 5.2.1 Sonority

The Non-UK variants of the variables /t/, LOT and BATH are phonetically favourable on the basis of sonority. The /t/-variable is more sonorous in its Non-UK variant [t] than in its UK realization as a glottal stop [ʔ]. This is due to the fact that [t] includes an explosion, characterized by a peak in amplitude, after the stop in the air flow. This explosion is missing for the glottal stop [ʔ], which is characterized only by a complete stop in the air flow, severely

reducing its sonority. In an intervocalic context, the sonority of the variants of /t/ differs even stronger. Here, the UK variants are [t] and [ʔ], as described above. The Non-UK variant is realized as an alveolar flap [ɾ]. This variant is more sonorous than its UK counterparts, in that it is voiced continuously and only includes a tangential contact between the tongue tip and the alveolar ridge. The UK variants [t] and [ʔ], on the other hand, are both produced with a stop in voicing, placing them lower on the sonority scale.

In the lexical set LOT, the Non-UK variable is also more sonorous than the UK variants, due to the fact that the former is unrounded while the latter is rounded. As mentioned in Section 2, unrounded vowels are generally more sonorous than their rounded counterparts, due to a smaller restriction to the air flow (Morrissey, 2008).

For BATH, the difference in sonority is only very slight, as both /æ/ and /ɑ/ are produced in an open position (see figure 8). Research on the difference in sonority regarding front and back vowels is still lacking but it can be argued that, in the case of the back vowel /ɑ/, the tongue disrupts the air flow more than in the case of the fronted vowel /æ/, as the tongue is closer to the soft palate. This would suggest that the fronted vowel is sonorous than its fronted counterpart /æ/.

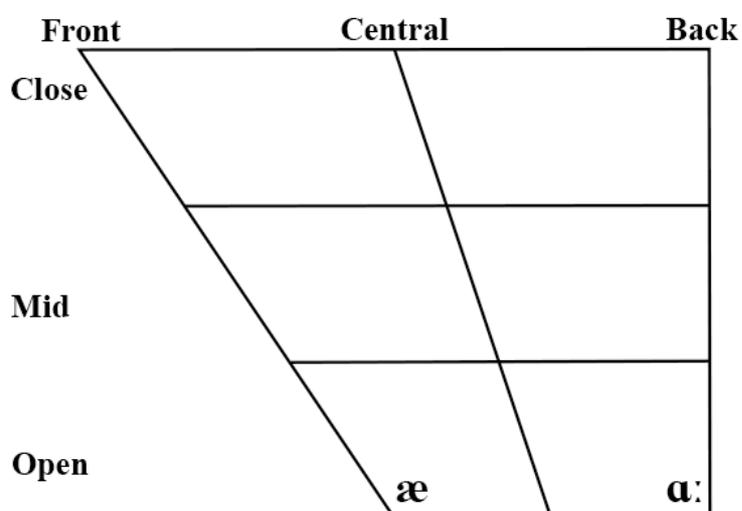


Figure 8. Position of BATH variants.

### 5.2.2 Ease of Articulation

For the variables intervocalic /t/, LOT and GOAT, the Non-UK variants are phonotactically favourable on the basis of ease of articulation.

The Non-UK variant [ɾ] of the /t/-variable in intervocalic contexts is preferred both on the grounds of sonority and ease of articulation. As described above, it is the only intervocalic /t/-variant that does not include a change in voicing. Moreover, it constitutes the slightest change in mouth position from all variants, in that it only includes a tangential contact between the tongue tip and the alveolar ridge in contrast to a full retraction of the tongue towards the soft palate or a full contact between tongue tip and alveolar ridge.

The Non-UK variant of LOT is, next to being more sonorous, also slightly preferable on the basis of ease of articulation. The two variants of LOT are identical with the exception that the Non-UK variant includes lip rounding. As such, the Non-UK variant is easier to articulate in that the extra movement of lip rounding does not have to be executed.

The lexical set GOAT is realized either as its UK variant /əʊ/ or its Non-UK variant /oʊ/, both of which are diphthongs. As seen in figure 9, diphthongs constitute a movement from one vowel position to another. Increased mouth and lip movements also lead to increased effort on the side of the speaker, and thus goes against the principle of minimal effort mentioned in Section 2. Thus it can be assumed that the variant that is preferred phonotactically is the one in which the two vowels of the diphthong are closer to each other. In the case of the GOAT variable, /ʊ/ is closer to /o/ and /ə/, leading to a phonotactic preference for the Non-UK variable /oʊ/ over the UK variant /əʊ/. The preference for the Non-UK variant is also preferred by the fact that both /o/ and /ʊ/ are rounded, while /ə/ is unrounded. Thus, using the UK variant /əʊ/ would include an extra lip movement, which puts it behind /oʊ/ on the grounds of ease of articulation.

