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DIMENSIONS IN THE CONCEPTUAL INTEGRATION OF JOKES
or How a Dissertation Got Lost in Generic Space
Seminario para optar al grado de Licenciado en Lengua y Literatura
Inglesas

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Abstract

Conceptual Integration addresses the dynamicity of language as an interactive and situated phenomenon. This theory accounts for the productivity of new emergent structures in language. Taking into account that jokes are a prototypical discursive form which can be easily be differentiated intuitively, it is stated that jokes have not been properly differentiated from other linguistic structures, in the sense that their funny element has not been profiled in Blending Theory. This dissertation proposes a new conceptual schema in order to provide a novel model which includes funniness in jokes. Henceforth, this work hypothesizes the presence of a second generic space in jokes, which categorizes a non-entrenched feature which works as the basis of the humorous quality of jokes. In the attempt to properly test this novel schema, 30 jokes were analyzed following Conceptual Blending theory, with the addition of the new generic space. After the specific analysis of each joke, the success of the schema was measured with quantitative analysis. The results showed that for all the jokes from the sample presented a proposed Ad hoc Generic Space and a Conceptual one, that seem to support the hypothesis of its duality. Furthermore, a Blended Space was achieved via mappings of inputs for every joke and non-humorous blends using the same inputs could be constructed only for the jokes labelled as verbal.

Key words: Conceptual Blending Theory, Conceptual Integration, Isotopy-Disjunction Model, Humor, Jokes, Cognitive Linguistics

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1. Introduction

Conceptual Integration has been a widely discussed topic among researchers in the area of Cognitive Linguistics in the last decades. Particularly, the phenomenon of jokes in society finds its own place among the general area of interest in linguistics. Attardo carried out a research with a corpus of 2000 jokes, posing the *Isotopy-Disjunction Model* (1994), in which he draws a line between referential and verbal jokes, plus the identification of the elements “connector” and “disjunctor” within their structure. These works, although consistent and theoretically plausible, fail to account for the cognitive underpinnings of jokes.

Within the area of Cognitive Linguistics, Fauconnier and Turner, extending their theory of *Mental Spaces*, have presented their *Conceptual Integration Model* or *Conceptual Blending* theory (2002). According to this theory, meaning arises from the construction of mental spaces and mappings between them, creating relations that are relevant to the context of texts. Specifically, regarding the study of jokes, Vivian Cook carried out a study in which jokes were analyzed under Fauconnier’s terms. In his study, he understands that jokes, as well as metaphors and other linguistic structures, must be analysed in terms of Blending theory, since it is the theory that most thoroughly describes the cognitive processes involved in language.

Nevertheless, this work acknowledges the fact that the Conceptual Integration Model does not deliver a distinctive feature which makes jokes a special construction, considering that, intuitively speaking, they can be easily differentiated from other constructions. While the Conceptual Blending Theory does provide an insight on the

processing of concepts in our minds, it does not address the fact that jokes involve an extra process of integration, such as the resolving of an incongruity (Brône, G., Feyaerts, K., & Veale, T. 2015).

Considering the information above, this work proposes that jokes need a special type of Blending model in order to achieve a complete view of what jokes —as unique entities— imply in conceptual terms. This new model attempts to address those elements in a joke that make them special, and which are not necessarily mentioned in previous works. We hypothesize that what triggers the humorous effect in jokes specifically is that their linear structure purposefully profiles or foregrounds a non-entrenched or conceptually incongruent mapping between features from two inputs, forcing an ad-hoc generic space to emerge. At the same time, the joke's structure also allows conceptually feasible mappings between the two inputs, which emerge in a Conceptual Generic Space that corresponds in nature to Fauconnier's Generic Space. While the presence of the Conceptual Generic Space allows the joke to make sense to the hearer/reader as a narration, the Ad-Hoc Generic Space creates a structured ambiguity in meaning that can only be plausible in the context of the joke.

