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Universals in puns and humorous wordplay

Abstract: This article reviews some of the universal features of humorous wordplay which include the phonological mechanisms used to manipulate strings, the semantic oppositeness found in incongruity, the pseudo-logical Cratylistic resolution of the incongruity, and the relative distribution of types of wordplay involving different types of ambiguity and alliteration.

Keywords: ambiguity, clang response, Cratylism, folk linguistics, glossolalia, humor, iconicity, pareymology, puns, rhyme, sound symbolism, speech error, taboo word, wordplay

1 On defining a few terms

There is a significant literature on puns and wordplay, reviewed in Attardo (1994), Hempelmann (2003) and Hempelmann and Miller (2017). In fact, for a long time, puns were assumed to be the sole purview of the linguistics of humor. The advent of semantic theories of humor in the 1980s changed the perspective and the study of puns was somewhat marginalized. However, lately a resurgence of interest can be seen, for example in the beginning of the Dynamics of Wordplay book series, in 2015. The purpose of this paper is to present an argument for the universality of the linguistic mechanisms used in puns (humorous wordplay). I will also use “verbal humor” (as opposed to referential humor; see Attardo 1994) as a synonym of humorous wordplay. The following are an example of verbal humor (1) and one of referential humor (2):

- (1) In Trinidad and Tobago it will cost you £2.50 for a steak pie, in Jamaica it will cost you £3.00. These are pie rates of the Caribbean.
(https://www.reddit.com/r/dadjokes/comments/7hyxk9/in_trinidad_and_tobago_it_will_cost_you_250_for_a/, accessed 10 July 2018)
- (2) Can you take shorthand? Yes, but it takes me longer.

The field of wordplay is beset by terminological problems. It is thus useful to begin by clarifying, as much as possible, the scope of one’s investigation. Wordplay may take many forms, including games that are played with reference to the spelling of words (such as Scrabble, crosswords, etc.) but also anagrams (the letters are arranged to form another word), palindromes (the word or phrase is

readable from left to right and right to left), acrostics (words or phrases the initials of which form another word), word squares (a type of acrostic on a square grid), etc. Other forms of wordplay consist in the creation of sublanguages, such as the French “verlan” based on syllabic units, as exemplified by the name of the “argot” itself from “l’envers” → “ver-lan” by flipping the order of the two syllables. These types of argotic sublanguages are documented in over 100 languages as varied as Afrikaans and Vietnamese.¹

Even from this short list we can extrapolate some interesting features. Wordplay may be completely unrelated to humor: players of Scrabble and those who solve crossword puzzles are obviously not engaged in humor appreciation. They may be completely metalinguistic, i.e., performed at a different linguistic level than ordinary linguistic activities, for example, anagrams are performed deliberately, and are a separate skill from ordinary language processing. Here a specification needs to be inserted: in some cases, anagrams (or other wordplay) may acquire² an ulterior meaning, as in the following example:

(3) Salvador Dalí → avida dollars (attributed to André Breton)

Finally, all these types of language play are mostly graphemic, i.e., based on the spelling of the words (with the exception of spoken argotic forms, such as verlan which are based on pronunciation). Here too a distinction needs to be made, because there exist some types of wordplay that are based on the differences between graphemic and phonemic representations of language. Here I will quote the “eye dialect” practice (Bolinger 1946) which has the effect of “trivializing” (Gumperz and Berenz 1993: 96–97) the language of the speaker(s). Example (4) is a sample of eye dialect:

(4) Ah shore could eat mo’ po’k chops, Mammy = I sure could eat more pork chops, Mommy (Malin 1965: 230)

Another example, from Queneau’s novel *Zazie dans le métro* (1959), is the phonetic “transcription” of an utterance (5), resulting in a mismatch between the expected orthographic / graphemic representation, on the right, and the more accurate quasi-phonetic representation, on the left (cf. Attardo 1994: 123).

¹ https://en.wikipedia.org/wiki/Language_game (accessed 10 July 2018).

² The human agency in the process of anagramming is limited to the recognition of the semantic / pragmatic potential of some of the combinations. The process of anagramming itself is a simple permutation of letters.

(5) Lagoçamilébou = La gosse a mis les bouts.

Except in the limited sense that graphemic representation is involved in the semantic phenomena exemplified in the previous paragraph, neither graphemic phenomena, nor metalinguistic processes that do not occur in normal language use³, nor non-humorous phenomena will be considered in what follows. To put it differently, this paper is concerned with wordplay that occurs naturally in the use of language⁴ and that has the purpose (perlocutionary goal or effect) of being perceived as amusing, mirthful, or exhilarating by at least one of the participants in the exchange.⁵

2 Definition of puns

We can now present a definition of humorous puns. A pun is a textual occurrence in which a sequence of sounds must be interpreted with a reference to a second sequence of sounds, which may, but need not, be identical to the first sequence, for the full meaning of the text to be accessed. The perlocutionary goal or effect of the pun is to generate the perception of mirth or of the intention to do so. The latter distinction between perlocutionary goal or effect is necessary to account for the fact that involuntary puns may be perceived as humorous only by a member of the audience and no intention to amuse may be present in the speaker.

This definition generalizes over string-based puns and alliterative ones. Let us address the two questions in that order. Puns are not exclusively word-based. Puns involve the presence of (minimally) two senses, but need not involve two “words”, as does example (1) “pie + rates”. The two senses can come about via the interpretation of any string, be it related or not to a word. In example (6), the two senses come from the proper name *Indiana Jones* and the idiomatic

³ For example, a friend of mine had trained herself to reverse any string (in Italian) on the fly. This is not an activity that occurs naturally in any spoken language. One can always train oneself to perform arbitrary metalinguistic tasks, such as counting the number of letters required to spell a word, for example. However, these are not activities that occur in normal language use by untrained speakers.

⁴ Humorous puns have a metalinguistic component, of course (see Zirker and Winter-Froemel 2015). However, there is a difference between the metalinguistic implicit reference to the form, which characterizes puns, as we will see below, and the artificial construction outside of normal exchanges of practices such as anagrams or cross-word puzzles.

⁵ “Mirth” is a technical term used in humor studies (Martin 2007: 8) to describe the emotion elicited by humor. Another term is “exhilaration” (Ruch 1993).

expression “to jones for something” (‘to desire something intensely’) and neither is a separate word. See also example (11) below, for another case in which a string is manipulated, but in the case of (11), a sub-morphemic one.

(6) JONESING FOR INDIANA (Dave Pell, Nextdraft 14 March 2018; www.nextdraft.com)

Moreover, puns may also come about as a result of syntactic ambiguity, as in example (7) below where the syntactic role of the word “bite” (as the verb of an embedded clause “dog bite victim” or as a modifier of “victim”, itself modified by “dog” (not to mention the syntactic role of “dog” demoted from the subject of the subordinate clause to a modifier of “bite”)).

(7) Squad helps dog bite victim (Bucaria 2004: 292)

Of course the most common category is morphological ambiguity (lexical ambiguity falls in this last category), as in (8) in which we have two ambiguities (*head* ‘boss’ vs. ‘body part’, *arms* ‘weapons’ vs. ‘body part’).

(8) Iraqi head seeks arms (Bucaria 2004: 288)

Furthermore, alliterative puns involve the repetition of a given phoneme or group of phonemes and may be scattered along (parts of) the relevant text, as in (9) below:

(9) You remember Sunset Strip – where the unneat meet to bleat! (Attardo et al. 1994: 35)

where the repetition of the [i] sound in the last three syllables is highly noticeable.

The literature on puns is vast, as mentioned above. There are numerous issues, of great interest and significance, but they cannot all be pursued in this context. I will thus list a number of assumptions I will take henceforth for granted, without discussion. The interested reader should consult Attardo (1994), particularly chapters 3 and 4, where some treatment of these matters can be found.

- Puns invoke significantly the surface structure (the signifier) of language, but this claim can be generalized to non-verbal linguistic forms (e.g., signed languages) and in general to semiotic systems (e.g., graphic signs).
- Puns are non-casual (Hymes 1958; Attardo 1994: 110) speech forms; in casual speech the speaker is unaware of the surface structure of the forms he/she is uttering. Insofar as this is the case and the speakers reference implicitly the signifier of the sign, puns have also a metalinguistic component.

- Not any ambiguous string is a pun. Ambiguity is generally eliminated by semantic and pragmatic disambiguation.⁶ Puns preserve (at least) two meanings or interpretations. Hence, puns exist only in the context of disambiguation and therefore only in context.
- Once two meanings have been brought together, the two senses may either coexist, or one of the two may win out. There are examples in which the first meaning subsists, and cases in which the second meaning subsists. This should not be taken as psychological activation or access, but merely as the potential for the speaker to access the first/second meaning.
- The (usually lexical) unit that allows the two senses to coexist is called a connector, while the unit that forces the presence of the second sense is called a disjuncter.
- Connector and disjuncter may be distinct (i.e., be manifested in the text as two separate entities) or they may be non-distinct (i.e., be manifested as one entity).

3 The universality of punning mechanisms

In this paper, as stated above, I will argue that the linguistic mechanisms that make puns work are universal. Not only will I argue that the phonological and phonetic constraints on puns are the same across languages, but that the syntactico-lexical constraints, the semantic constraints, and the mechanisms that allow the resolution of the incongruity, i.e., the Cratylitic theory of sound-sense matching are universal.

Let us then start with a pretty stark, and deceptively simple, claim in favor of the universality of puns:

It seems to me that punning owes its occurrence to the essential nature of language and meaning, and that it must therefore occur in all languages and cultures. (Hill, 1985: 450)

Thus posed, the question is probably too simplistic to be answered meaningfully. To a large extent the truth or falsity of the thesis, as stated by Hill, hinges on the definition of “pun”.

For example, consider the argument brought forward against the universality thesis. Sherzer (1996: 134) notes that if by puns we mean textual phenomena that are performed (in a broad sense, including both speakers and hearers) by a

⁶ Unless of course the speaker wants the utterance to be ambiguous. See Empson (1930).

culture in the same way that Western European culture performs puns, then puns are not universal, because of course no culture is the same as any other culture. Puns may have, even in our culture, aesthetic, religious, magical, or medical “meanings” (insofar as they may reveal pathologies), so obviously in other cultures puns may be not associated with humor at all, or only marginally. Sherzer brings the example of the Guna (Kuna), an indigenous people of Panama / Colombia, who do not have the text-type “joke”. However, he notes that their “life is punctuated by a great deal of verbal humor and joking” (Sherzer 1990: 205).

So, we can conclude that if by the universality of puns we mean that each culture has a literary / folkloric genre identical or similar to puns in Western culture, that is furthermore associated with humor in the same way that puns are associated with humor in Western culture, then it is pretty much tautological that some culture will not have puns-as-Western-culture-has-them. Conversely, if we understand puns to be multifaceted phenomena that may or may not be connected with humor, and that follow the definition presented at the beginning of section 2, then the question becomes an empirical one.⁷

When I wrote the synthesis of the work on puns for my 1994 book (Attardo 1994) that question was not even part of the discussion for the simple reason that there was no way to provide an empirical answer to the question. The situation changed radically after Guidi’s work, first defended as her 2008 dissertation and then published as Guidi (2012a, 2012b), which was designed specifically to attempt a first empirically grounded answer.

Tab. 1: Languages examined in Guidi (2012a, 2012b)

Seneca (Iroquoian)	Navajo (Na-Dene)	Winnebago (Siouan)
Mixtec (Oto-Maguean)	Tzotzil (Mayan)	Balinese (Austronesian)
Korean (Isolate)	Japanese (Japanese)	Rundi (Niger-Congo)
Yoruba (Niger-Congo)	Italian (Indo-European)	Sanskrit (Indo-European)
English (Indo-European)	Vietnamese (Austro-Asiatic)	Chinese (Sino-Tibetan)

Guidi built, through extensive bibliographic research, a corpus of 204 puns from 15 different languages spanning 12 different language families. The idea was to be able to make some first generalizations by widening the scope of the research beyond a single language or language family. Table 1 lists the languages and their

⁷ The definition is provided for puns that afford mirth, in our culture; in other cultures they may afford other perlocutionary effects.

language families. Obviously, Indo-European is over-represented due to its availability, but otherwise the variety of language families is sufficiently broad to generalize beyond a single family.

Guidi's conclusions are striking in their simplicity: She finds four universal phonetic mechanisms, listed and schematically exemplified below:

Addition: abc → abcd
 Deletion: abc → ab
 Substitution: abc → abd
 Inversion: abc → acb

Not all mechanisms are attested in all languages, but all the puns in all the languages of her corpus are accounted for by these mechanisms. We notice immediately that these processes are not new or unique to puns. Inversion is known as metathesis in phonetics; addition is known as epenthesis; deletion as elision. Substitution occurs obviously in other phonetic phenomena such as assimilation/dissimilation, lenition/fortition, etc. This is the bread and butter of the phonetic processes that govern language change.

Obviously, as Guidi herself is well aware and warns her readers, caution must be used when generalizing from her data. Nonetheless, Guidi's work affords us the first ever empirical glimpse at a cross-linguistic comparison of punning mechanisms general enough to be meaningful. Moreover, other generalizations (which are not universals, obviously) are also possible: for example, Guidi's data are consistent with a 5-phoneme threshold she extrapolated from Hempelmann's (2003) data for phonemic distance, since only 10 instances have a phonetic distance greater than 5, i.e., less than 5%. The largest phonemic distance Guidi found in her corpus is 8 phonemes.

In the following example, in the Seneca language (Chafe 1998, 188–189) there is a difference of one phoneme (the removal of the lengthening of the /a/ in sha:wí?s) which is obviously the smallest possible distance between two paronymous strings.

- (10) target o:nó? sha:wí?s 'you are carrying around the oil'
 pun o:nó? shawí?s 'sores on the buttocks'

In example (11), in the Rundi language (Niger-Kordofanian family), however, as Guidi (2012a: 99) points out, we have a difference of six phonemes (/fundí/ vs. /sindé/; note in passing that the strings replaced are not words):

- (11) target Agafundi gasimba agasindé 'The robin jumps on the clod'
 pun Agasindé gasimba agafundi 'The clod jumps on the robin'

Further evidence that punning mechanisms are sensitive to phonemic distance can be gathered from the fact that manipulations (changes) to the string tend to occur in the central elements of the string and/or in the nucleus of the syllable. In other words, they tend to occur in less cognitively prominent⁸ parts of the string (the cognitive prominence of the beginning and the end of the string is known as the bath-tub effect; see Attardo 1994: 123 for discussion).

Guidi's conclusions about the "ordinariness" of the phonological processes of puns, i.e., all phonological mechanisms that can change a string may be used to generate a pun, match a growing awareness that the linguistic phenomena involved in humor are likewise ordinary. The language of humor is not extraordinary. Humor makes marked uses of unmarked linguistic means (Hempelmann and Attardo 2011: 126).

4 Universals of verbal joke texts

We now turn to a much more tentative discussion of "universal" features of joke texts (the "scare quotes" should also alert the reader to the tentativeness of the discussion). We have four studies that collected significant samples of joke texts and analyzed some of their features, in four languages: English, Italian, German, and (classical) Arabic.⁹ The studies are, AlJared (2009; Arabic), Attardo (1989; Italian), Attardo et al. (1994; English), Stelter (2011; English), and (Stelter 2011; German). All these studies are based on corpora of jokes collected for commercial or cultural reasons, by non-humor scholars. Thus they reflect the interests and goals of the joke-collectors/anthologists and not those of humor scholars. For one, they are usually opaque on the criteria for inclusion, beyond platitudes as the desire to amuse or include the "best" jokes.

Obviously, since the data consist of canned jokes, no direct generalization is possible to conversational data. However, it is unlikely that any conclusions valid for canned jokes are completely at odds with conclusions for humor at large, because collections of humor cannot depart too significantly from the tastes and practices of the community they are targeting, for risk of losing sales as a result of alienating their audience. In other words, since the joke collections are com-

⁸ Not to be confused with stress-based prosodic prominence.

⁹ A forthcoming article by Winter-Froemel compares jokes in French, Italian, Spanish and Portuguese. I became aware of this publication too late to include it in the discussion.

mercially produced, they must reflect to a significant extent the tastes of their audience.

By comparing the data in these studies we can reach some conclusions: as Figure 1 shows clearly, most languages prefer referential jokes. Stelter's outlier data are explained by two of her collections of jokes which skew the data (51.3 % and 47.8 %), while the third one is in line with the other data sets (26.8 %). Note that the charts below report the averaged percentages (41.9 % for the English data, for example).

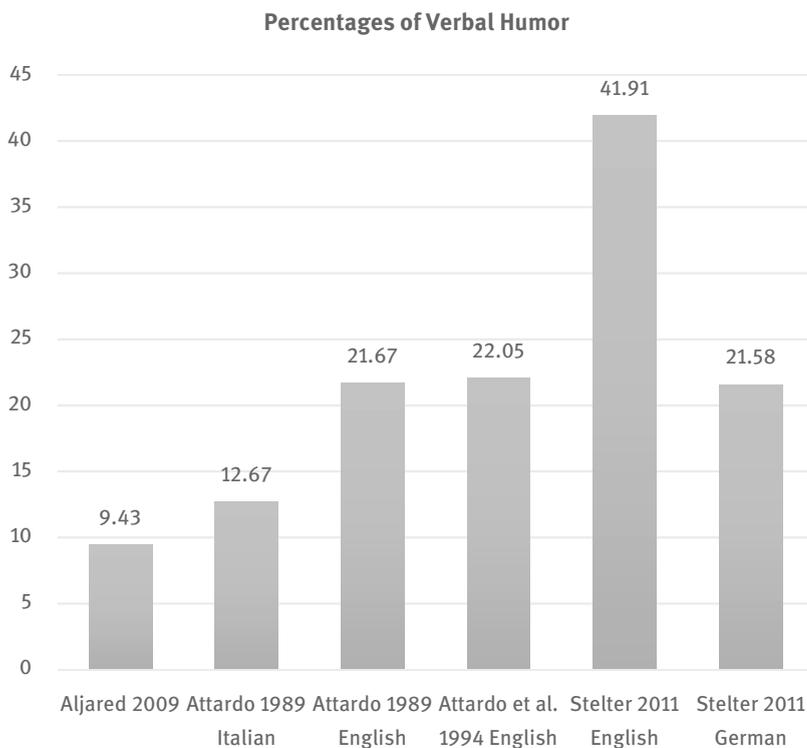


Fig. 1: Percentages of Verbal Jokes in the Corpora

Lexical-ambiguity jokes, i.e., jokes that hinge on the presence of an ambiguous lexical item, such as example (1), are the most frequent type of pun, whereas syntactic ambiguity (such as example (7)) is much less frequent, but nonetheless attested as a humorous mechanism in all corpora. Alliterative jokes, i.e., jokes

that involve the unusually frequent repetition of sounds (such as example (9)), are much rarer than either lexical or syntactic ambiguity jokes.¹⁰ The categories are mutually exclusive. See Figure 2 below for the overall percentages.

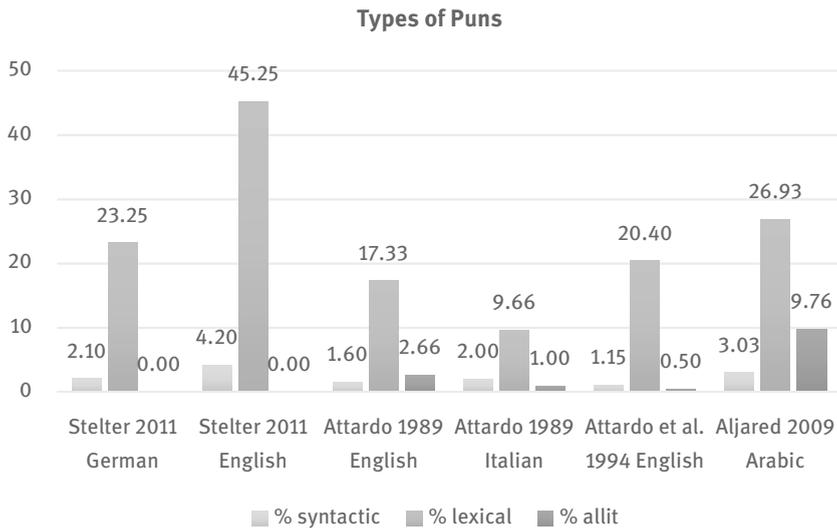


Fig. 2: A comparison of lexical ambiguity, syntactic ambiguity and alliterative jokes

What could motivate these preferences? One obvious answer is that humorous wordplay has, at least in Western culture, historically been looked upon as an inferior type of humor.¹¹ Hence, it may be simply that the collectors of jokes that appear in print prefer to avoid including too many verbal jokes for fear of appearing less sophisticated and thus lose marketability. Another potential explanation is that verbal humor requires more processing than referential humor and therefore a cost-benefit rationale would guide the choices of the anthologists: Given that a joke delivers amusement, why bother using verbal humor, which requires more processing effort and thus may turn off potential readers.

¹⁰ One of the anonymous referees suggests that the higher number of alliterative jokes in Arabic may be due to the tri-consonantal roots of the majority of words, with affixes being attached to this consonantal skeleton, which may facilitate the repetition of sounds.

¹¹ The negative attitude toward puns can be summarized by Victor Hugo's famous saying "Le calembour est la fiente de l'esprit qui vole" which compares it to a bird's excrement.

The relative scarcity of syntactic puns compared to lexical ambiguity is clearly due to processing costs: syntactic ambiguity is much harder to perceive and process than lexical ambiguity (MacKay and Bever 1967). It is unclear why alliterative wordplay would also be rare, as there does not seem to be any special cognitive load in processing it. Of course, another hypothesis, probably a null one, is that there simply are more referential jokes than verbal jokes and that therefore the joke collectors merely reflect the way the world is. Needless to say, this only pushes the question back one level: if that is the case, then why is the world that way?

5 Universals of resolution

We now turn to another aspect of puns and humorous wordplay, which is also universal. Namely, we will consider the resolution of the incongruity of puns. Puns have a built-in incongruity: A string activates two unrelated¹² meanings (scripts); by its very presence, the ambiguity between the two activated meanings generates an incongruity (i.e., the presence of two unrelated meanings in the same text string). However, as I pointed out already in Attardo (1994), puns do not consist of incongruity alone but must have a resolution aspect as well, or otherwise they would be indistinguishable from mere incongruous or ambiguous statements, such as the following:

(12) My amoeba thinks I am cool (incongruous)

(13) Flying planes can be dangerous (ambiguous)

(12) is incongruous, but not humorous. (13) is ambiguous and contains the same kinds of ambiguities observed in example (7) above, but is also not humorous.

Let me add that the term “resolution” (inherited from psychology) is unfortunate, as it seems to involve an actual removal of the incongruity, which is not the case: the resolution of the incongruity is partial, playful, or otherwise predicated on “local logic” (Ziv 1984; Hempelmann and Attardo 2011). The term “logical mechanism”, introduced for this aspect of jokes in the General Theory of Verbal Humor (Attardo and Raskin 1991), avoids this, but has the drawback of being semantically opaque. Aubouin’s (1948) term “justification” never caught on, despite being the most appropriate semantically, since what the resolution

¹² Raskin (1985) has “opposed” to be understood as “locally antonymous”.

consists of is a partial justification of the presence of the incongruity. Most importantly, the resolution of incongruity in humorous wordplay is non-eliminative, meaning that both senses remain available to the text, unlike in disambiguation, where the “losing” sense becomes suppressed.

Let us consider then a well-worn example:

(14) Why did the cookie cry? Because its mother was a wafer so long.

In (14) we have one signifier, the string [əweifər] and two signifieds, here represented by paraphrases in English orthography: a) “away for” and b) “a wafer”. The meanings are incongruous, since an entity cannot uniquely be both at a distance and a cookie simultaneously. An objection might be that an entity may both be a cookie and at a distance (a remote cookie, basically), however, the logical form of the proposition would be different: whereas (14) is $P(x)$, P represents either of the propositions “is a wafer” or “is away”, the logical form of the objection is $(P)x \ \& \ Q(x)$. These are obviously not the same sentences.

Coming now to the resolution, in puns it is provided by a folk-theory of language as a motivated sign (in which sounds correspond to meaning). Speakers assume that same (or similar) sounds should carry the same meanings and that therefore, if two strings sound the same, it is legitimate to bring together their two meanings. This folk-theory is known as Cratylism.¹³ Cratylism is the belief that the relationship between the signifier and the signified is motivated naturally; it is true, correct, and universal. Since Saussure’s (1916) rebuttal of Cratylism, scholars have a hard time taking Cratylistic beliefs seriously, but they remain deeply entrenched into folk-theory. In section 5.1 we will examine several strands of evidence that support the claim that speakers hold a Cratylistic view of language.

5.1 Evidence for a cratylistic view of language

In this section, we will review some of the evidence that speakers hold Cratylistic sound/sense relationship beliefs: the overall argument follows the one built in

13 Cratylus is a character in the eponymous Platonic dialogue, written in 360 BCE. Hermogenes, Cratylus’ opponent in the dialogue, thus summarizes Cratylus position with regard to Socrates: “Hermogenes. I should explain to you, Socrates, that our friend Cratylus has been arguing about names; he says that they are natural (φύσει) and not conventional; not a portion of the human voice which men agree to use; but that there is a truth (ὀρθότητά) or correctness in them, which is the same for Hellenes as for barbarians.” (<http://classics.mit.edu/Plato/cratylus.html>, accessed 30 July 2018).

more detail in Attardo (1994: 149–170) but updates the references to some extent. In particular, we will briefly review the following phenomena: pareymology, taboo words, folk linguistics, sound symbolism, iconicity, and sound-based lexical associations, which include, in order of relevance, rhyme, clang responses, glossolalia, and speech errors. The claim is not that these phenomena are humorous or even related to humor; rather, these phenomena are evidence that speakers hold a Cratylistic view of language.

5.1.1 Pareymology

Pareymology (also known as *Volksetymologie*, folk etymology, para-etymology, popular etymology, and synchronic etymology; see Paul 1880; Baldinger 1973, for example; a fuller set of references is provided in Attardo 1994: 154) defines derivational processes which consist of taking a lexical item, often in another language, and re-analyzing it according to sound/meaning patterns existing in the language, so in the following example:

(15) Ger. *Sauerkraut* → Fr. *choucroute*

The German word *Sauerkraut* (literally ‘sour-cabbage’) is re-analyzed according to French language patterns in *chou* (‘cabbage’) and *croute* (‘crust’).

Recent research on pareymology has occurred mostly in historical linguistics and includes Zuckermann (2003), Rundblad and Kronenfeld (2003), and Fertig (2013: 57–61). Zuckermann proposes to distinguish between Generative Popular Etymology, such as phono-semantic matching, i.e., the camouflaging of a borrowing with a pre-existent native word, as in the English borrowing of French *chaise-longue* (literally ‘long chair’) which is camouflaged with the lexical item *lounge*,

(16) Fr. *chaise-longue* → Eng. *chaise-lounge*

and Derivational-Only Popular Etymology, which only reinterprets pre-existing items. An example of only derivational reinterpretation is the Mandarin borrowing of English *hacker* as [heike] ‘black guest’ (Gao 2008: 373).

5.1.2 Taboo words

The phenomenon of taboo words refers to the reluctance of speakers to use a given word, for various reasons, such as respect, fear, or the desire not to convey or offend the bearer of the tabooed name.

A well-known example is the variability of the Indo-European root for ‘bear’ or ‘wolf’ due to tabooing: for example, the Indo-European root (**rktho-*) that gives *ursus* in Latin and *arktos* in Greek, is replaced in the Slavic languages, with a word derived from ‘honey’, and in the Germanic languages with a word derived from ‘brown’. This avoidance mechanism is born out of the magical fear that by naming an entity one is summoning it. Another example of tabooing is reported among the Faorese fishermen (Lockwood 1955) who, while at sea, used different words to indicate some fish and parts of their fishing equipment to ward off bad luck. More generally, on tabooing, see Allan and Burridge (2006).

5.1.3 Folk linguistics

Linguists call the beliefs that untrained native speakers have about languages “folk linguistics”. For example, consider the following quote from Benveniste (1966: 52).

For the speaker there is a complete identity of language and reality: the sign covers and commands reality; better still, it is reality (nomen omen, verbal taboos, magical power of the word, etc.).

Anderson (1998: 69–70) labels these “Cratyline folk-linguistics”. I should point out that Anderson quotes my own work in support of this idea as well, so obviously that introduces a circularity of argumentation.

5.1.4 Sound symbolism

Sound symbolism is the widespread belief that there is a connection between individual sounds or clusters of sounds and meaning. There has always been, within linguistics, despite Saussure’s (1916) exclusion of sound symbolism from the core of the linguistic system, a trend to associate sounds and meanings. Hinton, Nicholas and Ohala (1994) state that “sound symbolism plays a considerably larger role in language than scholarship has hitherto recognized” (Hinton, Nicholas and Ohala 1994: 1) and provide a good example of the kind of generaliza-

tions they mean: “segments such as palatal consonants and high vowels are frequently used for diminutive forms and other words representing small objects” (1994: 4). This is not the place to provide a review of the vast literature on sound symbolism. The references in Attardo (1994: 157) and Genette’s work (1995) provide a general overview.

5.1.5 Iconicity

The idea of iconicity is broader than sound symbolism, but closely related to it. The basic idea is that the sign bears some kind of relationship, not necessarily a sound-based one, with the reality it represents. Or, as Dingemanse et al. (2015) put it “aspects of form resemble aspects of meaning”.

An example of iconicity is the scalar progression in (17):

(17) Big [bɪg]; bigger [bɪgə]; biggest [bɪgɪst]

where we go from 3 phonemes, to 4 and then to 6, so that the growth of the signifier matches the “growth” of the meaning.¹⁴ Another example is the widely documented association between reduplication and repetition and /or distribution:

(18) goro: gorogoro, ‘one: multiple heavy objects rolling’ (Japanese)
 wūrūfū: wūrūfū-wūrūfū, ‘fluffy: fluffy here and there’ (Siwu)
 curuk-nu: curukcuruk-nu, ‘a sharp prick: many sharp pricks’ (Tamil)
 kpata: kpata kpata, ‘drop: scattered drops’ (Ewe)
 (Dingemanse et al. 2015: 606)

Besides the references provided in Attardo (1994: 158), recent work includes Fay, Ellison and Garrod (2014), Schmidtke, Conrad and Jacobs (2014), and the already mentioned Dingemanse et al. (2015).

5.1.6 Sound-based lexical associations

This section reviews the evidence for sound-based relations in the lexicon which have partially semantic values, in some cases.

14 One of the anonymous referees cleverly notes that “small-smaller-smallest” shows the same growth of the signifier with a blatant mismatch of the signified, which grows smaller. There is a reason why Saussure (1916) rejected Cratylism and iconicity: while they offer captivating local examples, they do not work system-wide.

- Rhyme

It is a well-known fact that rhyming has a semantic counterpart. The greater the semantic distance between rhyming words, the greater the effect. For example, a word does not rhyme with itself (e.g., “peach” does not rhyme with “peach”). Words that have very close meanings rhyme very weakly (e.g., Essex-Wessex, both regions in East England, have a very weak rhyme). On the contrary, rhyming widely different words has a strong effect (e.g., “potato” and “chateau”). In Attardo (1994: 161) I stated the argument thus: “Linking the forcefulness of rhyming effect to semantic distance implies that an inversely proportional relationship exists between sounds and senses and that, the closer the meaning of two words is, the less their rhyming potential.”

Rhyming has another effect that is semantic, but not related to lexical meaning. Rhyme has an asseverative effect, i.e., it reinforces the truth of what is being said. Interesting recent research has examined this phenomenon. McGlone and Tofighbakhsh (1999) investigated aphorisms and call this the “Keats’ heuristic”: “the aesthetic qualities of a message are equated with its truth” (McGlone and Tofighbakhsh 1999: 240). The phenomenon is not limited to aphorisms: “The rhyme-as-reason effect occurs not only in evaluation of existing aphorisms, but applies also to perception and evaluation of advertising slogans” (Filkuková and Klempe, 2013).

- Clang responses

In word association tasks, there is also a part, albeit a small one, of responses that are based on assonance. These are called “clang responses”. As Fitzpatrick (2013) notes “clang responses, [...] share phonological or orthographic features with the cue, but are otherwise not related”. Clang responses are closely related to rhyming phenomena: “Rhyming responses, assonance, responses with the same initial sounds as the stimulus, or a similar prominent consonant cluster are common types of clang associates” (Meara 2009: 13).

- Glossolalia

Under the broad label of “glossolalia”, I mean all phenomena which make use of sounds and syllables from languages known to the speaker to create a language “lookalike” which is devoid of meaning but is structured like a language phonologically. Phenomena like “speaking in tongues” are forms of glossolalia. Both phenomena exhibit frequent repetition, alliteration and assonance, which shows again that sound-based relations are used to “mimic” semantic ones (since the glossolalic utterances “appear” to be meaningful, i.e., are perceived as such by those who produce them). There is also a ludic aspect of glossolalia (for example, in its sounds-based repetitions) that has

been neglected given the different framing of the religious experience as meaningful and even mystical. Classical works on glossolalia include Samarin (1972), Goodman (1972), Courtine (1988a, 1988b), and recently Cartledge (2012).

– Speech errors

Speech errors are commonly used to investigate the underlying linguistic system (Fromkin 1973, 1980), even though the idea is not universally accepted (Meyer 1992). Recent work includes Shattuck-Hufnagel (1983, 1986), Berg (1997), Dell (2014), Nootboom and Quené (2015). Significantly, speech errors identify the same four phonological processes found in puns. Finally, it is worth noting that Aarons (2012) uses jokes to argue for the psycholinguistic reality of the system.

5.2 The argument on the cratylistic view of language

The review of the evidence for the psychological reality of the Cratylistic view of language, i.e., a view of language as a motivated, system, in which similarity of sound entails similarity of meaning, and vice-versa, should be convincing enough to show that naive speakers (i.e., those who have not been subjected to extensive training in linguistics) hold a fairly well-documented Cratylistic view of language. I must stress however that this does not mean that they are right. Science is not a democracy. The fact that something is psychologically real to the speakers at the metalinguistic level is not evidence of the correctness of that view. Language remains fundamentally arbitrary and non-motivated, even though speakers like to play with the idea that it may not be.

The Cratylistism of naive speakers is the source of the resolution of puns based on the identity or similarity of phonological, morphological, syntactical, and lexical forms. Because this inclination to Cratylistism is universal, then the Cratylistic resolution of the incongruity in puns is also a universal.

6 Conclusions

We can now conclude our brief review of the evidence on the universal nature of humorous wordplay. Puns and wordplay are universal, in the sense that they exploit universal structural features of language, as described by Guidi (2012a, 2012b). Humorous wordplay is also universal in the sense that the same mechanisms of incongruity/script opposition occur in all languages and likewise, the

Cratylistic pseudo-resolution of puns is also found in all languages. As for the trends observed in corpora of jokes, it is too early to say if they really are universal, but until further research can shed some light on the problem, we must be satisfied with saying that the evidence seems to be pointing in the direction of universality there as well.

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