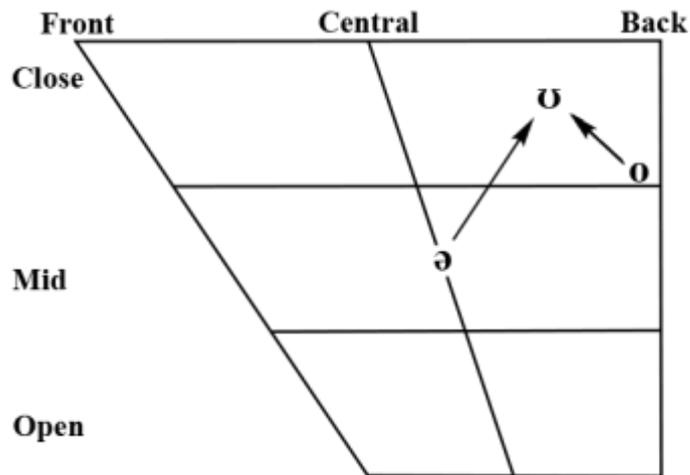


Figure 9. Start and end vowels of GOAT variants.

### 5.3 Two competing forces

The distribution found in the data analysis suggests an interplay between the sociolinguistic and the phonotactic influences. Though there is a highly significant correlation found between variant used and genre, the variant use is not categorical in either genre. Excluding rhoticity, the use of Non-UK variants in the Indie genre lies between 17.8% and 47.7% while the use of Non-UK variants in the mainstream genre lies between 77.1% and 92.8%. This distribution suggests that both influences apply to both genres. However, it can be assumed that they apply to different degrees.

Moreover, the data suggests that the two influences are in competition with each other with one overriding the other based on the communicative and sociolinguistic context. The lowered communicative need in singing leads to a stronger phonotactic influence. As this applies to all genres equally, the phonotactic influence can be assumed to apply to the Indie and mainstream genres in an equal measure. This is reflected by the variant distribution in the Indie genre, which shows a 17.8% and 47.7% use of Non-UK variants despite the strong sociolinguistic influence described above, and the strong preference for Non-UK variants as shown in the mainstream genre.

The lower use of UK variants in the data of the mainstream genre can be attributed to the missing need for authentication within the genre. In contrast to the Indie genre, the mainstream genre is not rooted in or connected to any specific group of the population. As a consequence, the intended audience is less confined and the genre is not associated with any particular values, as it is based on commercial grounds, lacking any idealistic background. Thus, there is no need for the bands in the mainstream genre to associate themselves with an outgroup to evoke a sense of authenticity or to be associated with any other specific values, significantly weakening the sociolinguistic influence. Thus, the phonotactic influence clearly wins out against the sociolinguistic influence within the mainstream genre, due to the almost non-existent sociolinguistic influence in this genre.

The persisting preference for the UK variants suggests that, within the Indie genre, the sociolinguistic influence overrides the still prevailing phonotactic influence. While the mainstream genre is almost exclusively influenced on phonotactic grounds, missing any sociolinguistic influence, the Indie genre is highly influenced by both. This is reflected in the more even distribution of the variants within the genre in comparison the mainstream genre data.

Moreover, the interplay of the sociolinguistic and phonotactic influences as competing forces is supported by the lack of Non-UK variants in the conversational speech of the British singers, as found in the interviews investigated. This lack of Non-UK variants can be account for by lesser importance of sonority and the higher communicative need found in normal speech. The importance of sonority in singing lies in singers aiming for a pronunciation that can best carry the tune over the music (Morrissey, 2008). This is done best by aiming for the most sonorous pronunciation, as sonority constitutes the perceived strength of pronunciation. The need for sonority is not as pronounced in normal speech, as speech is more isolated from other acoustic signals. As there is no background music and speakers are able to vary in

amplitude and distance to their communicative partner, the need for the chosen variants to carry the tune is not as important.

Also, ease of articulation can be argued to have less influence on conversational speech than on singing, due to the higher communicative function found in speech. Ease of articulation is grounded in the principle of minimal effort (Shariatmadari, 2006). As stated in Section 2.3.2, singing usually does not seem to exhaust its full communicative potential. This is seen in the repetitive nature of most lyrics and in the higher focus on form than on content in high performance, as argued by Coupland (2007). As such, ease of articulation has a higher degree of influence on singing than on speech, as the transmission of the message does not seem to be the primary purpose. This explains the absence of Non-UK variants in the speech of the British singers but their presence within singing.

### **5.3.1 Rhoticity as a controlling factor**

Rhoticity can be taken as a controlling factor for the competitive nature of the sociolinguistic and phonotactic influences. The retroflex approximant investigated in this study, as the Non-UK variant of rhoticity, is positioned below vowels on the sonority scale. Burquest (1998) argues that vowels are by definition the most sonorous speech part, putting all others below them. The rhotic variant of rhoticity is produced by retroflexion, which is defined by a curled back tongue. The retraction of the tongue leads to a restriction of the air flow (Ladefoged, 1975). Thus, rhoticity is an exceptional variable in the context of this study in that it is the only one in which the UK variant is favoured on sociolinguistic as well as phonotactic grounds. Hence, the interaction of influences argued for in this study would predict a strong preference for the UK variant. The prediction is supported by the data analysed, which indicates a strong preference for the UK variant within both the Indie and the Mainstream genre, with 98.3% and 93.1%, respectively.