The results obtained from this study support the hypothesized existence of a duality in the Generic Space for jokes. Blended Spaces were obtained for every joke analysis and, while non-humorous blends built up from the same frames that the joke sanctioned were achieved only for the jokes that can be catalogued as verbal according to Attardo's conceptualizations. This may imply that what distinguishes non-humorous blends from the humorous ones is the highlighting of the Ad hoc Generic Space as a space in which non-entrenched, temporal relations are mapped.

This paper is designed as follows. After the introduction, a review of the literature is presented in which topics associated to the research topic are explained. Secondly, a theoretical framework is provided for the presentation of the terminology being used. Subsequently, the hypothesis and objectives are introduced. Afterwards, the methodology section is developed for a step by step guidance of the procedures performed in this work. Later, the analysis of the jokes with their respective schemas are displayed, followed by the quantification of the elements hypothesized. Finally, proper conclusions are drawn from the quantification.

2. Literature Review

2.1 The Symbolic Thesis: Formal Models and Semanticity in Cognitive Linguistics

The Cognitive Approach to the study of language has taken into account previous linguistics studies to the development of its theories. Within the formal models that this approach has considered, the linguistic theory of Ferdinand de Saussure has had a significant impact in its development. From this theory, Cognitive Linguistics (CL) has taken the stance that language is symbolic in nature. This is reflected in the *symbolic thesis* adopted by Cognitive Grammar. The aim of this section is to define the symbolic thesis addressing the formal model proposed by Saussure, to explore semanticity in CL, and to analyze the implications of conceiving language as a symbolic system.

The symbolic thesis is a guiding principle of Cognitive approaches to Grammar and can be seen as a natural development of Saussure's conception of the linguistics sign. Saussure stated that language is a symbolic system, and that the primary object of linguistic enquiry should be the linguistic sign (Taylor, 2002, p. 39). Saussure defined the linguistic sign as an entity composed of two elements; a Signified (a concept), and a

Signifier (an acoustic image) (op.cit.). Both are mental representations linked conventionally to form the linguistic sign. The symbolic thesis on its part holds that the fundamental unit of Grammar is a linguistic unit called *symbolic assembly* or construction (the name depends on the Cognitive approach to Grammar). This unit, like Saussure's sign, consists of two poles; a semantic pole (its meaning) and a phonological pole (its form) (Taylor, 2002, p. 39-41). Both are linked conventionally to form a symbolic assembly or construction (op. cit.).

Regarding the usefulness of this thesis, Evans states: "By adopting the symbolic thesis, cognitive approaches to grammar are not restricted to investigating aspects of grammatical structure independently of meaning, as is often the case in formal linguistics. Instead, cognitive approaches to grammar encompass the entire inventory of linguistic units defined as form-meaning pairings" (2007, p. 208).

Semanticity, as explained by Hockett, points to the intentionality of a sign (1960, p. 6). This characteristic is what differentiates a symbol from other types of signs such as icons, or indexes. When we interact with other people using language, we basically use a set of symbols to convey our thoughts and ideas. So, if a speaker sees fire in a crowded place and utters the word *fire!* for people to become aware of it, that sign exhibits semanticity, i.e., a concept associated conventionally with a phonological form and used with the intention of conveying that concept. On the contrary, if a parrot or a tape recorder produce the same word, this lacks intention. Hence, a sign is symbolic and exhibits semanticity only if it is produced with the intention of symbolizing a concept.

When we talk about a language being a system of signs, we basically talk about a language being a system of symbols. This does not mean that language cannot exhibit iconic or indexical features. For example, units such as *splash* or *U-turn* exhibit iconic features in that their form resemble their meaning. Likewise, if a person that we know starts speaking with a hoarse voice from one day to the next, we may infer that the cause of that is a flu. This is a case of index. However, if the person deliberately fakes his voice to convey the conceptual content of being sick to achieve a purpose such as not going to work, this exhibits symbolic rather than indexical characteristics due to the intentions of the speaker.

It has been stated that symbolic assemblies are a union of form (Saussure signifier) and meaning (Saussure's signified), characterized by carrying a communicative intention (that is, they exhibit semanticity). In regular communication, speakers take symbolic assemblies as units. However, there can be cases where it serves the purpose of the speaker's communicative intentions to create the effect of an artificial separation of a linguistic symbol's form (be it the sound image or the standardized spelling if the word) from its lexical concept, by highlighting each separately (Giora, Fein, Kotler & Shuval, 2003). This is the case with puns. The purpose of a pun is not to communicate one meaning by one form, but to take advantage of a speaker's knowledge of symbols that have a similar form within the system to make two meanings salient in just one form (op. cit.). This is possible by inserting one symbol in a context that can facilitate the speaker's recollection of a symbol that has a similar form, even if that second symbol has not been given in explicitly in the context (op. cit.). This artificial act of separating the form and meaning

of a symbol to create more meaning is not necessarily done for a comical effect, (though it certainly can, as will be extensively discussed later); an example is the 2006 Tel Aviv street art intervention in which a street was filled with rubble to symbolize the destruction of war, and a sign reading Know Hope was displayed (Giora, Fein, Kotler & Shuval, 2003, p.133). Readers would recognize the meanings *no hope* and *know hope* in the form 'know hope', because the context made the symbol for 'no hope' salient in their minds, even though it was not explicitly given.

This section has discussed how the symbolic thesis of CL has its roots in a formal model, the one postulated by Ferdinand de Saussure. Both CL and Saussurean linguistics have in common the conception of language as a symbolic system and the assumption that the linguistic sign (for Saussure) and the symbolic assembly or construction (for Cognitive approaches to Grammar) play a fundamental role in the analysis and description of language. The distinction was made between different kinds of signs such as icons, indexes, and symbols, and the latter was identified as the predominant element in a linguistics system.

2.2 The Origins of Cognitive Linguistics: Mind and Body Union

CL is an approach to the study of language set within the larger, interdisciplinary field of Cognitive Science. It sprung from a dissatisfaction with the shortcomings of the formalist approaches to language (such as Generativism) on the one hand, and the emergence of modern cognitive science and work related to human categorization on the other (Evans, Green, 2006, p.3). Various linguistic theories comprise CL, all rooted in and guided by a set of cognitivist assumptions and methodological commitments that acknowledge the importance of the human mind, body and environment, and the

interactions between them, in the study of human language. The present section examines the origins and main characteristics of Cognitive Science in order to illustrate the roots of CL, and briefly introduces the primary theoretical assumptions and methodological tenets that inform CL theories: embodied cognition and the generalization and cognitive commitments. It is based on this framework that CL can be said to theoretically unite mind and body in an approach to language. This is explained in the following paragraphs.

The origins of Cognitive Science can be traced back to the 50's, when researchers in artificial intelligence, psychology, and linguistics –notably Noam Chomsky in the latter– began to reject the behaviorist assumptions that had dominated inquiry in their fields since the early 20th century (Thagard, 2014). Instead of studying human behavior (including language) as mere responses to stimuli, as had been the practice at the time, authors began to argue in favor of assumptions that admitted the existence of inner, mental states. The theories that were built on these assumptions reflected a conception of mind called computer functionalism: mind as a digital computer program (software) running on a computer-like brain (hardware) (Searle, 2004, p.65). Mental states were equated to computational states of the brain (op. cit.) that had a specific function in the overall behavior of an organism (Searle, 2004, p.62). In this decade, researchers put forth the first theories of mind “based on complex representations and computational procedures” (Thagard, 2014), which were meant to represent what is happening in our brains when we think or act. By the 70's, Cognitive Science was officially constituted as a multidisciplinary field that combined research

findings in psychology, neuroscience, artificial intelligence, philosophy, anthropology and linguistics to pursue the empirical study of mind and intelligence (op. cit.).

Most contemporary branches of Cognitive Science, however, look very different than they did forty years ago, since computer functionalism and materialism in general have encountered much harsh criticism along the decades (see Searle, 2004, p.83-106). On the one hand, detractors point out these movements void (or at best ignore) some essential, irreducible features of the mind — consciousness, intentionality, and its first-person subjective quality (Searle, 2004, p.83). On the other, evidence found over the years by researchers in Cognitive Science disciplines points to the fact that all human cognitive abilities, including language, are possible through the same kind of cognitive processes and share the same neural basis (Harris 2006). That is, the brain does not work like hardware that runs separate, independent software programs for different functions, but more like a dynamic network, which encompasses all human cognitive abilities (Harris, 2006). As a direct consequence, most researchers in Cognitive Science today seek to produce a theory of cognition with the representational power necessary to encompass all human cognitive abilities (Harris, 2006). The field of CL echoes this belief in its *Cognitive Commitment* and *Generalization Commitment*, notions coined and defined by George Lakoff in his 1990 article “The Invariance Hypothesis: is abstract reason based on image-schemas?”, featured in the first ever issue of *Cognitive Linguistics*.

i) The Cognitive Commitment says that linguistic structure (and a descriptive theory of it) should reflect general cognitive principles discovered by other Cognitive

Science disciplines, rather than cognitive principles that are specific to language (Evans, Green, 2006, p.40-1).

ii) The Generalization Commitment says that, just as the brain is not compartmentalized into different functions, the faculty of language itself is not compartmentalized either; “there are common structuring principles that hold across different aspects of language” (Evans and Green, 2006, p.28). For a more extensive discussion of this commitment, see section 3 of the literature review (‘Generalization Commitment’).

In adopting these theoretical guidelines, CL unites human language with the human mind, as a dynamic whole. However, another step was taken in order to unite language and mind with the human body. Here, it is relevant to note that CL today departs from the rationalist approach that some branches of other Cognitive Science disciplines still embrace. Rationalism is the belief that we can study cognition (and therefore language) as a formal system, attending only to mental phenomena and/or the brain, without recourse to the human body or the environment it exists in (Evans, Green, 2006, p.44). In linguistics, this camp is represented by formalist authors such as Noam Chomsky and Richard Montague. On the opposite side, there are empiricist traditions in psychology and philosophy that emphasize the centrality of the human body and human-specific cognitive structure in the configuration of the human experience (op. cit.). It is drawing from these traditions that CL departs from the rationalist assumptions of other Cognitive Science theorists to include the idea of embodiment in a theory of cognition and language (Evans & Green, 2006, p.21, 44). *Embodied experience* is the idea that we have a species-specific way of experiencing

the world due to our specific genetic configuration (Evans, Green, 2006, p.45). This in turn entails *embodied cognition*, the idea that the nature of our human bodies and neurological system and the way they interact with the rest of the physical world constrain and structure our cognitive capacities, including language (Evans, Green, 2006, p.46). Further theoretical implications of these assumption are discussed in section 2.5 ‘Universality and Linguistic variation: Metaphorical creativity in discourse’.

Thus, the key characteristic that unites diverse linguistic theories under the CL umbrella is that they are rooted in and guided by a set of assumptions and methodological commitments which are in the vein of contemporary Cognitive Science and decidedly contrary to those that inform formalist linguistic programs like Generativism (Evans and Green, 2016, p.3). Against this backdrop, we can understand CL as an enterprise that fills a gap overlooked by computer functionalism and rationalism. Cognitive Science in general, and CL as a part of it, unites mind and language in the assumption of cognitive generalization, which for linguistics specifically means that patterns found in language reflect patterns in cognitive structure. Cognitive linguists later found that patterns in language also reflect features of our bodies and the way they interact with the world, and thus the field united body with language in the tenet of embodiment. The following section discusses the Generalization Commitment at length.

2.3 Generalization Commitment

As mentioned in the previous section, Lakoff (1990) proposed that two key methodological commitments, the Cognitive Commitment and the Generalization

Commitment, characterize CL. The first commitment encourages CL to find principles of linguistic organization that are not novel or specific to language, but rather, that have been proven by general cognitive research to be present across all of human cognition (Evans and Green, 2006, p. 27). This commitment has to do with the concept of embodied cognition (see section 1). The second commitment indicates that there are principles that offer language structure across its ‘distinct areas’, as formal approaches would have it (Evans and Green, 2006, p. 28). Evans and Green give an account of three “structuring principles” — Categorization, Metaphor and Polysemy — that provide linguistic structure in syntax, phonology and lexicon. To this list, Taylor (1995) adds intonation and morphology. The following discussion is mainly related to the generalization of Categorization and Polysemy in language.

Findings in cognitive psychology have revealed that human categories are fuzzy in nature, rather than criteria; i.e. the characterization and membership of any given category is not set in stone, but will depend on the way we interact with it and with the entities proposed to belong to it (Evans and Green, 2006, p. 29). A consequence of this is the phenomenon of *family resemblance* (Evans and Green, 2006), a feature exhibited by categories whose members can be said to be more or less central or representative of it, i. e., the most “x” member of the category “x”. Fuzziness in categorization is a good example of a structuring feature that is generalized across language, since it is common to linguistic categories found in syntax, morphology and phonology, besides being a feature of the way, we subconsciously categorize the world as we perceive it around us (Evans and Green, 2006, p. 29). The way in which humans categorize colors is an example of fuzzy categorization.

In the first chapter of his book *Linguistic Categorization*, Taylor (1995) roughly states that the categorization of colors is neither arbitrary nor constrained by language, and that color terms do not form a color system in the Saussurean sense, as Formal Linguistics once suggested. Instead, informed by the research of linguistic anthropologists Berlin and Kay, he understands color and its categorization as influenced by human perception and environmental factors. Color categories denote focal colors primarily, and they acquire their full denotational range by generalizing this focal color onto other exemplars, which may be more or less similar to the central exemplar (Taylor, 1995, p.15). That is, the word ‘red’ denotes a specific shade of red as its best exemplar. Other shades of red will also fall under the ‘red’ category, but will not be considered “as red as” the focal red. Thus, categorization of color is fuzzy in the sense that, as Evans and Green suggest, “some members of a category seem to be more central than others” (2006, p.29). Taylor (1995) says the categorization of colors is neither arbitrary nor constrained by language because, in studies, subjects’ selection of the focal point of a color category was independent of their language. Another example of fuzziness given by Evans and Green concerns a set of objects that could potentially be called cups – a teacup, a mug, a bowl with a handle, a bowl without one, a goblet – of which some are more cup-like than others (2006, p.29). These examples illustrate how the shape and boundaries of categories are not very clear. Fuzziness is not only found in our categorization of objects; we also find fuzzy categories in language itself, as it will be discussed in the next two subsections.

CL researchers claim polysemy is a “fundamental feature of human language”, common to areas such as lexicon, morphology, syntax (Evans and Green, 2006, p.36).

There is polysemy when a word has various related senses, monosemy when a word has just one sense, and homonymy when a single word has various yet unrelated senses. According to Taylor, however, when considering some particular cases, the distinctions between polysemy/monosemy and polysemy/homonymy do not seem so clear cut, i.e., the distinctions are fuzzy. For instance, the difference between an adoptive *mother* and a biological one. One could argue that in this case the word *mother* is polysemous because both senses of mother just belong to the same linguistic form. On the other hand, it could also be argued that these correspond to different exemplars of the same sense (Taylor 1995 p.100), and therefore *mother* would be monosemous.

Moreover, polysemy and homonymy can also have fuzzy distinctions. Considering Taylor's example, *eye*, *the organ of sight* and *the eye of the needle*. These meanings may not seem related at first, but acknowledging that "the relatedness of meaning is both a gradient and a subjective notion" (Taylor, 1995, p. 103), the argument could be made that they actually are related; the eye of a needle has a similar form to an animal eye, and that it seems plausible that *eye of the needle* would come from the concept of *the eye*.

Taylor suggests that words' senses are related through meaning chains (1995, p.108), and that this implies some distance between senses. In other words, meaning relations are stronger among "adjacent" members. Now, considering Taylor's notion of meaning relatedness being subjective, it seems the very categorization of specific senses as adjacent to other specific senses would in itself entail fuzziness.

The gradual and subjective relations, similarities, distances, and fuzzy boundaries between units of language across the lexicon, morphology and syntax, can potentially be backgrounded or highlighted to achieve different stylistic effects, including comical ones (Giora, Fein, Kotler & Shuval, 2003). This point will become relevant in the theoretical framework of this thesis.

The Generalization Commitment provides a glimpse into the dynamicity of language; language does not rely solely upon entrenched, stable relations, but it actually gives access to new singularities, such as new categorizations for “old” concepts, as mentioned in the examples above. This serves as a basis for Fauconnier’s Blending Theory (1994), which accounts for the potential emergence of new concepts in language.

2.4 Literalness and Metaphoricity: Traditional view and Cognitive Linguistics

In linguistics, as well as in philosophy and rhetoric, there is a traditional view that makes a clear-cut distinction between literal language and nonliteral (also called rhetorical or figurative) language (Evans & Green, 2006, p.287). This traditional stance holds that the first is objective, context-independent (or truth-conditional), non-metaphorical and used in everyday speech, while the latter is subjective, context-dependent, relies on rhetorical devices such as metaphor and corresponds largely to literary use (op. cit.). However, research in CL has found no evidence to support that a clear distinction between literal and non-literal language can be made based on these (or possibly any) criteria (op. cit.).

One important finding is that, contrary to the traditional notion of what characterizes conventional language, it does in fact rely heavily on metaphor. The

metaphor we find in conventional speech does not usually exhibit the Aristotelian A is B explicitly in its form (Evans & Green, 2006, p.290), as in, *happiness is a warm gun*. Nonetheless, language that explains one kind of thing in terms of another – for example, nonphysical entities in terms of physical ones – is in fact metaphorical language (Lakoff & Johnson, 1980, p.5). For example, it is normal for people to speak of states in terms of physical locations, as in (1), or in terms of a change in location, as in (2):

1. He was *in* a state of shock after the election result.
2. The economy *is going from* bad to worse.

(Evans & Green, 2006, p.289)

Another frequent use of metaphor in conventional speech is to talk about time in terms of motion or space, as in (3) and (4), and (5) respectively:

3. Christmas is *approaching*.
4. We're *moving towards* Christmas.
5. Christmas is not very *far away*.

(Evans & Green, 2006, p. 291)

Apart from metaphor, Lakoff and Johnson (1980) also mention metonymy as an important structuring principle of language. Metonymy is understood as a kind of referential shift, in which we name one entity to refer to another that is related to it by contiguity or proximity, as in the following examples:

13. He likes to read the *Marquis de Sade*. (= the writings of the marquis)
14. He's *in dance*. (= the dancing profession)
15. *Acrylic* has taken over the art world. (= the use of acrylic paint)

16. The *Times* hasn't arrived at the press conference yet. (= the reporter from the *Times*)

17. Mrs. Grundy frowns on *blue jeans*. (= the wearing of blue jeans)

18. *New windshield wipers* will satisfy him. (= the state of having new wipers)

(Lakoff & Johnson, 1980, p. 4)

Metaphor and metonymy are different processes; through metaphors we conceive one entity in terms of another that belongs to a different domain, while in metonymy one entity stands for another within the same domain (Lakoff and Turner as cited in Evans, & Green, 2006, p. 312). Metaphors exhibit a conceptual structure of the kind A is B, where A is called the *target* and B the *source*, while metonymy has the form of B for A, where B is the *vehicle* and A is the *target*. The topic of target and source in metaphor is revisited in section 'Jokes, Metaphor and Blending'.

Metaphor and metonymy are similar in the sense that neither of them is an arbitrary occurrence in speech, but rather systematic; they are "instances of concepts in terms of which we organize our thoughts and actions" (Lakoff & