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Approaching wordplay from the angle of phonology and phonetics – examples from German

Abstract: The present contribution seeks to outline what a phonetic approach can contribute to the study of wordplay. Therefore, it is confined to the analysis wordplay at the syllable level of language. To this end, a taxonomy of wordplay based on structural elements of the syllable is proposed. It emphasizes the distinction between wordplay relying on existing lexical items as opposed to creating new ones. Various mechanisms of "classical" wordplay are examined with respect to their effect on syllable structure. A quantitative study involving 213 items intended for a German audience is presented. Specifically, the following questions are addressed: (1) what is the distribution among the various types of wordplay at the syllable level; (2) which part of the syllable is played on, and (3) which mechanisms are most frequently used in this type of wordplay. Results show that paronymy and blending are the most frequent types of wordplay. Furthermore, there is a clear preference for the syllable onset to be played on. *

1 Introduction: Verbal humor, wordplay, puns, and soundplay

When trying to describe wordplay phenomena at a sublexical level, one is confronted with a plethora of terms which are usually not even used in the same way by different researchers. One point which seems reasonably uncontroversial is that "verbal humor" is the most general term to denote ludicity in language and speech (cf. e.g. Winter-Froemel 2016; Attardo and Raskin 2017). Things become more confusing when the relationship between "punning" and "wordplay" is concerned. Hempelmann (2014: 612), whose work is based on the General Theory of Verbal Humor (GTVH) (cf. Attardo and Raskin 1991) defines

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¹ Some authors draw further distinctions between various types of puns (cf. e.g. Hempelmann and Miller 2017) or between "wordplay in a broad sense" and "wordplay in a narrow sense" (cf. e.g. Winter-Froemel 2016; Thaler 2016).

"pun" as "[...] a type of joke in which one sound sequence (e.g., a word) has two meanings and this similarity in sound creates a relationship for the two meanings from which humor is derived".

He draws a clear distinction between puns on the one hand and what he repeatedly terms "mere wordplay" on the other (Hempelmann 2004: 386): "[...] a text lacking the playful resolution of the SOp [semantic opposition; AB] created by the LM [logical mechanism; AB] will be mere wordplay rather than humor." In other words, his concept of "puns" is limited to what is called homophony and near-homophony in the present contribution. The subject of blends, which form a major element in phonological wordplay is neither addressed nor discussed in his overview (cf. Hempelmann and Miller 2017). The lack of semantic opposition turns "wordplay" into a "bad pun", called *Kalauer* in German (Hempelmann and Miller 2017: 99). In an earlier publication, Hempelmann (2004: 388) adds "word play", "play with words" and the terms "Sinnspiel" ('play with meaning') and "Klangspiel" ('soundplay') to his definition of punning:

In sum, punning includes word play, but play with words cannot work at the sound level alone as mere 'Klangspiel' (play with sounds) if it strives to be humor as well. But it must be accompanied by 'Sinnspiel' (play with meaning; cf. Hausmann 1974: 20) [...]. [...] the belief on the part of a joker that he or she can get away with pure 'Klangspiel' is what earns bad puns a pariah status in the family of jokes.

The term "soundplay" (or *Klangspiel* in German), in turn, has been used by other researchers to denote a very small and well-defined subcategory of wordplay in a broad sense (Winter-Froemel 2016: 42). Soundplay thus understood encompasses tongue-twisters (1), alliterations (2), lipograms² (3), palindromes (4) and the like. Examples are

- (1) Blaukraut bleibt Blaukraut, und Brautkleid bleibt Brautkleid.
 (Well-known German tongue-twister which literally translates as Red cabbage remains red cabbage, and bridal gown remains bridal gown.)
- (2) Hinter Hermann Hansens Haus hängen hundert Hemden raus.

 (This tongue-twister is based on alliteration. The literal translation is Behind Hermann Hansen's house one hundred shirts are hanging out(side).)
- (3) Friederike Kempner (1995), *Gedichte ohne r.* 'Poems without r'.
- (4) Die Liebe geht, hege Beileid. 'love goes, be sympathetic'.

² A lipogram is a kind of constrained writing which avoids one or more letters.

At the same time, not all soundplay involves wordplay. The former also includes instances of infant babble, serving to explore the human articulatory possibilities. For a long time soundplay was not even considered a "legitimate" subtype of wordplay (Heibert 1993: 12). This has changed somewhat in the past decades (but see Hempelmann 2004: 388 as quoted above), and soundplay in the sense of "combining elements selected according to a formal criterion which is defined on a sublexical level [...] and identifies paradigmatically similar items [...] [is] presently considered a major subtype of wordplay in a broad sense" (Winter-Froemel 2016: 38). Still, although it seems intuitive to use the term "soundplay" as a descriptor when dealing with wordplay on a phonological level, that would just add to the confusion of terms.

Thus we are faced with the problem that the term "pun" is in some ways too narrow to be used in the present contribution. The definition of "wordplay" as a "bad pun" as in Hempelmann (2004) does not meet with general acceptance either, "Wordplay" in a broader sense, on the other hand, has been defined in many different ways, reflecting the research interests of the respective authors. They range from rhetorical aspects (e.g. Plett 1979) to literary (e.g. Wagenknecht 1965) and linguistic ones including the translation of wordplay (e.g. Heibert 1993).

A "common denominator" is sought by Winter-Froemel (2009: 1429), who defines wordplay as follows:

- [...] eine Gruppe rhetorischer Sinn- und Klangfiguren, bei denen 'spielerisch' die Bedeutungen lautähnlicher oder lautgleicher Wörter überraschend gegenübergestellt werden.
- [[...] a group of rhetorical plays on sound or content, ludically and surprisingly contrasting the meanings of similar sounding or homophonous words. (Translation: AB)]

The present contribution narrows down this definition to phonological and also phonetic phenomena and adopts the following working definition: Wordplay from a phonological / phonetic perspective encompasses a range of phenomena operating at syllable level which involve lexemes sounding and / or spelled identically or alike in a way which surprises the listener and is therefore perceived as ludic. In this approach, wordplay is considered to be a deliberate speech act with the aim of amusing, but also intellectually challenging the listener and creating complicity between speaker and listener (cf. Winter-Froemel, this volume).

Thus, a constituting factor of wordplay is that it presents the listener with a riddle. In this context, one of the delicate tasks of the creator of a wordplay is to make the riddle neither too easy nor too difficult to solve³. The former amounts to stating something which is immediately obvious to the listener and may be perceived as boring by the intended audience (5); in the latter case the audience will possibly not get the point or take quite some time to process the riddle, thus potentially missing the subsequent punch line if the riddle forms part of a sketch comedy program (6).

- (5) Kraft auf den Teller, Knorr auf den Tisch (A parallelism in advertising Knorr instant soup products, which translates into 'power into the (soup) dish, Knorr onto the table'; a commercial featuring German soccer player Franz Beckenbauer dating back to 1966, where Kraft 'power' is represented both by the product and the athlete.)
- (6) *Cinzano* [tʃm'tsa:no]
 (Brand name of Italian sweet wine; near-homophonous with German *Jeans a no*; [tʃi:n'sa:no] 'Jeans in addition' as pronounced in Bavarian only. The pun was part of a sketch by the German comedian Willy Astor which was broadcast on German regional television (WDR) on 01 July 2017. The punchline had to be repeated in the show because the audience originating from outside Bavaria did not get the joke in the first instance.)

The latter example underlines the need for a usage-based approach to studying wordplay, involving both the speaker and the listener perspectives as well as the interaction between the two (cf. Zirker and Winter-Froemel 2015: 10).

Wordplay has been studied from a wide range of perspectives (for an overview, cf. Winter-Froemel 2009). The sound level was occasionally mentioned in classical wordplay research (e.g. Wagenknecht 1965: 15–22; Hausmann 1974: 76–80; Plett 1979: 36–39), but the focus was on rhetorical rather than phonetic / phonological aspects. Plett (1979) establishes what he terms "similarity classes" from a phonetic and a semantic point of view. He distinguishes "total similarity" (=identity) from "partial similarity" (36). Among the latter class, he lists the following subtypes (Plett 1979: 37–38):

- phonetic identiy + semantic difference (homophony / polysemy);
- phonetic similarity + semantic similarity (paronymy);
- phonetic difference + semantic similarity.

Of those, only the first two are of interest in the present context, the first subtype amounting to homophony or polysemy and the second to paronymy. These "phonetic" considerations do not extend beyond the broad typological level,

³ The second point was first pointed out by Attardo (1994); cf. also Guidi (2012: 343).

though⁴. Recently, Thaler (2016) developed a taxonomy of wordplay which includes what she calls "Phonetic Techniques". Among these, she lists homophones, similarity of pronunciation, which she terms "homoephonic [sic!] play", permutation of sounds, rhythm and rhyme, and finally alliteration and assonance. She considers the first two to be wordplay in the narrow sense, the third one as either wordplay in either a broad sense or a narrow sense and does not become specific on the classification of the latter two. Based on the taxonomy developed by Winter-Froemel (2016: 42), they would fall into the category of wordplay in a broad sense.

Within the field of phonetics, publications covering the ludic use of speech (sounds) are not easy to find either. This is somewhat surprising considering the fact that wordplay can often be analyzed at the syllable level of language, cf. (7) and (8). Instead, most recent studies on the subject refer to the linguistic level of interest as phonological rather than phonetic (Binsted and Ritchie 1997; Hempelmann 2004; Hempelmann and Miller 2017). While this is certainly true for the most part, the phonetic level does come into play at the subphonemic level, be it in conjunction with analyzing near-homophones, especially from a cross-linguistic point of view or in relation to narrowing down phonetic processes like sound substitutions to their articulatory phonetic properties.

- (7) Ein Land röstet auf with reference to the German verb aufrüsten with the nuclear vowel /y/ 'gear up'. An analogy is created by the formation of a verb aufrösten 'roast up' with the nuclear vowel /œ/. The newspaper article refers to the growing number of coffee roasteries in some parts of the country. (Welt am Sonntag 46, 2016, NRW section, 10).
- (8) Ran an den Dreck [ran ?an den duckh] (literally 'go right at the dirt' with reference to spring cleaning; the saying played on is ran an den Speck [ran ?an den [pɛkh], literally 'go right at the fat', meaning 'go right at it'; posted at a local drugstore (dm) in Trier, April 2017).

Guidi (2012) was probably the first researcher to introduce the syllable level as the one relevant to the sublexical analysis of wordplay. In a cross-linguistic study she analyzed a total of 209 puns from 15 languages. Given these numbers, her results cannot be interpreted quantitatively, but the analytic framework used in the present contribution is very similar to hers.

From a phonetic / phonological perspective, the syllable consists of three elements: the onset, the nucleus, and the coda. Of those, only the nucleus is

⁴ An example for semantic similarity and phonetic difference is German *Erdapfel* vs. *Kartoffel*, both meaning 'potato'.

mandatory, whereas the other two are optional. The phonotactic rules of each individual language determine not only the phonological constraints on the nucleus but also - and more notably - the phonological structure of both the onset and the coda.

All three constituents of the syllable lend themselves to being played on in wordplay. In many cases, the ludic forms will create minimal pairs with the original wording (cf. 7). In instances like (8), however, the whole onset cluster is replaced. In this context, the question of whether wordplay complies with the phonotactic rules is an important one. German, e.g., is known for displaying extensive consonant clusters in the onset as well as the coda (cf. schrumpfst [[sumpfst]]. On the one hand, it might be argued that a "forbidden" syllable structure such as /ft[/ as an onset in a German syllable might impede listener acceptance; on the other hand, it has been argued that "the violation of structural well-formedness rules" may render the new form more playful (Renner 2015: 126-127).

Most of the time, wordplay at the syllable level works on both a phonological and a graphemic level cf. e.g. (7) or (8). Sometimes, however, it rests primarily on the graphemic strand⁵. Whereas the former type may be presented orally or in writing, the latter type lends itself to be written.

The present contribution attempts to outline an analytic framework of sublexical wordplay⁶ and subsequently presents a quantitative analysis of a small set of data which has been collected by this author. By focusing on formal characteristics of wordplay at the syllable level, it is in a way complementary to Winter-Froemel's (2016) discussion which is primarily concerned with semantic and communicative issues related to wordplay.

⁵ In rare cases, the wordplay will rely on graphemic more than phonemic similarity, e.g. Make America sweat again (NDR extra 3 on June 10 2017 with reference to Donald Trump), where <sweat> and <great> resemble each other more closely than the pronunciations [swɛth] and [gieith] do. Another example is Horst case scenario (alluding to worst case scenario; referring to the fear within the German Christian Social Party that its leader Horst Seehofer would cling to his office). There is no phonetic similarity in the onset or the nucleus ([hɔʁstʰ] vs. [wɜːstʰ], assuming a rhotic variety of English), but Horst and worst form a "minimal pair" on the graphemic level, which is called *eve pun* (Hempelmann and Miller 2017: 96).

⁶ Obviously, complete homophones fall into this category only ex negativo, i.e., they are characterized by the absence of any such process.

2 Wordplay analyzed at the syllable level

When looking at examples of wordplay at the syllable level, one is confronted with a major dividing line:

- Wordplay drawing on existing lexical items (i.e. recontextualizing them),
 and
- Wordplay creating new lexical items

Examples for the former process are (7) and (8); examples for the latter are (9) and (10):

- (9) Staycation to denote a trend in Germany to spend one's vacation at home; Frankfurter Allgemeine Sontagszeitung 31 of 07 August 2016, p. 65.
- (10) Earbags (Trademark for frameless ear warmers, creating an analogy to airbags).

Examples (7): Ein Land röstet auf and (8): Ran an den Dreck can be classified as horizontal wordplay, i.e. involving more than one word, the latter (9): Staycation and (10): Earbags may be called vertical, i.e. involving only one lexeme (Wagenknecht 1965: 21; Hausmann 1974: 76). The status of compounds in this context is unclear, though. Wagenknecht (1965: 15) argues that compounds form a horizontal wordplay from a structural point of view whereas blends are to be considered as vertical.

If wordplay makes use of existing lexical items, the surprise effect which is intended to intellectually challenge and amuse the listener is generated by placing them in an unexpected co(n)text. In the case of homophones, it is up to the listener to create the unusual interpretation. If that endeavor is successful, he or she will "get" the pun, if not, the pun is lost on the listener. Thus, in a way, wordplay at the syllable level is selective in that its success largely depends on listener ability to reconstruct the process of punning.

Wordplay creating new lexical items will often take on the form of blends (see 2.2 below). Following Winter-Froemel (2016: 42), ludic innovations like e.g. *Stubentiger* ('cat'; literally *room tiger*) are not considered to constitute wordplay here but are regarded as verbal humor instead (cf. Winter-Froemel, this volume; Moulin, this volume).

Drawing a distinction between recontextualizing existing lexical items as described above and creating new ones is of potential interest from a cognitive point of view. The task for the listener is different: In the former case the element of surprise (and humorous effect) is generated by an unexpected sequence

or combination of lexemes, whereas in the latter case, new lexemes are generated which are expected to conform to phonotactic rules of a given variety, may or may not become conventional and may even make it into the dictionaries. A good example is the German blend *Ostalgie* (11).

(11) Ostalgie, a blend created from Nostalgie 'nostalgia' and Osten 'east', describing the "Sehnsucht nach [bestimmten Lebensformen] der DDR" (longing for [certain aspects of living in] the GDR; translation mine; AB); cf. DUDEN online (2017).

It is open to debate whether the cognitive processing between those two subgroups of wordplay at sublexical level really is all that different. One might argue that a phrase like Ein Land röstet auf is processed as an entity just as the blend Staycation is. I will keep them separate for the time being, though, in order to be on the safe side, because the phonetic implementation of the two categories may differ (see 3 below), and this difference should not be lost in the analysis.

2.1 Recontextualization of existing lexical items

This type of wordplay uses a recombination of existing lexical items, i.e., the lexical items used are not "funny" on their own, but the pun is produced by embedding them into a context which creates an element of surprise. This is known as horizontal wordplay (Wagenknecht 1975: 21). This process may leave the phonological and / or phonetic structure of the lexeme intact, putting it in a different context. This is what happens in the case of homophones. Alternatively, slight changes to the syllable structure may be made, thus creating minimal pairs in a strict sense or near-minimal pairs⁷. These mechanisms are considered here from a descriptive phonetic point of view.

⁷ The larger the phonological overlap, the easier the detection of wordplay (e.g., Ostalgie, see above). A borderline case of phonological similarity is Almer Nordwand, where three out of five phonemes as well as the spelling differ [?erge] vs. [?alme]. The pun refers to the excellent performance of the Austrian goalkeeper Almer during the World Championship in 2015, comparing him with the almost invincible Eiger Nordward in the Alps (Deutschlandfunk on 19 June 2016).

2.1.1 Homophony

One very popular way of creating wordplay at the syllable level is certainly the use of homophones. This contribution distinguishes between complete homophony (or perfect puns in the terms of Hempelmann and Miller (2017) and near-homophony (or imperfect puns in the terms of Hempelmann and Miller 2017). Complete homophony includes homonyms as well as polysemes. They may or may not be homographs. Examples are (12) and (13), and many more are to be found in Winter-Froemel (2016). It seems that certain languages like e.g. French, which display a many-to-one relationship between spelling and pronunciation⁸, lend themselves to wordplay by homophony much more than languages like e.g. Spanish do, in which this relationship is closer to a one-to-one ratio. This is a mere hypothesis at this point in time but certainly seems to merit looking into in future studies⁹.

- (12) Unsere Sommerreifen ['?unzəʁə 'zɔmeʁeɪfən]
 (Slogan advertising fresh produce sold by a German chain of supermarkets. It translates either as 'Our summer-ripe (produce)' playing on the homophonous 'our summer tires')
- (13) Greatest Hitz ['gɪɛɪtəst hɪts]
 (literally 'greatest heat' and, of course, 'greatest hits'; Jan Böhmermann on 29 September 2016 in his ZDF show, commenting on a heat wave in Germany)

If we are dealing with complete homophony in oral speech (as opposed to heterography¹⁰), there is definitely a need for signaling the wordplay to the listener as long as the wordplay is presented orally only. This may be achieved by a wide variety of mechanisms which have yet to be analyzed in detail. On a phonetic level, pausing, raising one's voice, articulating carefully, voice quality and slowing down are probably the ones which are used most frequently. Another way of signaling wordplay is obviously the graphemic level, which may in turn reveal a blend (cf. *alternatief*, ¹¹ discussed by Ronneberger-Sibold 2006: 167).

⁸ A famous example is French [o:], which may be written <au>, <aux>, <haut>, <haut>, <eau>, <eaux>, <aulx>, or <oh>.

⁹ This, by the way, opens up a whole new field of wordplay research, which might relate typological features of languages to their (preferred) mechanisms of wordplay.

¹⁰ E.g., *Nuhr im Ersten*, where *Nuhr* is the last name of a German comedian whose show is broadcast on German television's Channel One as opposed to homophonous *nur im Ersten* 'only on Channel One'.

¹¹ This blend (alternativ + tief 'alternative + low') is pronounced [?alterna'thi:f] and refers to a bad option.

2.1.2 Near-homophony (homeophony)

From a strictly phonetic perspective, complete homophony has to be distinguished from quasi- or intended homophony or "homoephonic play [sic!]" according to Thaler (2016: 53). As is evident from the database analyzed for the present study (see 3, below), homeophonic wordplay often involves either bilingual punning (Stefanowitsch 2002) or punning across linguistic varieties¹² which show different realizations of nearly identical phonemes. The speaker may rely on the mismatch going unnoticed by German listeners as in (14) or (16), depending on whether the borrowing has been integrated into the German phonological system or the donor language is used as a reference:

(14) Funtastisch

([fʌn] vs. [fan]; advertizing slogan for Swatch watches, seen in Trier in February 2017; Knospe 2015: 173 lists a different source)

On the other hand, the mismatch may add to the ludic impression, creating an extra challenge to the listener to solve the riddle, cf. examples (15) and (17):

(15) Karl mag's. Du auch?

('Karl likes it. Do you, too?' Billboard advertizing for the automobiles manufactured by Mini, seen in Chemnitz (eastern Germany) on 29 June 2013. The homophony [kha: l ma:ks] with Karl Marx will work best for those parts of Germany where /r/ following /a/ is realized through vowel lengthening only, i.e. primarily the north. In areas where postvocalic /r/ is pronounced as a consonant, the pun might just go undetected.

- (16) We kehr for Vienna ('we sweep for Vienna') where the first element of the diphthong is oscillating between (British) English [ϵ] in *care* and Austrian German [ϵ] in *kehr*¹³.
- (17) Am Arsch ([?amaʁʃ] 'to be fucked', playing on Macron's "en marche" [amaʁʃ]; NDR extra 3 on 15 May 2017)

¹² From a structural point of view, there is no difference between historical languages and, say, regional varieties thereof. They will therefore be treated equally here.

¹³ Knospe (2015: 174) lists the slogan "We kehr for you" as originating in Berlin. The present author saw the above version in Vienna in June of 2016.



Fig. 1: Advertizement banner seen in Chemnitz on 29 June 2013 (© Angelika Braun)

As Knospe (2015: 172-173), who studied press examples of German / English puns, puts it,

Only rarely are diamorphs [i.e., identical elements of different language indexing; AB] full homonyms, i.e. both interlingual homonyms and homographs. Rather, partial German / English homonyms, which either constitute (near-)homophones or homographs, predominate. As a consequence, most bilingual puns which appear in written texts also involve the level of orthography.

Near-homophones can be expected to go largely unnoticed by the untrained listener if the difference is located at a subphonemic level, as is the case in (14) and (16). If there is a difference at the phonemic level as in e.g. (17), the interlanguage seems to render the wordplay more challenging and thus more attractive to listener intellect. Generally speaking, its detection is quite a demanding task because it will always depend on the extent to which the listener knows the languages or varieties involved. Among the languages utilized in wordplay directed at German recipients, English clearly plays a dominant role in the data studied here. Knospe (2015: 170) supports this view:

[T]he attractiveness of bilingual puns resides in two aspects, namely in the prestige of English, which is bound to a gradual bilingualism, as well as in the specificity of bilingual puns that [...] require an additional cognitive effort, which leads to a particular sense of achievement if the addressee succeeds in understanding the pun.

2.1.3 Suprasegmental wordplay

It is, however, worthwhile to extend the perspective beyond the segmental level of speech. Wordplay may be implemented by suprasegmental means just as well, the segmental level being homophonous. The two mechanisms to be considered in this context have to do with stress and juncture. Homophones on a segmental strand may be turned into wordplay by shifting the stress pattern and / or by dintroducing juncture. Examples are:

- (18) Miss **Bildung**¹⁴ [mis 'bildun] vs. ['mis bildun] (literally either 'Miss Education' as a nickname for Margot Honecker, the wife of the late Erich Honecker, who held the post of secretary of education in the GDR from 1963 to 1989, or 'deformity').
- (19) *Du darfst keinen Gott neben mir haben außer Mar # got.*('Thou shalt have no other gods before me except Mar-god'; popular saying in the former GDR referring to Margot Honecker, who was ill-reputed for her neo-Stalinist views.)

(20) Jan Josef # Liefers!

(literally 'Jan Josef – deliver it!' as part of a comedy sketch by comedian Willy Astor on German television. The name of the popular German actor Jan Josef Liefers is played on. The context is an order to a pizza service, and a certain Jan Josef is urged to deliver it. Willy Astor; Promi WG; https://www.youtube.com/watch?v=osHEsa5OUAc).

The pun in these last examples primarily rests on the introduction of juncture, i.e., a pause. It is very clear that in these cases, pausing forms an indispensable element of the wordplay, i.e., it would not be understood without the pause.

¹⁴ The stressed syllable is marked by boldface characters.

Shifted stress patterns and junctures are obviously sufficient indications of wordplay, and they often constitute it. However, in some cases it may prove useful to exaggerate the juncture in order to make sure that the listener really gets the point. Therefore, signaling suprasegmental wordplay is often a matter of degree rather than of kind, i.e., the pause accompanying the juncture may be longer than linguistically necessary in order to make sure that the wordplay is recognized.

Suprasegmental mechanisms of speech have also been used in poetry to signal wordplay. It is precisely what the verbal humor in the following poem by Christoph Schwarz (*1947) relies on (Dencker 2002: 330).

be, B	[bə be:]	b, B
ich schreibe,	[Jıć ,[Raip9]	'I write',
ich schrei "B".	[Sič [rei,pe:]	'I scream "B"'.
ich beschreibe,	[Jıć pə,ʔksıpə]	'I describe',
ich, B., schrei "B".	[Jıč ,pe:l̞kɛi,pe:]	'I, B, scream "B"'.
ich beschreibe B,	[Sıć pəˌʔʀsɪpə ˌpe:]	'I describe B',
ich, B., schreibe "B".	[Jıč ,pe:l̞ʀsɪpə,pe:]	'I, B, write "B"".
ich bebe, schrei "B",	[Jıċ ,pe:p9	'I tremble, scream "B"",
ich, B., beschreibe.	[Jič ,pe: p9,lksip9]	'I, B, describe.' (Translation: AB)
	ich schrei "B". ich beschreibe, ich, B., schrei "B". ich beschreibe B, ich, B., schreibe "B". ich bebe, schrei "B",	ich schreibe, ich schrei "B". [ʔiç ˈʃʁɛɪbə] ich beschreibe, ich, B., schrei "B". [ʔiç bəˈʃʁɛɪbə] ich beschreibe B, ich, B., schreibe "B". [ʔiç bəˈʃʁɛɪbə ˈbeː] ich bebe, schrei "B", [ʔiç ˈbeːʃʁɛɪbə ʃʁɛɪ ˈbeː]

2.1.4 Paronymy

This paper argues that analyzing the changes are made at the syllable level of a lexeme which is then placed in a new and unexpected context will provide further insight into differences in punning mechanisms across languages (cf. Guidi 2012 for an example) and into the acceptability of puns to various listener groups. Paronymy is the textbook example of wordplay (see 3.1 below). The distinction between paronymy and homeophony is quite clear-cut: whereas homeophony operates in an interlinguistic context paronymy does not. Another defining element of paronyms is that the newly introduced lexical items constitute minimal pairs or near-minimal pairs with the items which they are derived from. Examples besides (7) and (8) are:

- (22) *Bin Baden* as a nickname for the German politician Rudolf Scharping, who had himself and his partner photographed in a swimming pool as part of a home story. It literally translates as 'gone for a swim', but the allusion to Bin Laden is evident¹⁵.
- (23) *Vater, Sohn, eiliger Geist* 'Father, son, and hurried ghost'. (*Süddeutsche Zeitung* of 16 May 2016) on the occasion of Max Verstappen's first Formula 1 victory. His father, Jos Verstappen, was also a famous Formula 1 driver.

2.2 Wordplay creating new lexical items

The creation of a new lexical item by way of wordplay can – and will most of the time – happen through blending. Even though there is no general agreement on a definition of blending (Bauer 2012), the following definition by Ronneberger-Sibold (2006: 157) is adopted here: "A blend here is defined as a deliberate creation of a new word out of two (or more) previously existing ones in a way which differs from the rules or patterns of regular compounding."

Few researchers have taken the trouble to look at blending processes from a phonological, let alone a phonetic perspective (e.g. Kubozono 1990; Kelly 1998; Gries 2004a, b; Wright et al. 2005; Arndt-Lappe & Plag 2013; Renner 2015). Kubozono (1990) formulates phonological and phonotactic constraints for the formation of blends. Kelly (1998: 586) points to the "playful" and "teas[ing]" character of blends. He argues that the phonemes at the boundary tend to be similar, which has an effect on how they are processed by the listener: "By constructing the blend so that the onset of word two sounds similar to the expected continuation of word one, the speaker postpones, however momentarily, the listeners' recognition that they have been sidetracked" (Kelly 1998: 587). Gries (2004a) argues that it does not suffice to look at similarity at the breakpoint but makes a case for analyzing the overall phonetic similarity of the source words instead. He proposes carrying out a detailed phonetic analysis extending to the feature level (Gries 2004a: 652–653).

In the context of the present study, which focuses on the processes at the syllable level, only a fraction of blends are of immediate interest, i.e. those which create minimal pairs or near-minimal pairs with one of the constituents of the blend, the prosodic structure remaining intact. This implies that one of the constituents will remain unchanged. These blends fall into the category of "contour blends" as defined by Ronneberger-Sibold (2006: 170), and they are known to retain the prosodic structure of the longer source word (Renner

¹⁵ All of this took place well before the times of Al Qaida and 9 / 11.

2015: 125) or matrix word (Ronneberger-Sibold 2006). Some researchers will not even consider these new word creations as blends (Bauer 2012: 15). They are included here, however, because they are quite frequent and are distinct from the use of minimal pairs in lexical recontextualization as discussed above. Examples from our database are

- (24) Zauderkünstler: Zaudern + Zauberkünstler ('hesitate' + 'magician'; Welt kompakt of 09 January 2017, 4)
 This wordplay refers to the former head of the German Social Democrats, Sigmar Gabriel, who hesitated for a long time before announcing that he would not run for Chancellor in
- (25) Scheinmeier: Schein + Steinmeier ('appearance' + Steinmeier) This wordplay makes reference to allegations that the German President plagiarized in his PhD dissertation.

2017.

2017 elections.

(26) Muttivationsseminar: Mutti + Motivationsseminar ('Mom' + 'pep talk'; heute-show of 15 December 2016)
"Mutti" ('mom') is a nickname for Chancellor Merkel; the blend Muttivationsseminar refers to a meeting of Merkel with political leaders of her own party in order to prepare for the

Irrespective of whether or not these newly formed words are considered to be blends by various authors, they merit consideration in the present context, because they may follow the same rules as paronymy as discussed in 2.1.4 above.

The reason why this is relevant to the present contribution is that while blending relatively rarely operates at the level of individual sounds, it will create minimal pairs if it does (cf. also Kubozono 1990).

- (27) Electile Dysfunction
 (Title of a book by Alan Dershowitz on the US presidential campaign 2016. Obviously the allusion is to *erectile dysfunction*.)
- (28) Saarmageddon (Saar + Armageddon) as a comment on the outcome of the 2017 elections in the German State of Saarland (ZDF heute-show on 06 April 2017).
- (29) *Teuro (Teuer + Euro)* as a satirical comment on the fact that many businesses used the establishment/introduction of the Euro to raise their prices.
- (30) Weinsinnig (Wein + wahnsinnig) (name of a wine bar in Trier).

It might be argued that the phonetic processes which lead to minimal-pair-type blends resemble those discussed above in the context of paronymy. But even though they may turn out to be similar from a descriptive angle, they seem to differ from a cognitive point of view. Whereas paronymy is reliably signaled to the hearer by co-text, this condition being mandatory for its perception, as well as by context, this condition being optional, the newly created lexical items by way of blends speak for themselves.

2.3 The phonetics of wordplay at the syllable level

From an analytic point of view, it does not seem sufficient to take into account homeophony, paronymy or blending only when analyzing wordplay. Instead, the phonetic description of what exactly is "played on" and how this is done may add to our knowledge about the detailed mechanisms used in wordplay. The crudest difference to be taken into account is that between the phonetic and phonological levels. From a systematic point of view, there is a total of four options:

Tab. 1: Structural properties of homophones

Structure of homophones	Phonological identity	Phonological difference		
Phonetic identity	total homophony	final consonant devoicing		
Phonetic difference	juncture	(impossible by definition)		

Identity on the phonetic as well as the phonological level will result in complete homophony. Differences on both these levels, on the other hand, run counter to the definition of homophony. Phonetic differences combined with phonological identity seems highly unlikely, unless one chooses to consider juncture and stress to be phonetic features only. 6 Final consonant devoicing forms a prototypical example of phonological difference and at the same time phonetic identity:

(31) Radhaus /radhaus/, phonetically ['Ba:theus] to denote a bicycle station; creating a homophone with Rathaus / rathaus / 'town hall' on a phonetic level only

A very frequent case is obviously constituted by homophony on both the phonological and phonetic levels, as is the case in the following examples:

¹⁶ In this case, (18) and (19) conform to this description.

(32) Nuhr im Ersten

(Name of a comedy program on German TV hosted by Dieter Nuhr; the title will also translate as 'only on Channel One')

(33) Nur für Busse

(Name of a comedy program on German TV hosted by Jochen Busse; the title will also translate as 'buses only')

(34) The Importance of Being Earnest

(Title of a comedy by Oscar Wilde), drawing on the homophony between *Earnest* as a first name and *earnest* as an adjective.

The relationship between pronunciation and writing may form an additional factor in wordplay. In cases of homophony combined with heterography the graphemic level may serve to signal the pun (*Nuhr im Ersten*). If, on the other hand, heterophony (['?ybezɛtsən] vs. [?ybe'zɛtsən]) is paired with homography <übersetzen>, this constitutes a different phenomenon which has to be discussed separately.

Wordplay as defined above will not always affect its "target" in the same way. A major distinction should be made between stressed and unstressed syllables being played on. Given the need to successfully communicate a pun for it to be effective, the expectation would be that mainly stressed syllables are affected by wordplay.

Within the syllable category, phonetic analysis calls for a further distinction between its elements: onset, nucleus, and coda. In the syllable onset and coda, different phonetic processes may occur. An onset or a coda may be inserted, deleted substituted, or modified. *Insertion* means that an onset is added where there used to be none. The possibility of onset *deletion* in German depends on how the phonemic status of the glottal stop is assessed. If the glottal stop were considered to have phonemic status, there would effectively be no syllable without an onset, and consequently there could be no onset deletion. Yet Hall (2011: 65) reports that "Die meisten Phonologen, die das Konsonantensystem des Deutschen untersucht haben, [...] zu dem Schluss gekommen [sind], daß [sic!] der glottale Plosiv [?] kein Phonem des Deutschen ist. [Most phonologists who have studied the consonant system of German have come to the conclusion that the glottal stop is not a phoneme of German. (Translation: AB)]"

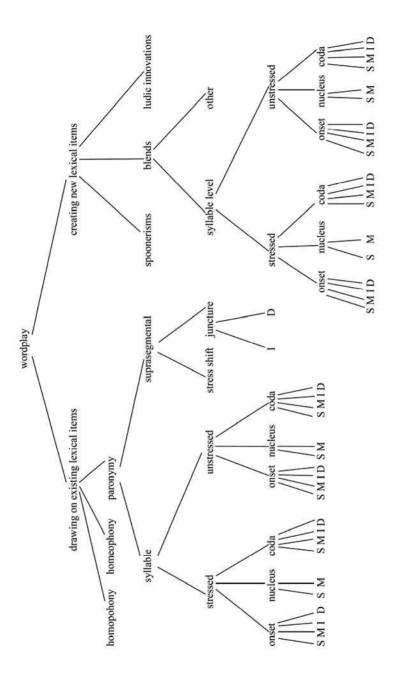


Fig. 2: A taxonomy of wordplay from the angle of phonology (I = insertion; D = deletion; M = modification; S = substitution)

Thus, the glottal stop is not regarded as having phonemic status in this contribution, i.e. examples like *Vater*, *Sohn*, *eiliger Geist* (23) are considered to show onset deletion. Another process to be taken into account is *substitution*, i.e. one consonant replacing another. Finally, onset or coda *modification* has to be taken into account. This may entail the expansion or reduction of a consonant cluster. The nucleus, on the other hand, can only be modified, e.g. by replacing a diphthong with a monophthong or vice versa, or substituted, e.g. replacing a monophthong with a different monophthong.

Based on these structural considerations, a taxonomy of formal, sublexical aspects of wordplay in a narrow sense according to Winter-Froemel (2016: 42) could look as shown in Figure 2.

Examples for the types of wordplay mentioned in Figure 2 are:

(35) Onset - Insertion

Ein Mann, kein Wort. 'One man, not a word'; ZEIT online 7 July 2011 with reference to the phrase Ein Mann, ein Wort "one man, one word". This refers to the mayor of Duisburg, Germany, who failed to express his regret over a number of fatalities at a local pop concert.

Onset - Deletion

Cf. (23) above: Vater, Sohn und eiliger Geist

(36) Onset - Substitution

Bin baden; (literally: 'gone for a swim'), referring to the former leader of the Social Democratic Party, Rudolf Scharping, who had himself photographed with his partner in a swimming pool. The allusion is, of course, to Bin Laden.

(37) Onset - Modification: Cluster reduction

Wahlverbrechen, (literally: 'election crime') referring to Donald Trump being elected POTUS; NDR extra 3 on 2 February 2017. The term played on is *Wahlversprechen* ('pre-election promise').

(38) Onset - Modification: Cluster expansion

Jack the Dripper. Nickname for Jackson Pollock for throwing bags of paint at the canvas; playing on *Jack the Ripper*.

(39) Nucleus - Modification: Expansion

Doppelt heilt besser (literally: 'double will cure better', playing on the proverb doppelt hält besser 'double will hold (together) better'; NDR Series on two sisters who are animal healers).

(40) Nucleus - Modification: Reduction

BonnGiorno [bɔn ˈdʒɔrnɔ]; near-homophony with Italian *buon giorno* [bʊɔn ˈdʒɔrnɔ] 'good day'; Name of a restaurant in the Sinn Leffers department store in Bonn, seen on 24 November 2016.

(41) Nucleus - Substitution17

Keine Macht den Drögen (literally: 'no power to the boring'), playing on the slogan *Keine Macht den Drogen* 'no power to drugs'; *ZDF heute-show* of 05 May 2017 with reference to the lack of profile in the candidates running in a state election.

(42) Coda - Insertion

Carmorra; (NDR extra-3-spezial of 12 May 2016, referring to potentially criminal activities by the German car manufacturers in conjunction with the exhaust measurement scandal).

(43) Coda - Deletion

Verstehen Sie Spa? (Article in the *Deutsche Bahn* Journal DB mobil of 28 January 2017, advertising weekend wellness trips; the reference is to the German equivalent to *Candid Camera* called *Verstehen Sie Spaß*; literally 'Can you take a joke').

(44) Coda - Substitution

*Kopfpit*¹⁸ (literally 'head pit'); *NDR extra 3 Das Beste*, seen on German TV's Channel One on 23 April 2017; the reference is to *cockpit*; the sketch dealing with a pubertal boy who is sitting inside Donald Trump's head and steering his actions).

(45) Coda - Modification: Cluster reduction

Irren ist männlich ['ʔɪʁən ʔɪst 'mɛnlɪç] ('to err is male'; title of a German comedy film of 1996; the pun is on irren ist menschlich ['ʔɪʁən ʔɪst 'mɛnʃlɪc] 'to err is human').

(46) Coda - Modification: Cluster expansion

Last Vegas (Title of a 2013 American comedy film featuring three friends who travel to Las Vegas to hold a bachelor party for their last remaining single friend.)

As far as vowels are concerned, stressed ones seem to be the prime candidates for wordplay. Rare examples of unstressed vowels being affected are the following:

(47) *Gewichtstsunami* (literally 'weight tsunami', playing on *Gewichtszunahme* 'weight gain'; alluding to a large weight gain; *Welt am Sonntag* 45 of 06 November 2016, 24).

¹⁷ Nucleus insertion and deletion are not listed because neither is compatible with German phonotactics.

¹⁸ *Kopfpit* is an outright blend (*Kopf + Cockpit*). Depending on whether affricates are considered as monophonemic or biphonemic, this might alternatively be interpreted as a cluster expansion.

- (48) *Dubai sein ist alles* (playing on *dabei sein ist alles* 'participating is everything' in an advertisement for trips to Dubai in a Trier travel agency)
- (49) Sahra Waggonknecht [vaˈgɔnknɛçtʰ] (literally 'waggon servant', playing on the name of communist politician Sahra Wagenknecht ['vaːgənknɛçtʰ]; literally 'car servant' in conjunction with Deutsche Bahn; NDR extra3 on 02 February 2017)

3 Quantitative analysis

In an attempt to quantify the various kinds of wordplay at the syllable level, a total of 213 samples taken from a multilingual (German, English, French, Italian) database on wordplay were analyzed. This database has been compiled by the present author since 2016, largely relying on TV shows, newspapers, posted advertisements, and – to a very limited extent – applicable examples from previous publications (Ronneberger-Sibold 2006; Winter-Froemel 2009). The selection was confined to examples which were intended for a German audience. This includes items which are in part (see example 16 above) or completely (cf. example 27) in English. Interestingly enough, in some of these examples, the pun will work for a German-speaking audience only, cf. e.g. (51) below. The latter example will completely elude monolingual speakers of English. Puns which are bilingual or even completely in English may be considered to present listeners with an extra challenge and thus establish some kind of a group spirit between the speaker and the hearers.

- (50) The winner fakes it all (ZDF heute-show of 23 February 2017 on Donald Trump).
- (51) Maut [meoth] Rushmore (ZDF heute-show of 15 December 2016 on the impending toll ('Maut') for privately owned cars in Germany); the allusion here is to Mount [meonth] Rushmore.

Table 2 shows the overall distribution of the types of wordplay at the syllable level. In some rare cases, it is difficult to make a clear distinction between homeophony and blends. Normally, homeophony will be confined to interlinguistic use, and blends are generally monolingual. An area of overlap emerges where interlinguistic blends occur which form a minimal pair with one of the source words as in the case of *funtastisch*. The latter example was counted as a near-homophony in the present contribution. This decision was made under the assumption that *fun* almost has loan-word status in German. However, it could arguably have been made in a different way.

Tab. 2: Distribution	of types o	f wordplay	at the	syllable	level(N = 213)
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phonetic mechanism	paronymy	blending	complete homophony	near- homophony (homeo- phony)	supraseg- mental	total
no. (percent)	91 (43%)	61 (29%)	22 (11%)	27 (13%)	12 (6%)	213 (100%)

The table shows that paronymy and blending are by far the most frequent processes in wordplay at the syllable level in German. Complete homophony and homeophony are each used much less frequently, homeophony being slightly more frequent than homophony. This does not come as a surprise considering that complete homophony between languages and varieties is not particularly widespread. – In a relatively small number of incidents of wordplay at the syllable level, the suprasegmental level is affected. This includes stress shift and / or an insertion / deletion of juncture.

3.1 Paronymy

Of the items studied, 91 (43%) can be categorized as paronyms. Based on these results, the question arises of whether all elements of the (stressed) syllable are equally susceptible to wordplay or if there is a preference. For this reason the number of paronymic instances was analyzed according to syllable position (cf. Table 3).

Tab. 3: Distribution of paronyms (N=91) across the syllable (numbers and percentages)

syllable position	onset	nucleus	coda	total
phonetic processes	53 (58%)	22 (24%)	16 (18%)	91 (100%)

As far as syllable position is concerned, it is quite obvious that in German there is a clear preference for the syllable onset to be played on. This covers more than half of the total number of items analyzed. The nucleus is affected in one in four of the cases, whereas the coda is played on only 18% of the time. Given that chance level is at 33%, the preference for the onset position is even more evident.

In order to narrow down the phonetic processes even further, they were broken down according to the taxonomy outlined above (cf. Table 4).

Tab. 4: Types of phonetic processes within the syllable in paronyms (N=91). + / - str refers to
stressed vs. unstressed syllables

syllable position	ons	et	+str	-str	nuc	leus	+str	-str	CO	da ¹⁹
phonetic process										
substitution	33	(61%)	28	5	14	(67%)	8	6	3	(19%)
deletion	4	(7%)	4	0	0	(0%)			2	(13%)
insertion	8	(15%)	8	0	0	(0%)			5	(31%)
modification	9	(17%)	7	2	7	(33%)	4	3	6	(38%)

If one takes a closer look at where the phonetic wordplay mechanisms occur most frequently, i.e. in the onset position, it emerges that substitutions are the preferred process by a large margin. Considering the onset position alone, close to two thirds (61%) of the items consist of substitutions, followed by modifications and insertions (17% and 15%, respectively), whereas deletions (7%) play a minor role. As far as the overall results are concerned, more than one third of all paronyms present in the corpus (36%) consist of onset substitutions alone.

In the syllable nucleus, which is affected much less frequently than the onset, substitutions dominate over modifications, i.e., the nuclear element tends to be replaced rather than expanded or reduced.

The coda is played on even less frequently than the nucleus, modification and insertion being the most frequent mechanisms. This means that one element of the coda tends to be replaced or deleted, or that a coda is added.

A further distinction which turns out to be crucial for the distribution of phonetic wordplay is syllable stress. As Table 4 shows, the onset processes affect stressed syllables almost exclusively, whereas the nuclear processes are almost evenly distributed between stressed²⁰ and unstressed syllables. The latter cases merit a closer look at the perception side, specifically the question of whether an audience is able to grasp the pun despite the unstressed vowel.

¹⁹ In view of the small number of tokens, it did not seem appropriate to distinguish stressed and unstressed realizations.

²⁰ Since the vast majority of lexemes studied contain no more than three syllables, only primary stress is taken into account.

The general results are quite clear-cut, and despite the limited size of the database there can be little doubt about the preferred phonetic ludic mechanism intended for German listeners: replacing the (stressed) syllable onset. The substitution of the nuclear vowel also plays a major part, but is far less frequent. The coda is clearly of lesser importance to this type of wordplay.

A further question to be addressed is whether the phonotactic constraints of the language in question are respected by the wordplay, and if so, whether there are exceptions. If the latter turns out to be true, this might on the one hand affect the acceptability for listeners or on the other hand increase the intellectual challenge to the listener because it renders solving the riddle more difficult. Renner (2015: 126–127, 130–131) calls this "structural transgression". As far as our German data is concerned, wordplay at the syllable level always concurs with the phonotactic constraints of German²¹. There is not a single violation of those rules, which is, by the way, also true for the remaining instances of ludic wordplay which were analyzed, e.g., the blends. This result is in accord with Guidi's (2012) findings on puns in 15 different languages. She observes that "[...] strings do not generally violate phonotactic constraints [...]" (Guidi 2012: 361).

3.2 Blends

The question of whether a recontextualized paronymy will be subject to the same underlying cognitive process as a blend remains as yet unsolved. However, the approach taken here is descriptive, and thus, the same descriptive framework which was outlined above (see 2.3) for paronymy will be applied in the empirical study concerning blends. Specifically, 61 (29%) out of the 213 items analyzed consist of blends. In 21 of these, the blend forms a minimal pair with one of the constituents of the blend. An example is

(52) *Kurlaub* (*Kur* 'rehab' + *Urlaub* 'vacation' the implication being that for many, rehab amounts to a kind of vacation.

²¹ Taking phonotactic considerations into account when looking at wordplay is by no means new. In 1651, Georg Philipp Harsdörffer developed a so-called *Denckring* (literally: *thinking ring*) as a means of creative use of language (cf. Moulin, this volume). It consists of a concentric array of five different rings on which the prefixes, syllable-initial clusters, nuclear vowels, syllable-final clusters, and suffixes of German are listed. By turning each ring individually, a total of 82,944,000 linguistic items can be created. The *Denckring* was intended for ludic word formation, and it was by no means the first such device (Dencker 2002: 425). What is particularly remarkable is that Harsdörffer was evidently well aware of the phonotactic constraints of German since he lists all possible prenuclear and postnuclear consonant clusters.

The following table shows the distribution of phonetic processes across the svllable.

Tab. 2: Distribution of phonetic processes in blends (N=67) across the syllable (numbers and percentages)22

syllable position	onset	nucleus	coda	total
phonetic processes	44 (64%)	12 (19%)	11 (16%)	67 (100%)

In those blends which involve wordplay at the syllable level, the syllable onset is by far most often played on (cf. Table 5). Nucleus and coda are affected in about one in five instances. This distribution is quite comparable to that for paronymy in Table 3 above.

A detailed look at the phonetic wordplay mechanisms is given in Table 6. It reveals that where they occur most frequently, i.e. in the onset position, modifications, insertions, and substitutions are fairly evenly distributed. On the other hand, there were no instances of onset deletions. As far as the overall results are concerned, about one in four of all the ludic variations (41%) occurs in the form of modifications (i.e. expansions or reductions) of the syllable onset alone. All phonetic processes occur much more often in the onset of stressed syllables than in unstressed ones. Substitutions and modifications of the nucleus are too infrequent to draw firm conclusions, but the results indicate that syllable stress may not be as crucial a factor here as it is in the onset.

If one compares Tables 3 / 5 and 4 / 6, respectively, the similarities are striking at first glance. The syllable onset forms the preferred object of wordplay in both. However, there are some differences with respect to the favored processes. Whereas substitution predominates in the paronyms, modification is most frequent in blend onsets. In the nuclear position, substitutions are the preferred process in both paronyms and blends. Differences between the two kinds of wordplay emerge regarding the coda. While substitutions, insertions and modifications are about evenly distributed in blends, modifications predominate in the paronyms.

²² The total number of phonetic processes is larger than the number of items because in some cases there was more than one process, i.e. one element of the syllable onset may have been replaced and a second one added.

syllable position	onset	+str	-str	nucleus	+str -str	coda
•						
phonetic process						
substitution	14 (33%	b) 11	3	8 (62%)	5 3	3 (27%)
deletion	0 (0%	5)		0 (0%)		0 (0%)
insertion	12 (28%	b) 12	0	0 (0%)		4 (36%)
modification	17 (40%	b) 11	6	5 (38%)	3 2	4 (36%)

Tab. 3: Distribution of phonetic processes across the syllable in blends (N=67)

The fact that paronymy and blending (as understood here) do not follow the same patterns especially as far as syllable onset is concerned justifies keeping those two mechanisms of wordplay separate. Still, it seems as if – irrespective of context – the phonetic processes utilized will primarily affect the onset of a stressed syllable and will most likely involve a replacement or modification of the syllable-initial consonant.

3.3 Fine phonetic detail

It is conceivable to break down the analysis even further, i.e., towards a featurebased phonetic description (as expressed by 3-term labels; Abercrombie 1967: 52) of sounds which have been substituted or modified. For example, in Electile Dysfunction (27), a (central) voiced alveolar approximant /1/ is replaced by a voiced alveolar lateral approximant /l/. These two sounds differ in one respect only, i.e. manner of articulation, i.e., /x/ being a central approximant and /l/ a lateral approximant. They are identical with respect to voicing and place of articulation and are both classified as approximants. Strictly speaking, the difference between the two can be narrowed down to central vs. lateral airflow. They are thus much more similar than, e.g., the two phonemes played on in Ich lease Dich (53), i.e. the voiced bilabial plosive /b/ and the voiced alveolar fricative /z/, which differ with respect to place (bilabial /b/ vs. alveolar /z/), and manner of articulation (plosive /b/ vs. fricative /z/). This kind of analysis allows for a subsegmental description of the processes which are employed in wordplay. It is applicable to homeophony as well as paronymy and blends. Once sufficient data is available, it will be possible to narrow down the preferences on the part of the sender like e.g. playing on the voicing of a plosive as opposed to its place of articulation. This will help to unveil fine phonetic detail of wordplay. The data can be used to establish patterns of wordplay at the syllable level and thus serve to differentiate between languages, genres, or media. For instance, it is quite obvious that the syllable onset is most frequently played on in German, but the question of whether this is the same for other languages remains to be answered. Mechanisms specific to the advertizing business or to political satire could be identified. Finally, written wordplay which is meant to hit the eye rather than the ear may follow patterns which differ from those of oral wordplay. Perception studies will be able to show which processes are most easily acceptable to listeners and thus contribute to the discourse-related understanding of wordplay.

(53) Ich lease Dich ['?ɪc li:zə dɪc] (advertizement for the car leasing company smart cars; the reference is to German ich liebe Dich ['ʔɪç liːbə dɪç] 'I love you').

4 Discussion and perspectives

The present study constitutes a first attempt at establishing a taxonomy of wordplay at the syllable level. For wordplay intended for a German audience, 23 a very clear pattern emerges with respect to syllable position (onset of stressed syllable). The preferred processes vary: substitutions predominate in paronyms, whereas modifications are most frequent in blends. This may serve as an argument for studying those two categories separately.

Further quantitative studies are lacking. These would be needed in order to determine the fine phonetic detail which is played on in a given language and allows for a comparative approach once sufficient material has been collected. There remains a lot to be unveiled about language specificity of phonetic wordplay (Guidi 2012).

Another research field which would merit attention in the present context is the perception of wordplay at sublexical level. One of the very few studies in that subject area was carried out by Fuhrich and Schmid (2016). These authors show that fictitious monolingual slogans are recalled better than mixedlanguage ones, but they do not address the question of popularity of actual puns among listener groups. On a different strand, there have been attempts to establish a maximum number of segments differing in target and pun for a tar-

²³ As was mentioned earlier on, the items analyzed in this study were used in a German language context, but many lexical items played on are not originally German but English. Discretion should therefore be exercised when drawing conclusions with respect to German phonology.

get to still be recognizable. This limit was originally determined by Hempelmann (2003) to be N=5 phonemes based on English puns, and Guidi (2012:343) confirmed this number for examples from numerous other languages. It remains to be seen, however, if a solely quantitative approach to this issue is sufficient. It might turn out that a more detailed phonetic analysis taking into account not just the number but also the kind of differences will prove more promising.

Studies on the acceptability and, in addition, on the criteria for the "success" of wordplay remain to be carried out as part of determining the pragmatic dimension of wordplay. It would be highly desirable to establish which mechanisms used in the encoding process meet with acceptance²⁴ on the part of the hearers and which ones fail to evoke the complicity between speaker and hearer which is so crucial to the success of wordplay. This may involve (re)determining a degree of phonetic similarity beyond which a pun is no longer easily decipherable (for an audience to be defined). The whole area of speaker-hearer interaction is clearly an aspect of wordplay which is worthy of future attention.

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^{24 &}quot;Acceptance" here describes the ability to resolve the riddle, assuming that listeners gain satisfaction from being able to get the pun and are not appreciative of riddles that are impossible to solve.

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