## 6. Conclusion

Most of the prior studies into the field of phonological variation in singing have focussed only on sociolinguistic influences, mostly disregarding possible phonotactic influences (e.g. Bell, 1984; Trudgill, 1983; Beal, 2009). This thesis aimed to give a more unified approach to phonological variation in singing by investigating the phonological variation found in the British Indie and mainstream genres and relating the results to possible influences on both a sociolinguistic and a phonotactic level. By doing so, this thesis has made an initial attempt at combining the sociolinguistic and phonotactic strands of linguistic research on phonological variation, which were so far largely kept separate. This thesis argued for a competitive interplay of sociolinguistic and phonotactic influences, leading to phonological variation through a varying strength of the two influences based on the sociolinguistic context of the genres.

Due to the scope of this thesis, the possible sample size was limited. While most variables had a satisfactorily large sample, the lexical set BATH only had 47 realizations. Thus, this study will have to be replicated on a larger scale to further strengthen the results found in this thesis. However, for the aim of this thesis the results found are sufficient to be taken as a point of indication. Also, it should be noted that the convention of rhyme in songs might have influenced the results slightly. However, this influence can be expected to be almost non-existent, as most potential sites of variation were not in rhyming position. Moreover, rhyme usually only occurs across two verses, and thus leads to only one forced repetition of the variable. Thus, the influence of rhyme can be regarded to be almost irrelevant to the aim of this thesis, also in the light of the strength of the correlation ( $p < 0.001$ ).

It is interesting to note that the variables /t/, GOAT and BATH do not show a significant correlation with gender in themselves, though the other variables and the overall distribution do show such a correlation. While the missing correlation for the /t/-variable can

be linked back to the actual neutrality of the variant [t], here analysed as the Non-UK variant, it is not clear what the reason is for the missing correlation of GOAT. This can be taken as an impetus for further sociolinguistic research into the indexicality of certain variables in regard to values like masculinity. For the aim of this thesis, it suffices that the overall variant distribution is highly significant in regards to gender.

The results found in the study conducted support the hypothesis that phonological variation in British music is based on the varying strength of the two influences based on the sociolinguistic context of the genres. The genres have shown a correlation between genre and the variant used. The Indie genre, which has shown to be more strongly sociolinguistically influenced than the mainstream genre, has shown to be positively correlated with the UK variants, while the mainstream genre, which has nearly no sociolinguistic influence due to an absence of associated values, shows a positive correlation with the phonotactically favoured Non-UK variants. Gender has shown to be a correlating factor regarding variant use in the Indie genre as well. The male Indie singers show a stronger preference for the UK variants than the female Indie singers. This again supports the connection of the Indie genre and masculinity in regards to authenticity, and thus also supports Beal's study on the accent use by the Indie band Arctic Monkeys (2009).

By relating the use of Non-UK variants by the mainstream bands to phonotactic influences, this thesis moreover gives an alternative to Trudgill's (1983) view on the linguistics of British pop music, which does not hold for the contemporary situation of the music industry. In his study, he asserts that the "Americanized" pronunciation of British singers is based on Audience Design through the values associated with the American music market. The diminishment of the American music, however, as well as the missing consideration of differences between genres found in this study, lead to a preference for ascribing the use of Non-UK variants to phonotactic influences instead of to the workings of Audience Design.

By means of considering both sociolinguistic and phonotactic influences on phonotactic variation in British music, this thesis can be taken as a first indication for the interaction between these two strands of linguistic research and as a starting point for further research into a more closely-knit linguistic analysis on phonological variation.

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## Appendices

### Appendix A

Table A1  
*Indie Bands and Songs Investigated*

<b>Indie</b>	
<i>Band</i>	<i>Song</i>
<i>The 1975</i>	Chocolate
	Menswear
	Settle Down
<i>Declan McKenna</i>	The Kids Don't Wanna Go Home
	Paracetamol
	Brazil
<i>Arctic Monkeys</i>	Fake Tales of San Francisco
	Dancing Shoes
	When the Sun Goes Down
<i>The Kooks</i>	Time Await
	Naive
	She Moves in Her Own Way
<i>Franz Ferdinand</i>	Take Me Out
	Come On Home
	Tell Her Tonight
<i>Daughter</i>	Human
	Smother
	Youth
<i>The Japanese House</i>	Pools to Bathe In
	Still
	Teeth

**Appendix B**

Table B1  
*Mainstream Bands and Songs Investigated*

<b>Mainstream</b>	
<i>Band</i>	<i>Song</i>
<i>Rita Ora</i>	R.I.P
	Hot Right Now
	I Will Never Let You Down
<i>Ella Henderson</i>	Ghost
	Glow
	Yours
<i>Leona Lewis</i>	Better In Time
	Footprints in the Sand
	Run
<i>Jess Glynne</i>	Don't Be So Hard On Yourself
	Take Me Home
	Hold My Hand
<i>Jessie J</i>	Domino
	Masterpiece
	Price Tag
<i>Olly Murs</i>	Dear Darlin'
	Troublemaker
	Years and Years
<i>George Ezra</i>	Blame It On Me
	Cassy O'
	Budapest