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Catchy and conversational? A register analysis of pop lyrics

This study presents a register analysis of pop lyrics. To this end, it applies multidimensional register analysis to empirically test claims regarding the allegedly conversational nature of pop lyrics. It thus follows broader calls for the linguistic exploration of performed language as represented in non-canonical pop culture registers. The text-linguistic investigation relies on a corpus of contemporary pop lyrics and uses the *Multidimensional Analysis Tagger* (Nini, 2018), a software that replicates Biber's (1988) tagger, to identify register features to contrast lyrics with other text varieties. In addition, the n-gram and keyword functionalities of a concordancer are used for establishing register markers and style features to identify characteristic properties of pop lyrics discourse. In line with earlier claims, it emerges that pop lyrics indeed carry some conversational force despite situational factors being indicative of planned and performed production. Furthermore, this analysis identifies additional features that are highly distinctive of pop lyrics (vs. general conversation), overall suggestive of the special status of this register on the speech-writing continuum.

Keywords: pop culture, lyrics, multi-dimensional register analysis, stylistics, speech vs. writing

1 Introduction

Pop culture is a pervasive phenomenon and recognized as a driving sociocultural force worldwide, likely to affect everybody on a daily basis (Trotta, 2010: 44). Even though pop culture is for the most part text-based, there are surprisingly few attempts to describe its discourse from a linguistic perspective (see also Schneider, 2018). While one reason for this undervaluation may be the traditional, cultural pessimist view of pop culture as stigmatized ‘low culture’ (see Adorno, 1941 for a pertinent example), linguists have also long refrained from studying the language of pop culture due to its ‘performed’ and ‘inauthentic’ nature that strongly separates it from ‘real’, that is, what is genuinely perceived as authentic, unscripted spoken and written language (Queen, 2018: 218-219). However, performed language is increasingly considered a worthwhile object of (socio-)linguistic study due to its large social impact (Bell and Gibson, 2011: 555; Mair, 2013: 275), and as it is even viewed as a constitutive cultural practice with the ‘potential to define and reconfigure the culture in which it functions’ (Coupland, 2011: 578), for instance in terms of having a possible bearing on language change (see Denis and Tagliamonte, 2017; Trotta, 2018: 36-39 for discussion). In addition, pop cultural forms have been embraced by applied linguists and language educators, mainly due to the associated motivational potential of such material (see, e.g., Mobbs and Cuyul, 2018; contributions to Werner & Tegge, forthcoming).

Pop culture explicitly reveals itself in various manifestations. Among them, lyrics have been identified as arguably epitomizing the performed language of pop culture (Werner, 2012). It is important to note that performance crucially does not only include staged performance (e.g. during a live concert), but also mediated (i.e. recorded) performance, which actually is the ‘primary channel of public performance’ (Bell and Gibson, 2011: 558) in today’s mediatized (Western) societies (see also, Doyle McCarthy, 2017: 92). In recent years, several linguistic analyses of pop lyrics¹ have been conducted, amongst others focusing on accent features (e.g. Gerwin, 2017; Jansen, 2018; Gibson, 2019) and lexicogrammar (e.g. Jansen and Westphal, 2017), often with a sociolinguistic focus on identity and language attitudes. Others have applied the frameworks of Critical Discourse Analysis (e.g. Longhurst and Bogdanovic, 2014; Motschenbacher, 2016) and stylistics (e.g. Hilbert, 2012).

A further look at some older and more recent (applied linguistic, linguistic, and non-linguistic) literature on pop lyrics reveals that observers, in a somewhat conspicuous manner, seem to agree on the general communicative properties of this text variety. They have assigned labels such as ‘in the mode of direct address, of intimate conversation’ (Horton, 1957: 569), ‘conversational colloquialism’ (Frith, 1996: 166), ‘conversational’ (Li and Brand, 2009: 75; Segal, 2014: 3; Zhou, 2016: 167), ‘similar to how people have conversations with each other’ (Pettijohn and Sacco, 2009: 298), ‘conversational directness’ (Durant and Lambrou, 2009: 137), ‘proximity to everyday speech’ (Petras, 2011: 51; transl.), ‘oral language form’ (Bell and Gibson, 2011: 558),

¹ For a recent comprehensive sociolinguistic investigation of the related domain of folk songs, an aspect not treated in this analysis, see Watts and Morrissey (2019). Note that the label ‘popular’ (vs. ‘pop’) is sometimes used for the folk genre.

or ‘corresponding [to] ordinary conversation’ (Moore, 2012: 103). While such claims may seem intuitively plausible, they have rarely been empirically tested.

Some assessments of pop lyrics as a register or genre, focusing on their alleged conversational and colloquial nature, are provided in Kreyer and Mukherjee (2007), who, based on a comparison of average word length, type-token ratio, and of the wordlists between a synchronic pilot corpus of pop lyrics (from the 2003 US album charts) and spoken and written sections of a reference corpus, conclude that pop lyrics ‘sit somewhat uneasily on the boundary between speech and writing’ (Kreyer and Mukherjee, 2007: 38). Werner (2012) complements their work with a larger diachronic corpus (spanning the years 1956–2005) that also allows a contrastive view of British and American data. He suggests that while they superficially are conversational, pop lyrics should not be viewed as ‘exemplars of spoken/informal register [...] but rather [...] be thought of as a “special” register’ (Werner, 2012: 43). In sum, it is evident that while both studies serve to outline selected linguistic properties and provide some information on the extent of their conversational nature, they stay somewhat vague in their description of pop lyrics as a distinctive register, as this was not the genuine aim of these studies.²

Studies that explicitly take a register approach (see Section 2) are Biber and Egbert (2018) and Bértoli-Dutra (2014). In their Multi-Dimensional Analysis (MDA) of online registers, based on the *Corpus of Online Registers of English* (CORE; www.english-corpora.org/core/), Biber and Egbert (2018) establish the linguistic properties of a ‘lyrical’ category as an oral sub-register. In view of the fact that they work with a probability sample corpus³ in which the lyrical category is not restricted to pop lyrics (and not even to lyrics in general, as the lyrical sub-register comprises diverse material from webpages with poems, quotes, prayers, or guitar chord presentations), it is noteworthy that their findings, for instance as regards restricted lexical diversity, extended use of first and second personal pronouns and contractions, or topic choice, are in line with previous analyses (e.g. Kreyer and Mukherjee, 2007; Werner, 2012).⁴ In another MDA study, based on a corpus of US chart lyrics, Bértoli-Dutra (2014) identifies six dimensions, which she labels ‘persuasion’, ‘interaction’, ‘narrative concerns’, ‘personal action’, ‘emotion and society’, and ‘musical reference’. Bértoli-Dutra (2014) is to be credited for providing a valuable, empirically informed register-internal perspective (i.e. a bottom-up establishment of dimensions of variation within lyrics), while it is clear that the relation of pop lyrics to other registers (i.e., an ‘additive analysis’ (Berber Sardinha, 2014: 90) that compares dimension values of the target register(s) to

² This similarly applies to Kreyer (2016), a study that focuses on rap specifically.

³ Probability sampling is a technique used to maximize representativeness of a corpus when the whole population cannot be included in the database (due to its large size, for instance). In simplified terms, when applying probability sampling, only a certain percentage of texts (the sample) that would be available (the population) are randomly selected.

⁴ As CORE is devised as a large, representative corpus of webpages, the inclusion of lyrics is indicative of the salience and wider relevance of such material.

those established in Biber's original work; see further Section 2) is not inherent in such an approach.

This study addresses this gap and uses a corpus-based approach for a systematic and data-driven description of pop lyrics as a text variety. Specifically, it addresses the following research questions:

- Where can lyrics be located in relation to other registers?
- What are the distinctive linguistic properties of lyrics (in contrast to conversation)?

The remainder of this study consists of, an overview of the data and methodology used (Section 2) followed by a description of the situational characteristics of pop lyrics communication (Section 3.1) and a presentation of the results of an additive MDA(Section 3.2) and further corpus-based investigations (Section 3.3). Then, findings are discussed and contextualized (Section 4), while the conclusion (Section 5) contains an overall summary and suggests a few avenues for future research.

2 Data and methodology

To date, a publicly available corpus of pop lyrics does not exist. Neither do lyrics form part of any of the larger monitor corpora of the English language (CORE being an exception to some degree). Therefore, a specialized corpus of contemporary English pop lyrics, labelled LYPOP, was created.

While there are various ways to define what should count as 'pop(ular)' music (see, e.g., Storey 2010 for cultural conceptualizations), the approach taken here considered commercially highly successful material (see also Coupland, 2011: 578). This is motivated theoretically by definitions of pop culture as work designed with the intention of appealing to a maximal number of people (Merskin, 2008; Werner, 2018: 4) and follows precedence of previous studies with similar approaches (e.g. Kreyer and Mukherjee, 2007; Werner, 2012). This also helps to avoid personal bias and subjective designations if soft criteria such as 'strong influence on other contemporary music', 'artistic merit', etc. were applied. Note that 'pop' as defined in the way described may subsume various (subjectively defined) musical subgenres, which have been found to be inherently fuzzy and culturally determined (see, e.g., Van Venrooj and Schmutz, 2018). Note further that such an approach, rather than following a 'the bigger, the better' principle, is informed by an intention to represent a text variety in an efficient manner (cf. Berber Sardinha, 2014: 86).

Successful appeal to a large audience is operationalized as follows: LYPOP contains all the lyrics from the top ten albums of the year-end charts from the period 2001–2016. The charts were determined by the *Official Charts Company* (www.officialcharts.com), a British music industry related organization. It provides chart synopses based on the collection and analysis of record sales data, and includes information from streaming services.

To ensure internal consistency and searchability, and thus overall validity of the data, they had to be pre-processed. After the manual exclusion of all songs not in English, the actual lyrics

were semi-automatically retrieved in HTML format from the online lyrics archive *AZlyrics* (www.azlyrics.com) with the help of the *DownThemAll!* Firefox browser plugin. *AZlyrics* was mined as it – unlike other lyrics repositories – provides the option for users to correct lyrics once submitted. Very much in a wiki-like fashion, this serves as inherent quality control. Note in addition that *AZlyrics* has been found to offer high transcription accuracy rates in other linguistic studies of lyrics (see, e.g., Motschenbacher, 2016; Hagedorn, 2019).⁵ In the final preprocessing step, unwanted metainformation (such as indications of verses, instrumental solos, etc.)⁶ was removed with the help of a *Notepad++* script containing regular expressions, and files were converted to plain text format (TXT) to be readable by the corpus software. In total, the material comprises 1,842 songs/texts by 91 different artists/bands with a size of 547,758 tokens (12,894 word types).

Before the files were submitted to the corpus software, a post-processing step, aimed at resolving spelling variation in the data, as illustrated in (1) to (4), was required (all variants were normalized to 'cause in this case). For this, the *VARD* tool (Baron, 2017) was employed.

- (1) **cause** nothing changes when I'm on the road (Jess Glyne: "You can find me")
- (2) 'cause nothing's as it seems (Taylor Swift: "Wonderland")
- (3) **cuz** I don't wanna lose you again (Olly Murs: "Us against the world")
- (4) call the police, **coz** I've lost control (James Morrison: "Call the police")

Following Biber and Conrad (2019), the approach toward textual variation taken in this study is register-based. It involves a combined linguistic-situational perspective, which means that linguistic features commonly occurring in a text variety (Section 3.2) as well as parameters of the situation of use of this text variety (Section 3.1) should be analyzed and related. This serves the overall aim to describe the communicative function(s) and purposes of linguistic features in texts of a particular register (Section 4). First and foremost, a register analysis serves to identify *register features*, defined as pervasive and frequent (in comparison to other registers) words or grammatical characteristics that crucially are not exclusive to the target register (Biber and Conrad, 2019: 54). This serves to contrast lyrics with other (established) registers and may provide insight on the alleged conversation-like nature of lyrics (research question 1).

The type of register analysis presented in Section 3.2 can be categorized as an additive MDA (in combination with further corpus measures, on which see below). Some basic principles of MDA are explicated subsequently. MDA, originally established through the seminal work of

⁵ Hagedorn (2019) compared 160 lyrics transcriptions on *AZlyrics* with the sung versions on *Spotify* and only found two instances of wrongly transcribed contractions in her sample.

⁶ As repetitiveness is an important aspect of lyrics discourse, choruses were included as many times as they appeared.

Biber (1988, 1989), is a quantitative text-linguistic approach⁷ toward register variation that allows the comparison of various registers according to several linguistic *dimensions*, with a view to ‘(1) identify the underlying linguistic dimensions of variation in a language, in empirical/quantitative terms; and (2) compare spoken and written registers in the linguistic space defined by those dimensions’ (Biber and Conrad, 2019: 268). Dimensions thus are representative of a group of co-occurring individual features that are quantitatively identified through the statistical technique of factor analysis.⁸ Next, dimension scores, based on the normalized and standardized frequency values per text (see Biber, 1988: 93–97), can be computed for each text for each dimension, with the mean of these dimension scores serving as a measure that allows the comparison of linguistic similarities and differences across registers. In a follow-up (qualitative) step, quantitative patterns are functionally interpreted (see above) and related to situational parameters (Biber and Conrad, 2019: 268-270).

While it is possible to establish new sets of dimensions whenever a (more or less specialized) register is studied, depending on the focus of the individual researcher it may be helpful to compare dimension scores with those established for general spoken and written registers of English (Biber, 2019: 16). This approach, which regularly refers to the dimensions and text types studied in Biber (1988, 1989), has been termed ‘additive analysis’ (Berber Sardinha, 2014: 90) as it expands the range of registers described beyond the ones included in the original studies. It is also the one taken in this study as it serves to locate pop lyrics relative to several spoken and written registers and crucially includes the assessment of the conversational qualities of pop lyrics, one of the overarching research question addressed.

For the additive MDA, the study relies on the freely available *Multidimensional Analysis Tagger* (MAT; Nini, 2018, 2019),⁹ which has been successfully used in a number of corpus-based studies from various linguistic subfields (e.g. English for Academic Purposes: Crosthwaite, 2016; Language Variation and Change: Kruger and Smith, 2018; Stylistics: Montoro, 2018). As stated in Nini (2019: 71), MAT is intended as a replication of the tagger used in Biber’s (1988) seminal study, relying on the information on the algorithms used in the original work (see Biber, 1988: Appendix II). In general terms, it creates a frequency profile of the target text type (lyrics, in our case) on the basis of multiple linguistic features and locates this text variety (i) along Biber’s (1988) dimensions, as well as (ii) relative to other text types (conversation, press reportage, etc.) as established in Biber (1989).

⁷ This approach is characterized by using individual texts as observations and frequency rates of individual linguistic features in each text taken as variables (Biber et al., 2016).

⁸ Factor analysis is a procedure to reduce complexity. It reduces a large (potentially infinite) number of variables to a set of derived variables, known as factors. In MDA, individual linguistic features are the variables (see note 8), which are reduced to dimensions (see further Biber and Conrad, 2019: 270).

⁹ Z-score correction was enabled as this was a recommended setting for shorter texts (see Nini, 2018: 4). Otherwise, default settings were used. Small individual texts with fewer than 100 tokens were excluded from the MDA, as the reliability of feature frequency calculations would drop substantially if such texts were included (Nini, 2019: 83). This applied to 2.8 % of the texts.

This Java-based tool consists of three modules. Users first have to load input in plain text format to the central component, the ‘Tagger’. This module relies on the Stanford Tagger (2013), segments parts-of-speech and tags the data according to the same sixty-seven linguistic features and the same tagging rules as used in Biber (1988).¹⁰ After the tagging, data can be submitted to the ‘Analyser’, where occurrences of individual features are counted, and the counts normalized and standardized to allow the calculation of dimension scores (see above). As a final step, MAT locates the overall input along the six dimensions (According to Biber, 1988) and also assigns a text type (according to Biber, 1989) to each individual input text file. Besides output in textual format (token frequencies for the linguistic features, z-scores, dimension scores), the ‘Analyser’ also creates the input for visualizations of (i) the dimension scores of the input register (vs. Biber’s (1988) scores), including mean and range if the input corpus consisted of multiple texts, and (ii) the location of the text(s) analyzed relative to the Biber (1989) text types, using Euclidean distance. These visualizations can be accessed through the ‘Inspect’ tool (for further detail on individual functionalities of MAT, see Nini, 2018: 2-4, 2019: 71-72).

In an evaluation that relied on the original dataset used for Biber’s (1988, 1989) studies and that directly contrasted MAT results for dimension scores with the ones reported in the original studies, MAT emerged as overall reliably replicating the findings of the original studies while there are moderate differences as regards the scores for dimension 3, which does not affect the accuracy of text type assignment, however (Nini, 2019: 73-77).¹¹

The MAT was consciously chosen as a tool for this study as it facilitates additive analysis as described above. This means that, unlike in studies such as Bértoli-Dutra (2014), for instance, no (register-internal) factors are extracted in a bottom-up fashion, but the register in question (commercially successful pop lyrics, in our case) is mapped onto the extant Biber dimensions and text types.

The text-linguistic approach of MDA naturally relies on an analysis of complete texts. To complement this bird’s eye view, it is considered helpful to provide a supplementary perspective on the data. The rationale behind this is that such an approach may help to identify further register features that the MDA as implemented in MAT, which relies on sixty-seven linguistic features and their co-occurrence, is bound to miss. Given the special nature of lyrics, the text type studied here, such analyses may further serve to identify pervasive *style features* used for aesthetic reasons (Biber and Conrad, 2019: 55). To this end, the freeware corpus tool *AntConc* (Anthony, 2018) is used for an analysis of frequent n-grams and keywords.

¹⁰ For a list of the linguistic features included in MDA as conducted through MAT, see Nini (2018: 17-31; cf. Biber, 1988: 223-245).

¹¹ See the table presented in Nini (2019: 74-76) for a detailed comparison of dimension scores across various text types (MAT vs. the values provided in Biber, 1988, 1989). Mean differences in scores: dimension 1: 1.24; dimension 2: 0.51; dimension 3: 2.27; dimension 4: 0.72; dimension 5: 1.24; dimension 6: 0.51.

While creating a simple wordlist would also have been a feasible option, it was decided to provide information on frequent n-grams, as single word lists for pop lyrics have already been produced by Kreyer and Mukherjee (2007: 45), for instance. A look at n-grams may also provide additional insight on the allegedly repetitive nature of pop lyrics (see, e.g., Nunes et al., 2015; Schedl, 2019). The present analysis relies on 3-grams in order to ensure that these bundles are sufficiently represented across a range of individual texts. Key items in the keyword analysis are identified through the log ratio (as implemented in *AntConc*). Log ratio as an effect-size keyness measure has been found to be preferable over significance-based measures (such as log-likelihood) as it provides information on the size of the difference between two corpora for each keyword and avoids the bias of reporting on items that are highly frequent. Its interpretation thus is fairly transparent (see Hardie, 2014). The spoken sections (excluding scripted material, such as broadcast news) of the British component of the *International Corpus of English (ICE-GB)* (Greenbaum, 1996) served as a reference corpus., This choice was mainly informed by the comparable sizes (c. 550,000 words for LYPOP; c. 500,000 words for the ICE-GB selection) and the fact that it may serve as a good approximation as a spoken corpus of either British or American English¹² covering exactly the same period as LYPOP is not available. Note that rather than focusing on individual lexical items, key linguistic areas conceived more broadly (e.g. in terms of sets of lexicogrammatical items that are frequent and pervasive) will also be identified. Overall, the n-gram and keyword analyses are geared toward the aim of establishing specific linguistic properties of lyrics that distinguish them from speech more closely (research question 2).

3 Results

3.1 Situational characteristics

While situational characteristics are relatively straightforward for established and well-researched registers (such as news reports or telephone conversations, for instance), they are less well-known (and their analysis may be quite intricate) for non-canonical text varieties within a performed setting (and with a strong commercial interest), such as lyrics. In the following, I will therefore present an overview of the situational characteristics of pop lyrics along the lines of the framework developed in Biber and Conrad (2019: 39-40), extending the overview offered by Biber and Egbert (2018: 178-179).

3.1.1 Participants

When lyrics are performed, the singer can be considered the addressor (speaker). However, a complication involved is that the singer may not necessarily be the same person as the actual author of the lyrics. In the creation of mainstream pop lyrics it has been common practice to have teams

¹² The *Corpus of Contemporary American English* may be viewed as a potential option. However, its spoken sections largely consist of scripted and unscripted broadcast material and not of informal conversation. The *Santa Barbara Corpus of Spoken American English*, another possible alternative, in its present state is restricted in terms of size (c. 250,000 words).

of professional lyricists,¹³ while artists from pop sub-genres such as rock or rap are more likely to act as autonomous singer-songwriters (Moy, 2016: 10; Thompson, 2019: 48-51), highlighting their authenticity and autonomy (Bennett, 2005: 335). Still, lyrics are often specifically written for one artist and the artists could be considered the acting speakers (with various social characteristics); that is, they have a central position in the communicative process as the ‘authority of the performance’ (Eckstein, 2010: 53; see also Frith, 1996: 200).

For pop lyrics, there are two planes where the addressee could be located. Viewed narrowly (and this somewhat anticipates the linguistic analysis presented in Section 3.2), the intended listener could be described as a (fictional) single or plural *you* that often remains unspecified (Astor and Negus, 2014: 203).¹⁴ From a broader (and arguably more realistic) perspective, the intended listener is the pop music audience, that is, a potentially large number of addressees that in all probability remains unidentifiable. At the same time, the pop music audience could be considered as on-lookers, in particular if they do not listen to the lyrics intentionally. Given the tension between the two planes of communication operating here provides a rationale to explore whether this will have a bearing on the linguistic make-up of lyrics.

3.1.2 Relations among participants

As regards interactiveness, lyrics can be characterized as monologic, as the audience usually does not have the opportunity for backchannelling. Live performances may be considered an exception, but also in such contexts the audience does not provide direct feedback comparable to a traditional dialogic situation (see also Morrissey, 2008: 195-196). The social roles the singer and the audience take and their respective relative status and power are difficult to specify. The only valid general assumption is that there is a hierarchical relationship; that is, there is a high social distance between the two due to the star system associated with the pop music industry (see, e.g., Buxton, 1983; Verboord and Brandellero, 2018 and contributions in Loy, Rickwood and Bennett, 2018). This social distance also entails that, as a rule, there is no personal relationship between singer and audience, even though the social distance between the public persona of the singer and members of the audience may not be perceived by the latter at all (McCutcheon, Lange and Houran, 2002). Singer and audience possess some shared world knowledge and presumably also some kind of ‘insider’ knowledge if audience members identify themselves with or as fans of a particular celebrity performer.

3.1.3 Channel

The mode of communication has been established as a central determinant for any register analysis (Biber and Conrad, 2019: 43). Lyrics have been described as ‘special’ (Werner, 2012: 43) in this regard as they have been hypothesized to not squarely fall within any of the traditional modes of speech vs. writing (vs. signing) due to their production circumstances (see also below). A

¹³ Tough (2017: 105) provides an average of three to four writers per song (involved in creating music and lyrics).

¹⁴ Alternatively, reference to a fictional third-person persona can be observed as a scenario in pop lyrics (see Bradby, 1990).

description that tries to do justice to the hybridity of lyrics and that also incorporates the musical dimension within actual performance contexts is the label ‘written-to-be-sung’ (Kreyer and Mukherjee, 2007: 37). Whether this conspicuous status has some bearing on the linguistic realization is one of the aspects explored in this study.

In addition, lyrics are special in that they unite both permanent and transient properties. When performed, they (very much like speech) exist in the form of transient sound waves. However, these sound waves (if recorded) are repeatable and the written lyrics are made permanent, for example in printed form in record booklets, and in electronic form on artist homepages or lyrics websites.

3.1.4 Production circumstances

As already indicated in the foregoing sections, lyrics unite written and spoken/sung characteristics, which to some degree, reflects their dependence on multiple modes (Kreyer and Mukherjee, 2007: 37-38). This is mainly due to their production, which is carefully planned to fit the musical structure, as well as potentially revised and edited multiple times, a process not accessible to the audience.

If we wanted to add the circumstances of reception (an issue not part of the framework presented in Biber and Conrad, 2019), we could relate this to the transient and permanent properties mentioned above. Sung words acoustically realized in sound waves are simultaneously heard and understood by the audience, while printed/electronic lyrics enable complete reader control over the text.

3.1.5 Setting

Whether the time and place of communication are shared by the participants very much depends on the concrete setting. The default case when consuming lyrics is that they are listened to with the help of some technical device (Bell and Gibson, 2011: 558), potentially at any time, and both in private and public settings, so communication involves spatial and temporal distance between participants. Live performances as a specific setting provide an exception to these general patterns.

3.1.6 Communicative purposes

The communicative purposes of lyrics can be manifold, but again (see above) two planes of analysis appear to be operating. A general purpose of lyrics (reflecting the commercial interest behind this text type) is to entertain the audience (Thompson, 2019: 120). Viewed more narrowly, lyrics can also be assigned the broader purposes of narration, expressing attitudes, self-revelation, persuasion, etc. There are further specific purposes, to a large degree determined by the individual lyrics, such as teaching a moral, telling a personal story, etc. However, it is difficult to draw a line here (but see also Section 3.1.7).

If we try to assess lyrics in terms of factuality, we can argue that they may contain factual information along with personal opinion, speculation, imagination and fiction, so that overall a

mixed picture emerges. On a related note, we can expect a number of overt markers of personal attitudes and epistemic stance.

3.1.7 Topic

As regards topic areas, lyrics are not restricted, and they may deal with issues such as politics, religion, culture, etc. (cf. Biber and Conrad, 2019: 47). Previous analyses have suggested that ‘love’ (and its different shades such as ‘lost love’, ‘new love’, etc.) is a key concept in this text variety (Kreyer and Mukherjee, 2007; Kreyer, 2012; Werner, 2012). While this has been traced in previous work, the present study may provide additional evidence.

3.2 Text-linguistic perspective: Lyrics vs. other registers

To address the issue whether lyrics are conversational, it is sensible to focus on the dimensions with an ‘oral’ vs. ‘literate’ concern; that is, those dimensions that have been found to map the speech-writing continuum to a considerable degree. These are dimensions 1 (involved vs. informational production), 3 (explicit vs. situation-dependent reference), and 5 (abstract vs. non-abstract information) (Biber, 1988: 160-162; see also Biber and Conrad, 2019: ch. 10.3). Such an analysis has to take account of the fact that ‘no dimension defines an absolute spoken/written distinction’ (Biber, 1988: 161), so that it is to be assessed in terms of a ‘multi-dimensional construct’ (Biber, 1988: 162), with conversation and academic writing having previously been identified as representative oral and literate poles, respectively. Thus, crucially, the analysis of multiple dimensions, rather than providing an unambiguous result (i.e. ‘pop lyrics are oral/conversational’), will in all probability merely allow us to determine to which extent pop lyrics are to be viewed as an oral/conversational register from a linguistic perspective (Biber, 1988: 163).

As stated above (Section 2), in addition to dimension scores, MAT also provides an assessment of the data in relation to the Biber (1989) text types, both for the overall corpus and for each individual text contained therein, taking account of the individual text as basic unit in an MDA (cf. Berber Sardinha, 2014: 86). In line with the research questions, this serves to obtain a first general idea of the ‘register identity’ (Nini, 2019: 91) of the material studied compared to established English text types. For the pop lyrics data, MAT assigns ‘informational interaction’ as closest type overall, as this is the category assigned to the majority of individual texts (60%), that is, individual lyrics contained in LYPOP. This provides some first indication that lyrics indeed seem to map interactive communication (such as face-to-face conversation) to a large degree. Additionally, it emerges that pop lyrics may have a persuasive element as ‘involved persuasion’ emerges as the second-most frequent category (accounting for 19% of the individual texts; cf. Bértoli-Dutra, 2014: 153-156). The third largest share of individual texts (10%) is classified as ‘intimate interpersonal interaction’.

Next, information on the relevant dimension scores as calculated by MAT (vs. the ones provided in Biber, 1988) is given. Figure 1 displays the scores for dimension 1 (Biber, 1988: 129-135), which maps involved vs. informational production.

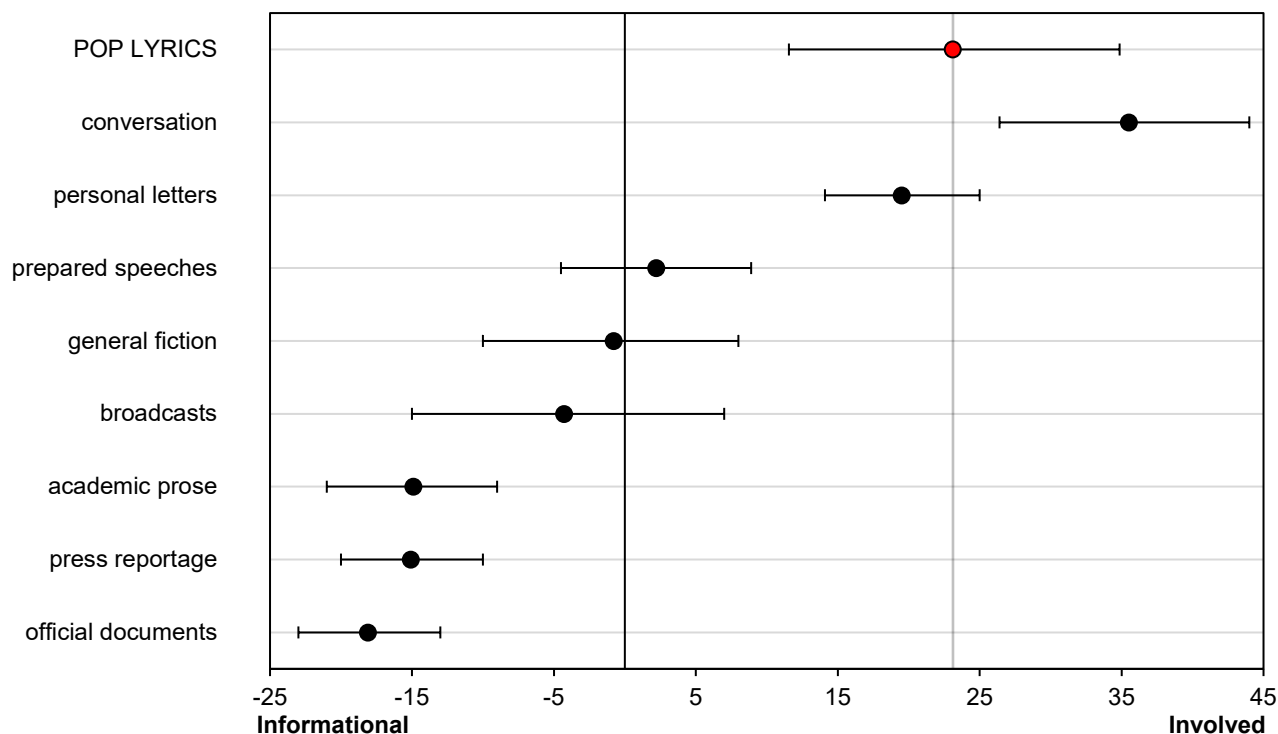


Figure 1. Scores for dimension 1: involved vs. informational production (dot = average; bars = +/- one std. deviation; black vertical line = 0; grey vertical line = reference line for pop lyrics)¹⁵

Predictably, conversation receives the highest score for this dimension. Pop lyrics also receive a comparatively high score (23.12) and thus can be characterized as an involved text variety distant from the more ‘literate’ end located toward the left of Figure 1. Though there is substantial overlap of the bars, rather than clearly aligning with conversation, the closest text type for pop lyrics is personal letters, a moderately involved, but written register (Biber, 1988: 132).

Some of the typical features of involved texts are, for instance, private verbs (i.e. those referring to unobservable intellectual activities and states; e.g. *think* and *love*), use of the present tense and of contracted forms, first and second person pronouns, while nouns, long words, and attributive adjectives, for example, are relatively infrequent (Biber, 1988: 129-131). The MDA indicates that involved features are present in pop lyrics to a large degree, which is highly suggestive of an affective and interactive type of communication, typically subject to constraints of real-time production (Biber, 1988: 134-135). As the property of real-time production clearly is

¹⁵ All figures were created with the freely available *XLdotplotter* (Sönning, 2016). Dimension scores for registers other than pop lyrics are taken from Biber (1988). Note that a similar graphical output (although in vertical format) is also provided by MAT (see Section 2).

not fulfilled in pop lyrics (see Section 3.1), the functionality of these features can be considered worth exploring further (see Section 4), also taking account of the statement that ‘the underlying communicative functions associated with this dimension cut directly across any distinction between the written and spoken modes’ (Biber, 1988: 135).

The scores for dimension 3, explicit vs. situation-dependent reference (Biber, 1988: 142-148), are displayed in Figure 2.

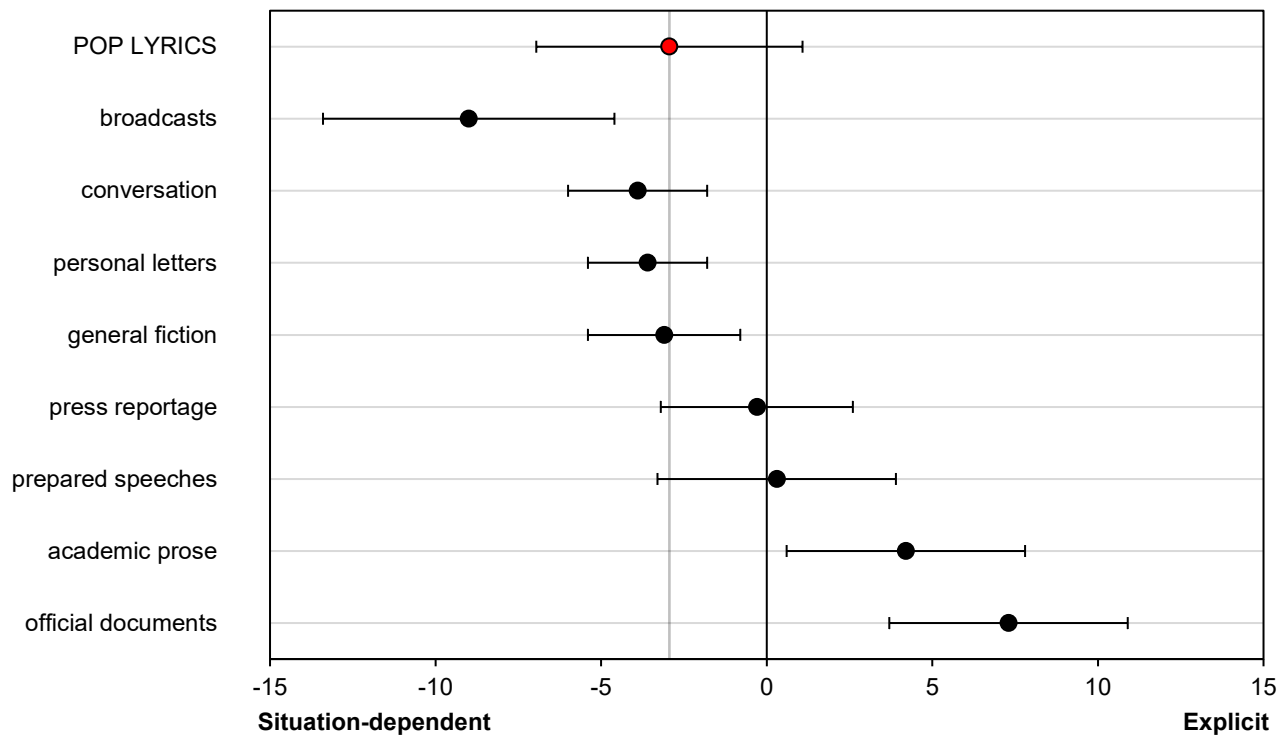


Figure 2. Scores for dimension 3: explicit vs. situation-dependent reference (dot = average; bars = +/- one std. deviation; black vertical line = 0; grey vertical line = reference line for pop lyrics)

Figure 2 shows that pop lyrics have a moderately low score on this dimension (-2.94). This means that they largely lack linguistic features used for ‘highly explicit, text-internal reference’ (Biber, 1988: 142), such as phrasal coordination and nominalizations. The MDA indicates that they are rather characterized by ‘direct [=exophoric] reference to the physical and temporal situation of discourse’ (Biber, 1988: 146), for instance through the use of deixis.

While the wide range of the error bars has to be acknowledged, in dimension 3, pop lyrics align with text varieties such as conversation, personal letters and, most closely, general fiction. Among these, we find an actually shared situational context between speaker and addressee only in conversation. Therefore, Biber (1988: 147-148) suggested that merely assuming a shared or at least familiar context (both real and fictional) on the part of the speaker is a sufficient condition determining situated discourse. It will be recalled that the typical setting of pop lyrics discourse involves spatial and temporal distance between participants (Section 3.1.5), so the mere assumption

of a shared situational context appears to play a vital part here as well. In any case, the association with conversation is obvious for this dimension, and persists even if the potential deviation of the MAT results (± 2.27) compared to the original Biber tagger (as mentioned in Section 2) for this dimension is factored in.

The last dimension to consider is dimension 5, abstract vs. non-abstract information (Biber, 1988: 151-154). The results are displayed in Figure 3.

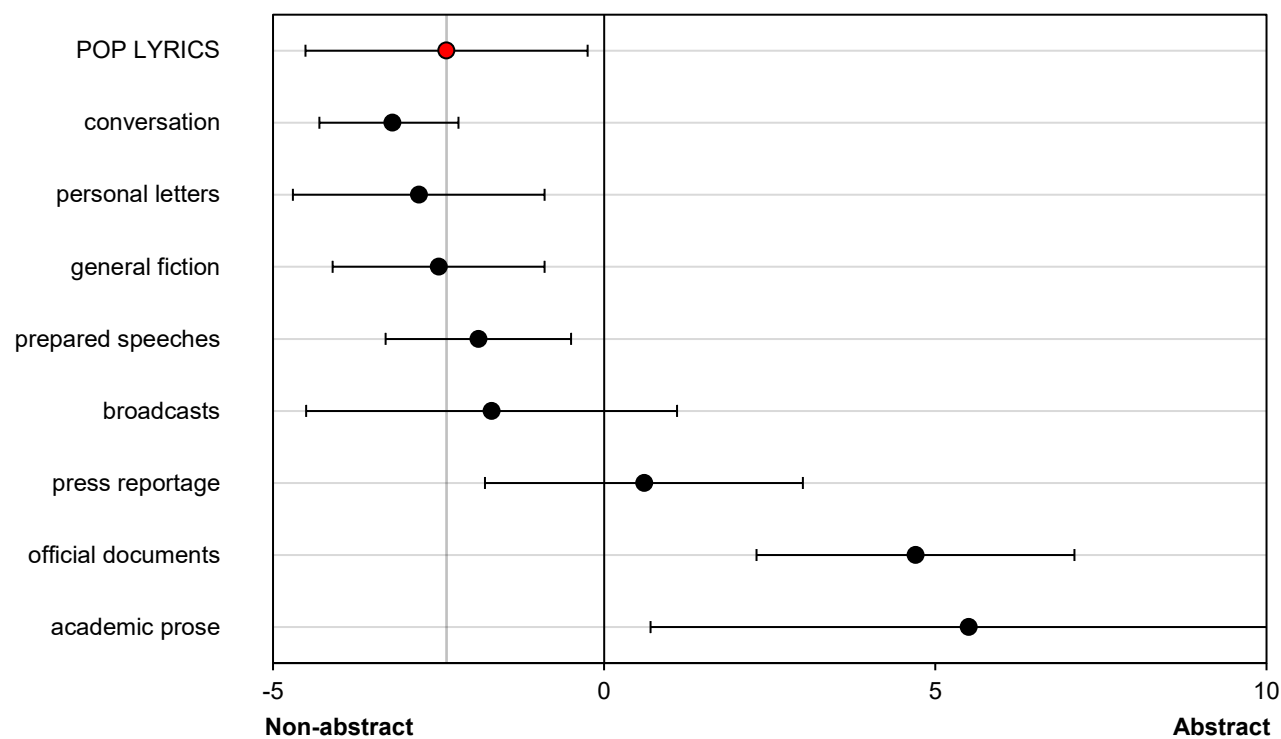


Figure 3. Scores for dimension 5: abstract vs. non-abstract information (dot = average; bars = \pm one std. deviation; black vertical line = 0; grey vertical line = reference line for pop lyrics)

Figure 3 yields a comparatively low score of pop lyrics for dimension 5 (-2.38). It has been suggested that high scores on this dimension are associated with formal written text varieties that are distinctive of technical discourse and characterized by linguistic features such as conjuncts, passives and past participial clauses. Functionally, this often serves to highlight concepts rather than agents in the discourse (Biber, 1988: 151-153).

Pop lyrics do not squarely fall under such a designation. The overall picture is diverse with pop lyrics aligning with a number of text varieties, such as prepared speeches, fiction, personal letters and broadcasts,¹⁶ and, less evidently, with conversation. In other words, and with regard to the first research question, it could be argued that pop lyrics are not as conversational as

¹⁶ Note the comparatively large width of the error bars for broadcasts. This may reflect the ‘twin purposes of [such registers, namely] reportage of events involving concrete, often human, referents; and abstract discussion of the implications of those events in conceptual terms’ (Biber, 1988: 154).

conversation in this dimension, while they show a relevant tendency to map this ‘stereotypically oral’ (Biber, 1988: 161) text variety, as is also shown by the complete overlap of the conversation range with the one for pop lyrics.

3.3 Further register and style features

To obtain a more detailed view of the pop lyrics data, the MDA results can be complemented by using basic quantitative techniques such as n-gram frequency lists and a keyword analysis (vs. a reference corpus of general conversation). The latter is used to establish features that are highly characteristic of lyrics, and may contribute to identifying style features present in the material. Overall, these analyses will serve to determine further specific linguistic properties of pop lyrics (research question 2).

Table 1. Most frequent trigrams in LYPOP

Rank	N	Range	Trigram
1	1672	110	oh oh oh
2	472	20	na na na
3	450	57	yeah yeah yeah
4	436	27	la la la
5	374	112	i don't know
6	267	88	i love you
7	223	20	ah ah ah
8	216	75	i don't wanna
9	204	37	no no no
10	197	54	i need you
11	197	65	the way you
12	184	90	i know that
13	184	72	you and i
14	178	77	i know you
15	177	56	i want you
16	170	64	i know i
17	170	37	you make me
18	168	71	and i don't
19	168	72	and i know
20	162	72	i want to
21	158	11	do do do
22	155	14	i i i
23	154	66	don't know what
24	153	69	i don't want

Table 1 displays the 25 most frequent trigrams in LYPOP. It is immediately clear that this list contains a considerable number of items indicative of the influence of the musical structure on the text. Combinations such as *oh oh oh* (rank 1), *na na na* (rank 2), *la la la* (rank 4) or *do do do* (rank 21) can be interpreted as semantically empty phonesthetic devices used to represent sung syllables (cf. the keyword list presented in the appendix). The restricted range of the last three items just mentioned (20, 27, 11, respectively) suggests that specific forms are used in specific lyrics (and used repetitively there), while *oh oh oh* appears to be a general-purpose phonesthetic device in pop lyrics. In addition, we find musical tropes (Werner, 2012: 25), such as *yeah yeah yeah* (rank 3) or *no no no* (rank 9) that fulfill a similar function in the pop lyrics. While such devices are used for aesthetic reasons, and thus qualify as style features, they are exclusive to sung discourse and therefore could also be viewed as register markers, defined as ‘distinctive linguistic constructions that do not occur in other registers’ (Biber and Conrad, 2019: 54). From a broader perspective, it could be said that such features are indicative of the situationality (language set to music) of pop lyrics (see Section 3.1.3).

The trigram list shown in Table 1 further yields many combinations of *I* (and to a lesser extent, *you*) and a verb (e.g. *love*, *need*, *know*, *want*), also in negated form (e.g. *don’t know*, *don’t wanna*, *don’t want*), as illustrated in (5) to (9).

- (5) Now I know my search is over and **I don’t know** where you take me (Westlife: “That’s where you find love”)
- (6) **I don’t wanna** be with you anymore I just don’t want you anymore (REM: “All the right friends”)
- (7) **I don’t want** to fight **I want to** get along with you (Red Hot Chilli Peppers: “Cabron”)
- (8) It’s 4am and **I know that** you’re with him (One Direction: “Happily”)
- (9) Oh you don’t love me the way that **I love you** (The Kooks: “You don’t love me”)

What unites these verbs is that they could be categorized as mental verbs used to express personal stance, a property typically assigned to conversation (cf. the results for dimension 1; see further Section 3.1.6 and Biber and Conrad, 2019: 73).

The results from the keyword analysis are best interpreted in terms of a number of key areas that emerge (see the appendix for the full top 100 keyword list).¹⁷ The first of these key areas comprises items relatable to informal usage. It is characterized by a high incidence of contracted

¹⁷ Lexical, semantic and metaphorical patterns have explicitly been discussed elsewhere (e.g. Kreyer and Mukherjee, 2007; Kreyer, 2012; Werner, 2012), and thus are ignored here.

and clipped forms in general (such as *sayin'*, *lookin'*, *nothin'*, *goin'*, etc.) and contracted modals (such as *wanna*, *gonna* and its clipped form *gon*, *gotta*, and variants of *imma* 'I'm going to') in particular, clippings (such as *'cause* 'because', *outta* 'out of', *c'mon* 'come on', *'bout* 'about', *tryna* 'trying to', *'em* 'them', and *'til* 'until'), as well as non-standard negation with *ain't*, often involving multiple negation. A selection of these features is presented in context in (10) to (12).

(10) **'cause Imma** ride or die, whether you fail or fly (Lana del Rey: "Blue jeans")

(11) **Tryna** find a moment where I can find release (Jess Glyné: "Hold my hand")

(12) We both know we **ain't** kids **no more** (Adele: "Send my love to your new lover")

A second key area illustrates linguistic variation. Among the items with high keyness effects sizes, features commonly associated with (African) American English (e.g. *ya/yo/y'all* as variants of the second person pronouns *you* and *your* or *da/dem* as article) occur. The incidence of such items is in all likelihood due to the fact that rap (see, e.g., Kreyer, 2016; Werner, 2019a) and its associated (non-standard) varieties play a vital role in the domain of pop lyrics (and arguably within the English language in general; Mair, 2013). Examples (13) and (14) are illustrative in this regard.

(13) And I smell **yo** cologne in the air baby (Beyoncé: "Video phone")

(14) Imma get one of **dem**, get me one of **dem** (Usher: "Bad girl")

Previous research has suggested that a similar situation applies for reggae music (see, e.g., Westphal, 2018: 99-101; Gerfer, 2018). Note that occasionally, also features of Creole languages (e.g. the infinitive marker *fi*, see (15)) occur, but do not appear under the top 100 items keywords as presented in the appendix.

(15) Me want **fi** [infinitive marker] see you get live 'pon the riddim when me ride (Sean Paul: "Get busy")

Another area where variation is conspicuous are spelling variants (such as *phresh* 'fresh' or *ur* 'your'/'you're'). Apparently, these (see examples (16) and (17)) are only salient in the written/transcribed lyrics and, different from the above (cf. *riddim* in example (15)) do not induce changes in pronunciation (see also Kreyer and Mukherjee, 2007: 40).

(16) I see you walk, I hear your boy, **phresh** out, **phresh** out the runway (Rihanna: "Phresh out the runway")

(17) It hurts when **u** see **ur** friends turn their back on **u dawg** (Eminem: "When the music stops")

It has been suggested that deviant spellings either serve as 'attention-seeking devices' (Kreyer and Mukherjee, 2007: 40; cf. Werner, 2012: 43) or may represent a particular accent and an associated group identity (Kreyer and Mukherjee, 2007: 41). The former function is especially visible in (16),

where the deviant spelling is taken over from the official song title, while the latter function can be viewed in examples (13) to (15) above. It can be hypothesized that spelling variants indicating a change in pronunciation (cf. also *cha* ‘you’) in all probability are less subjectively introduced into the transcriptions as they are perceptually much more salient.

A last aspect to be considered is the restricted use of characteristic features of involved speech in lyrics. They appear at the negative end of the keyness scale, (that is, these items are under-represented with regard to the reference corpus) and therefore are not displayed in the appendix. We find interjections and hesitation markers (such as *um*, *ah*, or *er*), and also discourse markers such as *you know*, which are characteristic of conversation (Biber, 1988: 131), but only occur very rarely in the lyrics, as in (18).

(18) But **you know** gotta let it go 'cause the party ain't jumpin' like it used to (Usher: “Burn”)

This finding converges with previous corpus-based analyses (Kreyer and Mukherjee, 2007: 46; Werner, 2012: 25) and can again be related to the situational characteristics of pop lyrics, which crucially are not subject to any real-time production constraints but rather are produced (and revised) in a deliberate manner that takes account of the musical structure.

4 Discussion

As regards the first research question, the analyses by and large support the view of pop lyrics as possessing ‘conversational directness’ (Durant and Lambrou, 2009: 137). The additive MDA, with a particular focus on those dimensions that have been identified to establish differences between typical ‘oral’ and ‘written’ discourse, indicate that pop lyrics as a rule are located toward the ‘oral’ end of the respective dimensions, and contain involved, interactive and persuasive elements. At the same time, it has emerged that lyrics in the dimensions assessed show considerable variation, as suggested by the comparatively wide standard deviations for this register (see Figures 1–3). This may either be due to the fact that the corpus used includes material from various pop sub-genres or that individual songs have a broad range of communicative concerns (see Section 3.1.6).

Specifically, the position that lyrics are conversational is further sustained by individual linguistic features, such as an extensive use of first and second person personal pronouns, expression of stance through mental verbs, as well as the amount of contractions and negations (see Section 3.3 and the appendix; cf. Biber et al., 1999: 159), which all fed into the MDA. In addition, against the background of an overall communicative aim to entertain the audience, conversation and pop lyrics may overlap in their concerns to focus on narration, expressing attitudes, self-revelation, persuasion, etc. (see Section 3.1.6), which may result in shared linguistic characteristics. The keyword analysis further revealed that lyrics are characterized by variety and informality, properties commonly associated with spoken usage.

However, a few aspects need closer inspection. At the same time, it emerged from the MDA that lyrics often are not as conversational as conversation, the text variety they were supposed to map, but may align with written types, such as personal letters or fiction, in individual dimensions. These results are not too surprising if the planned and edited production circumstances (Section 3.1.4), the spatial and temporal distance between speaker and addressee (Section 3.1.5), and the communicative purposes (Section 3.1.6) that are in place for lyrics are considered. In addition, it was found in the keyword analysis that pop lyrics nearly or completely lack a few linguistic features (such as discourse and hesitation markers) that can be considered a distinctive conversational property, and that the musical structure may exert some influence on the textual structure (e.g. as regards the occurrence of phonesthetic devices). Even though this was not explicitly investigated, based on previous analyses (such as Kreyer and Mukherjee, 2007; Werner, 2012) it can be stated with some confidence that lyrics lack further conversational features on the discourse level, such as false starts and self-corrections, which are typical of spontaneous production.

This apparent tension between the alleged conversational nature and the actual linguistic characteristics of pop lyrics (see also Biber and Egbert, 2018: 190) can be resolved when situational factors are taken into account. It will be recalled (see Section 3.1) that the production of lyrics is planned (and thus not subject to any real-time processing constraints) and that they represent a performed register that relies on scripted (written-to-be-sung) material. Thus, even though pop lyrics may aim at reproducing conversation to convey a personal feel through referring to an unspecified *you* (Section 3.1.1; see further below), devices such as hesitation and discourse markers do not fulfill a communicative function in this type of discourse and thus are omitted. The presence of what could be labelled a ‘performance filter’ is comparable to the situation in other types of scripted (pop culture) material, such as TV and movie scripts (Queen, 2018: 220). On a related note, it will be recalled that, very much unlike in any conversation, there is a substantial spatial, temporal (Section 3.1.5) and social (Section 3.1.2) distance between speaker (artist) and listeners (members of the audience), and that discourse actually is monologic due to the lack of any backchannelling opportunity on part of the audience (Section 3.1.2). Another issue to be taken into account is that planned text varieties (e.g. academic writing), as a rule, are typified by a considerable degree of formality. This has led some observers even to statements such as ‘the key distinction is not speech versus writing but planned versus unplanned production of speech and writing’ (Miller, 2006: 672). This does not seem to apply for lyrics, however. They are highly planned and edited (Section 3.1.4) but informal features are expected, also on part of the audience (Trotta, 2013; Squires, 2019; see also below).

In sum, there are large differences between the situational characteristics of conversation and those of pop lyrics. Evidently, this has implications for the linguistic features used, and, given these large situational differences, it may even appear surprising that lyrics actually do possess some conversational force. Sociolinguistic work has discussed the notion of an ‘imagined audience’ (Bell and Gibson, 2011: 563) that artists address and whose potential responses they anticipate. This can be related to the assumed shared context on the part of the speaker as stated in

Biber (1988: 147-148). Further, it has been suggested that this imagined audience ‘knows the genre’s modes’ (Bell and Gibson, 2011: 563) and silently agrees with the conventions of this fictive interaction (Pascual and Sandler, 2016). Thus, the discourse of pop lyrics represents actual one-to-many-communication that pretends to be conversational and tries to convey a personal feel, with the goal to appeal to a large audience (Thompson, 2019: 121). In this regard, lyrics are comparable to other types of modern mass media discourse in that they establish ‘pseudo-intimacy’ (O’Keeffe, 2006: 97) between speaker and audience, even though there actually is some kind of hierarchical relationship between them (Section 3.1.2). From the angle of the sociology of music, it has been argued that one of the functions of this simulated conversation, particularly visible in the pervasive occurrence of an unspecified *you* (and its variants; cf. Bradby, 1990), is to make lyrics ‘open to appropriation for personal use in a way that other popular cultural forms (television soap operas, for example) are not’ (Frith, 1987: 139).

Another factor that operates at a more general level and takes account of the situational characteristics (the channel and the production circumstances in particular) is the affordance of written registers that they ‘can have essentially the same linguistic characteristics as spoken registers’ (Biber and Conrad, 2019: 303). It is thus possible for pop lyrics as a written-to-be-sung text variety to map conversational features, and this seems to be the expected convention. From a linguistic perspective, this provides a rationale why pop lyrics are not entirely, but to a considerable degree, conversational, even though the situational characteristics diverge from actual conversation. Therefore, it seems adequate that the discourse of pop lyrics has been termed ‘pseudo-dialogical’ (Murphey, 1989: 168), ‘dialogical monologue’ (Murphey, 1990: 85) or an ‘imagined speech event’ (Durant and Lambrou, 2009: 138). In addition, the analysis further supports the designation of lyrics as ‘unique form’ (Griffie, 1992: 2) or “‘special” register’ (Werner, 2012: 43) as pop lyrics contain style and register markers that exclusively occur in this type of sung discourse (see Section 3.2), and render it different from unscripted informal conversation. Again, the production circumstances of lyrics (see Section 3.1.4) as highly planned and edited, written-to-be-sung text type, subject to specific formal constraints (rhythm, rhyme, accompanying musical structure, etc.), play a vital part here.

5 Conclusion

This text-linguistic study investigated the non-canonical specialized register that has received the label ‘pop lyrics’, and that qualifies as a genre as it could be argued to be ‘widely recognized within English-speaking cultures’ where it ‘serve[s] important functions’ (Biber and Conrad, 2019: 34). It aimed at determining whether and to which degree pop lyrics can be considered conversational. To this end, both an MDA and additional searches (n-grams and keywords) were conducted on LYPOP, a specialized corpus of commercially highly successful contemporary pop music lyrics. Overall, it emerged that co-occurrence patterns of linguistic features in the LYPOP data are similar to those characterizing conversation, and that the discourse of pop lyrics indeed possesses some conversational force, while informality and variety could be identified as additional characteristics.

The largely conversational nature of pop lyrics could be considered surprising in view of the situational characteristics, where central prerequisites for direct and two-way communication (such as temporal and spatial closeness between speaker and addressee or on-line production) were absent. In turn, it was argued that the situational characteristics (i) motivate the fact that in some respects, the discourse of pop lyrics lacks typical linguistic properties of conversation (such as discourse and hesitation markers) and (ii) provide a rationale for the presence of other (para-)linguistic material (such as phonesthetic devices). In conclusion, it was suggested that pop lyrics represent a special type of discourse.

While the present study can be seen as a small contribution to bring the study of non-canonical material from pop culture artifacts closer to the mainstream of linguistics (Trotta, 2018; Werner, 2018), it is also illustrative of the potential of register studies (in this case by way of an additive MDA) as a versatile and powerful tool for the investigation of the language of pop culture (see Quaglio, 2009; Veirano Pinto, 2018 for MDAs of telecinematic language). From a cumulative perspective, findings of the present analysis can be considered robust as they tie in with a previous study that used a comparable approach, albeit with slightly different (lyrical, and not strictly ‘pop’) data (Biber and Egbert, 2018: 181-186, 189-190).

At the same time, it emerged that no unambiguous results occur when scripted (performed) language as represented in the discourse of pop lyrics is considered along the ‘oral’ vs. ‘literate’ continuum. To complement the empirical register approach taken in this work, it could be worthwhile to apply (and potentially modify) communicative orality/literacy models (see, e.g., Koch and Oesterreicher, 2012) that draw a distinction between channel (speech vs. writing) and formality of language use (language of immediacy vs. language of distance) to be in a position to further elaborate on the ‘special’ status of scripted material (see Werner, forthcoming a).

In addition, and as the present analysis certainly has not exploited all options, there are a number of issues that should be explored further. To refine the MDA, it is conceivable to look at the lyrics of the verses and choruses (and bridges) of pop songs as separate categories to determine whether there are linguistic differences determined by the different functionality of the individual song parts (Thompson, 2019: 119). In a related manner, individual pop lyrics sub-genres (such as rap vs. metal vs. indie vs. R&B, etc.) should be contrasted, as such an analysis would take account of the internal variability of pop lyrics (Section 4; see also Bértoli-Dutra, 2014). However, a recent corpus-based study (Brett and Pinna, 2019) has shown that it is problematic to assign sub-genre designations on a purely linguistic basis, a finding that substantiates claims of such categorizations being inherently fuzzy and culturally determined (see, e.g., Van Venrooj and Schmutz 2018). It is also evident that a diachronic expansion of LYPOP would enable us to conduct historical (MDA) research (cf. Werner, 2012), for instance to trace whether the conversational nature of pop lyrics has changed over time. It is also conceivable to take into account regional variety and gender of the artists as variables to determine culture-specific patterns and gender differences within the register.

Other issues largely ignored in this investigation are lexical and semantic aspects. While these have been addressed in earlier work (e.g. Kreyer and Mukherjee, 2007; Werner, 2012; Motschenbacher, 2016), a large-scale quantitative approach could rely on a version of LYPOP that is semantically tagged (e.g. with the USAS tagger; cf. Kreyer, 2016: 92-95). This would allow the identification of salient topics in pop lyrics on a more fine-grained level than through a mere wordlist or keyword analysis. A final area where the linguistic investigation (and particularly register study) could make a vital contribution is (English) language education. The potential of pop lyrics as an accessible and motivating resource for both in- and out-of-classroom learning as well as in the domain of teacher education has repeatedly been emphasized (see, e.g., Werner, Lehl and Walton, 2017; Bértoli, 2018; Summer, 2018). A thorough linguistic description, of which a register analysis can be considered a vital part, is required, however, if language (teacher) educators want to make full use of this potential, for instance for exploring issues such as conversational grammar (Werner, forthcoming b) or the properties of carefully crafted (scripted) texts (Werner, in preparation) and related broader issues such as register and language awareness (Werner, 2019b).

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References

- Adorno, T. W. 1941. 'On popular music', *Zeitschrift für Sozialforschung* 9 (1), pp 17-48.
- Anthony, L. 2018. *AntConc* 3.5.6. Tokyo: Waseda University.
<http://www.laurenceanthony.net/software/antconcl/>
- Astor, P., and K. Negus. 2014. 'More than a performance: Song lyrics and the practices of songwriting' in L. Marshall and D. Laing (eds.) *Popular Music Matters*, pp. 195-207. Farnham: Ashgate.
- Baron, A. 2017. *VARD* 2. Lancaster: UCREL. <http://ucrel.lancs.ac.uk/var/about/>
- Bell, A., and A. Gibson. 2011. 'Staging language: An introduction to the sociolinguistics of performance', *Journal of Sociolinguistics* 15 (5), pp 555-572.
- Bennett, A. 2005. 'Popular music and leisure', *Leisure Studies* 24 (4), pp 333-342.
- Berber, Sardinha, T. 2014. '25 years later: Comparing internet and pre-internet registers' in T. Berber Sardinha and M. Veirano Pinto (eds.) *Multi-dimensional Analysis, 25 Years on: A Tribute to Douglas Biber*, pp. 81-105. Amsterdam: Benjamins.
- Bértoli, P. 2018. 'Song lyrics: From multi-dimensional analysis to the foreign language classroom' in V. Werner (ed.) *The Language of Pop Culture*, pp. 210-229. New York: Routledge.
- Bértoli-Dutra, P. 2014. 'Multi-dimensional analysis of pop songs' in T. Berber Sardinha and M. Veirano Pinto (eds.) *Multi-dimensional Analysis, 25 Years on: A Tribute to Douglas Biber*, pp. 149-175. Amsterdam: Benjamins.
- Biber, D. 1988. *Variation across Speech and Writing*. Cambridge: Cambridge University Press.
- Biber, D. 1989. 'A typology of English texts', *Linguistics* 27 (1), pp 3-43.
- Biber, D. 2019. 'Multi-dimensional analysis: A historical synopsis' in T. Berber Sardinha and M. Veirano Pinto (eds.) *Multi-dimensional Analysis: Research Methods and Current Issues*, pp. 11-26. London: Bloomsbury.
- Biber, D., J. Egbert, B. Gray, R. Opliger, and B. Szmrecsanyi. 2016. 'Variationist versus text-linguistic approaches to grammatical change in English: Nominal modifiers of head nouns' in M. Kytö and P. Pahta (eds.) *The Cambridge Handbook of English Historical Linguistics*, pp. 351-375. Cambridge: Cambridge University Press.
- Biber, D., S. Johansson, G. Leech, S. Conrad, and E. Finegan. 1999. *Longman Grammar of Spoken and Written English*. Harlow: Longman.
- Biber, D., and J. Egbert. 2018. *Register Variation Online*. Cambridge: Cambridge University Press.
- Biber, D., and S. Conrad. 2019. *Register, Genre, and Style*. Cambridge: Cambridge University Press.
- Bradby, B. 1990. 'Do-talk and don't-talk: The division of the subject in girl group music' in S. Frith and A. Goodwin (eds.) *On Record: Rock, Pop and the Written Word*, pp. 341-368. London: Routledge.

- Brett, D., and A. Pinna. 2019. 'Words (don't come easy): The automatic retrieval and analysis of popular song lyrics' in C. Suhr, T. Nevalainen and I. Taavitsainen (eds.) *From Data to Evidence in English Language Research*, pp. 307-325. Leiden: Brill.
- Buxton, D. 1983. 'Rock music, the star-system and the rise of consumerism', *Telos* 57, pp 93-106.
- Coupland, N. 2011. 'Voice, place and genre in popular song performance', *Journal of Sociolinguistics* 15 (5). pp 573-602.
- Crosthwaite, P. 2016. 'A longitudinal multidimensional analysis of EAP writing: Determining EAP course effectiveness', *Journal of English for Academic Purposes* 22, pp 166-178.
- Denis, D., and S. A. Tagliamonte. 2017. 'Language change and fiction' in M. A. Locher and A. H. Jucker (eds.) *Pragmatics of Fiction*, pp. 553-584. Berlin: Mouton de Gruyter.
- Doyle McCarthy, E. 2017. *Emotional Lives: Dramas of Identity in an Age of Mass Media*. Cambridge: Cambridge University Press.
- Durant, A., and M. Lambrou. 2009. *Language and the Media*. London: Routledge.
- Eckstein, L. 2010. *Reading Song Lyrics*. Amsterdam: Rodopi.
- Frith, S. 1987. 'Towards an aesthetic of popular music' in R. Lepper and S. McClary (eds.) *Music and Society: The Politics of Composition, Performance and Reception*, pp. 133-149. Cambridge: Cambridge University Press.
- Frith, S. 1996. *Performing Rites: Evaluating Popular Music*. Oxford: Oxford University Press.
- Gerfer, A. 2018. 'Global reggae and the appropriation of Jamaican Creole', *World Englishes* 37 (4), pp 668-683.
- Gerwin, J. 2017. 'Die Beatles, Arctic Monkeys und Lily Allen—Dialekte und Identität in britischer (Indie-)Popmusik' in L. Anderwald and J. Hoekstra (eds.) *Enregisterment: Zur symbolischen Bedeutung sprachlicher Variation*, pp. 47-65. Frankfurt: Lang.
- Gibson, A. 2019. *Sociophonetics of Popular Music: Insights from Corpus Analysis and Speech Perception Experiments*. PhD thesis, University of Canterbury, Christchurch.
https://ir.canterbury.ac.nz/bitstream/handle/10092/17892/Gibson%2C%20Andrew_Final%20PhD%20Thesis.pdf
- Greenbaum, S. (ed.). 1996. *Comparing English Worldwide: The International Corpus of English*. Oxford: Clarendon.
- Griffie, D. 1992. *Songs in Action*. New York: Prentice Hall.
- Hagedorn, L. 2019. *Informality and Recent Language Change in Pop versus Rock Lyrics*. MA thesis, University of Bamberg.
- Hardie, A. 2014. 'Log ratio: An informal introduction', Lancaster: CASS.
<http://cass.lancs.ac.uk/log-ratio-an-informal-introduction/>.
- Hilbert, M. 2012. 'When *I* becomes *we*: How prototypically "pop" are a band's lyrics after one breakup and two reunions?', *Popular Music History* 7 (2), pp 159-184.
- Horton, D. 1957. 'The dialogue of courtship in popular songs', *American Journal of Sociology* 62 (6), pp 569-578.

- Jansen, L. 2018. “‘Britpop is a thing, damn it’”: On British attitudes toward American English and an Americanized singing style’ in V. Werner (ed.) *The Language of Pop Culture*, pp. 116-135. New York: Routledge.
- Koch, P., and W. Oesterreicher. 2012. ‘Language of immediacy – Language of distance: Orality and literacy from the perspective of language theory and linguistic history’ in C. Lange, B. Weber and G. Wolf (eds.) *Communicative Spaces: Variation, Contact, and Change*, pp. 441-473. Frankfurt: Lang.
- Kreyer, R. 2012. “‘Love is like a stove – it burns you when it’s hot’”: A corpus-linguistic view on the (non-)creative use of love-related metaphors in pop songs’ in S. Hoffmann, P. Rayson and G. Leech (eds.) *English Corpus Linguistics: Looking Back, Moving Forward*, pp. 103-115. Amsterdam: Rodopi.
- Kreyer, R. 2016. “‘Now niggas talk a lotta bad boy shit’”: The register hip-hop from a corpus-linguistic perspective’ in C. Schubert and C. Sanchez-Stockhammer (eds.) *Variational Text Linguistics: Revisiting Register in English*, pp. 87-109. Berlin: Mouton de Gruyter.
- Kreyer, R., and J. Mukherjee. 2007. ‘The style of pop song lyrics: A corpus-linguistic pilot study’, *Anglia* 125 (1), pp 31-58.
- Kruger, H. and A. Smith. 2018. ‘Colloquialization versus densification in Australian English: A multidimensional analysis of the Australian Diachronic Hansard Corpus (ADHC)’, *Australian Journal of Linguistics* 38 (3), pp 293-328.
- Li, X., and M. Brand. 2009. ‘Effectiveness of music on vocabulary acquisition, language usage, and meaning for mainland Chinese ESL learners’, *Contributions to Music Education* 36 (1), pp 73-84.
- Longhurst, B., and D. Bogdanović. 2014. *Popular Music & Society*. Cambridge: Polity Press.
- Loy, S., Rickwood, J., and S. Bennett (eds.). 2018. *Popular Music, Stars and Stardom*. Acton: ANU Press. <https://press-files.anu.edu.au/downloads/press/n4313/pdf/book.pdf>
- Mair, C. 2013. ‘The world system of Englishes: Accounting for the transnational importance of mobile and mediated vernaculars’, *English World-Wide* 34 (4), pp 253-278.
- McCutcheon, L. E., R. Lange, and J. Houran. 2002. ‘Conceptualization and measurement of celebrity worship’, *British Journal of Psychology* 93, pp 67-87.
- Merskin, D. 2008. ‘Popular culture’ in W. Donsbach (ed.) *The International Encyclopedia of Communication*. Malden: Blackwell. <https://doi.org/10.1002/9781405186407.wbiecp074>
- Miller, J. 2006. ‘Spoken and written English’ in B. Aarts and A. McMahon (eds.) *The Handbook of English Linguistics*, pp. 670-691. Malden: Blackwell.
- Mobbs, A, and M. Cuyul. 2018. ‘Listen to the music: Using songs in listening and speaking classes’, *English Teaching Forum* 56 (3), pp 22-29.
- Montoro, R. 2018. ‘The creative use of absences: A corpus stylistic approach to Henry Greens’ *Living*’, *International Journal of Corpus Linguistics* 23 (3), pp 279-310.
- Moore, A. F. 2012. *Song Means: Analysing and Interpreting Recorded Popular Song*. Farnham: Ashgate.

- Morrissey, F. A. 2008. 'Liverpool to Louisiana in one lyrical line: Style choice in British rock, pop and folk singing' in M. A. Locher and J. Strässler (eds.) *Standards and Norms in the English Language*, pp. 193-216. Berlin: Mouton de Gruyter.
- Motschenbacher, H. 2016. 'A corpus linguistic study of the situatedness of English pop song lyrics', *Corpora* 11 (1), pp 1-28.
- Moy, R. 2016. *Authorship Roles in Popular Music: Issues and Debates*. New York: Routledge.
- Murphey, T. 1989. 'The when, where, and who of pop lyrics: The listener's prerogative', *Popular Music* 8 (2), pp 163-170.
- Murphey, T. 1990. *Song and Music in Language Learning: An Analysis of Pop Song Lyrics and the Use of Song and Music in Teaching English to Speakers of Other Languages*. Frankfurt: Lang.
- Nini, A. 2018. *Multidimensional Analysis Tagger 1.3.1*
<https://sites.google.com/site/multidimensionaltagger/>
- Nini, A. 2019. 'The Multi-Dimensional Analysis Tagger' in T. Berber Sardinha and M. Veirano Pinto (eds.) *Multi-dimensional Analysis: Research Methods and Current Issues*, pp. 67-94. London: Bloomsbury.
- Nunes, J. C., A. Ordanini, and F. Valesia. 2015. 'The power of repetition: Repetitive lyrics in a song increase processing fluency and drive market success', *Journal of Consumer Psychology* 25 (2), pp 187-199.
- O'Keeffe, A. 2006. *Investigating Media Discourse*. London: Routledge.
- Pascual, E., and S. Sandler (eds.). 2016. *The Conversation Frame: Forms and Functions of Fictive Interaction*. Amsterdam: Benjamins.
- Petras, O. 2011. *Wie Popmusik bedeutet: Eine synchrone Beschreibung popmusikalischer Zeichenverwendung* [how pop music means: a synchronic description of pop-musical sign usage]. Berlin: Mouton de Gruyter.
- Quaglio, P. 2009 *Television Dialogue: The sitcom Friends vs. Natural Conversation*. Amsterdam: Benjamins.
- Queen, R. 2018. 'Working with performed language: Movies, television, and music' in C. Mallinson, B. Childs and G. Van Herk (eds.) *Data Collection in Sociolinguistics: Methods and Applications*, pp. 218-226. New York: Routledge.
- Schedl, M. 2019. 'Genre differences of song lyrics and artist wikis: An analysis of popularity, length, repetitiveness, and readability', In L. Liu and R. White (eds.) *WWW '19: The World Wide Web Conference*, pp. 3201-3207. New York: ACM.
- Schneider, E. W. 2018. 'The interface between cultures and corpora: Tracing reflections and manifestations', *ICAME Journal* 42, pp 97-132.
- Segal, B. 2014. *Teaching English as a Second Language through Rap Music: A Curriculum for Secondary School Students*. MA thesis, University of San Francisco.
- Sönning, L. 2016. 'The dot plot: A graphical tool for data analysis and presentation' in H. Christ, D. Klenovšak, L. Sönning and V. Werner (eds.) *A Blend of MaLT: Selected Contributions from the Methods and Linguistic Theories Symposium 2015*, pp. 101-132. Bamberg: University of Bamberg Press.

- Squires, L. 2019. 'Genre and linguistic expectation shift: Evidence from pop song lyrics', *Language in Society* 48 (1), pp 1-30.
- Stanford Tagger. 2013. *Stanford Tagger 3.1.5*. <http://nlp.stanford.edu/software/tagger.shtml>.
- Storey, J. 2010. *Cultural Studies and the Study of Popular Culture*. Edinburgh: Edinburgh University Press.
- Summer, T. 2018. 'An analysis of pop songs for teaching English as a foreign language: Bridging the gap between corpus analysis and teaching practice' in V. Werner (ed.) *The Language of Pop Culture*, pp. 187-209. New York: Routledge.
- Thompson, P. 2019. *Creativity in the Recording Studio*. Cham: Palgrave Macmillan.
- Tough, D. T. 2017. 'An analysis of common songwriting and production practices in 2014–2015 Billboard Hot 100 songs', *Journal of the Music and Entertainment Industry Educators Association* 17 (1), pp 79-119.
- Trotta, J. 2010. 'Whose rules rule? Grammar controversies, popular culture and the fear of English from below', *Nordic Journal of English Studies* 9 (3), pp 41-65.
- Trotta, J. 2013. 'What Meatloaf won't do for love: A catalog of mystery, imagination and linguistic rebellion in popular music' in G. Bergh, R. Bowen and M. Mobärg (eds.) *Language, Football, and all that Jazz*, pp. 543-573. Göteborg: Acta Universitatis Gothenburgensis.
- Trotta, J. 2018. 'Pop culture and linguistics – is that, like, a thing now?' in V. Werner (ed.) *The Language of Pop Culture*, pp. 27-45. New York: Routledge.
- Van Venrooj, A., and V. Schmutz. 2018. 'Categorical ambiguity in cultural fields: The effects of genre fuzziness in popular music', *Poetics* 66, pp 1-18.
- Veirano Pinto, M. 2018. 'Variation in movies and television programs: The impact of corpus sampling' in V. Werner (ed.) *The Language of Pop Culture*, pp. 139-161. New York: Routledge.
- Verboord, M., and A. Brandellero. 2018. 'The globalization of popular music, 1960–2010: A multilevel analysis of music flows', *Communication Research* 45 (4), pp 603-627.
- Watts, R. J., and F. A. Morrissey. 2019. *Language, the Singer and the Song: The Sociolinguistics of Folk Performance*. Cambridge: Cambridge University Press.
- Werner, V. 2012. 'Love is all around: A corpus-based study of pop music lyrics', *Corpora* 7(1), pp 19-50.
- Werner, V. 2018. 'Linguistics and pop culture: Setting the scene(s)' in V. Werner (ed.) *The Language of Pop Culture*, pp. 3-26. New York: Routledge.
- Werner, V. 2019a. 'Assessing hip-hop discourse: Linguistic realness and styling', *Text & Talk* 39 (5), pp 671-698.
- Werner, V. 2019b. 'Lyrics and language awareness', *Nordic Journal of Modern Language Methodology* 7(1), 4-28.
<https://journal.uia.no/index.php/NJMLM/article/download/521/491>
- Werner, V. Forthcoming a. 'Text-linguistic analysis of performed language: Revisiting and re-modeling Koch & Oesterreicher', *Linguistics*.

- Werner, V. Forthcoming b. 'Teaching grammar through pop culture' in V. Werner and F. Tegge (eds.) *Pop Culture in Language Education: Theories and Practices*. London: Routledge.
- Werner, V. In preparation. 'A register approach toward pop lyrics in EFL education'.
- Werner, V., Lehl, M., and J. Walton. 2017. 'Pop lyrics and mobile learning: Prospects and challenges', *International Journal of Mobile and Blended Learning* 9 (4), pp 33-48.
- Werner, V., and F. Tegge (eds.). Forthcoming. *Pop Culture in Language Education: Theories and Practices*. London: Routledge.
- Westphal, M. 2018. 'Pop culture and the globalization of non-standard varieties of English' in V. Werner (ed.) *The Language of Pop Culture*, pp. 95-115. New York: Routledge.
- Westphal, M., and L. Jansen. 2017. 'Rihanna works her multivocal pop persona: A morpho-syntactic and accent analysis of Rihanna's singing style', *English Today* 33 (2), pp 46-55.
- Zhou, Z. 2016. 'A music-based agenda for teaching English as a second/foreign language: Common themes and directions' in M. C. Fonseca-Mora and M. Gant (eds.) *Melodies, Rhythm and Cognition in Foreign Language Learning*, pp. 163-173. Newcastle: Cambridge Scholars Publishing.

Appendix

Top 100 keyword list created with *AntConc*, sorted according to effect size (log ratio)

Rank	Freq	Keyness	Effect	Keyword
1	6,098	13,105.96	14.5136	i'm
2	4,546	9,761.65	14.0899	don't
3	3,595	7,715.35	13.7513	it's
4	2,473	5,303.98	13.2116	you're
5	2,153	4,616.81	13.0117	'cause
6	1,822	3,906.28	12.7708	can't
7	1,600	,3429.89	12.5834	i'll
8	1,444	3,095.20	12.4354	wanna
9	1,304	2,794.89	12.2882	i've
10	887	1,900.67	11.7323	won't
11	879	1,883.52	11.7192	ain't
12	868	1,859.94	11.7011	there's
13	860	1,842.79	11.6877	that's
14	751	1,609.12	11.4922	na
15	737	1,579.11	11.4650	we're
16	637	1,364.77	11.2547	you'll
17	522	1,118.31	10.9674	gotta
18	488	1,045.45	10.8703	you've
19	462	989.74	10.7913	she's
20	410	878.31	10.6190	i'd
21	407	871.88	10.6084	'til
22	404	865.45	10.5977	ya
23	399	854.74	10.5798	let's
24	398	852.60	10.5761	we'll
25	332	711.19	10.3146	didn't
26	284	608.35	10.0893	da
27	275	589.07	10.0428	imma
28	251	537.65	9.9111	he's
29	248	531.22	9.8937	'em
30	234	501.23	9.8099	what's
31	1,382	2,921.91	9.7871	gonna
32	165	353.42	9.3058	you'd
33	329	692.00	9.3015	whoa
34	163	349.13	9.2882	we've
35	162	346.99	9.2794	couldn't
36	161	344.85	9.2704	who's
37	158	338.42	9.2433	they're
38	155	332.00	9.2156	doesn't

39	142	304.15	9.0893	yo
40	278	583.07	9.0585	alright
41	139	297.72	9.0585	ling
42	136	291.30	9.0270	babe
43	133	284.87	8.9948	ass
44	132	282.73	8.9839	wouldn't
45	120	257.02	8.8464	outta
46	117	250.60	8.8099	'bout
47	111	237.75	8.7339	ba
48	106	227.04	8.6674	dreaming
49	105	224.89	8.6538	sayin'
50	103	220.61	8.6260	wasn't
51	101	216.33	8.5977	gon'
52	101	216.33	8.5977	isn't
53	95	203.47	8.5094	lookin'
54	94	201.33	8.4941	nothin'
55	92	197.05	8.4631	phresh
56	91	194.91	8.4473	goin'
57	177	367.60	8.4071	anymore
58	86	184.20	8.3658	c'mon
59	83	177.77	8.3146	woo
60	82	175.63	8.2971	haven't
61	82	175.63	8.2971	love's
62	81	173.49	8.2794	everybody's
63	77	164.92	8.2063	fuckin'
64	76	162.78	8.1874	bah
65	75	160.64	8.1683	they'll
66	72	154.21	8.1094	pum
67	65	139.22	7.9619	y'all
68	64	137.08	7.9395	fade
69	63	134.93	7.9168	doin'
70	63	134.93	7.9168	feelin'
71	123	252.66	7.8820	knees
72	60	128.51	7.8464	nobody's
73	58	124.22	7.7975	rockin'
74	58	124.22	7.7975	we'd
75	56	119.94	7.7469	cha
76	55	117.80	7.7209	diva
77	55	117.80	7.7209	louder
78	54	115.66	7.6944	heal
79	54	115.66	7.6944	thinkin'

80	54	115.66	7.6944	tryin'
81	53	113.51	7.6674	superman
82	53	113.51	7.6674	tryna
83	102	208.05	7.6119	hurts
84	50	107.09	7.5834	everything's
85	50	107.09	7.5834	lovin'
86	49	104.95	7.5542	comin'
87	48	102.81	7.5245	heart's
88	47	100.66	7.4941	it'll
89	46	98.52	7.4631	dancin'
90	46	98.52	7.4631	here's
91	46	98.52	7.4631	makin'
92	92	186.83	7.4631	mama
93	46	98.52	7.4631	shouldn't
94	45	96.38	7.4314	annie
95	45	96.38	7.4314	cinderella
96	45	96.38	7.4314	should've
97	44	94.24	7.3990	doh
98	44	94.24	7.3990	givin'
99	44	94.24	7.3990	nigga
100	44	94.24	7.3990	shuck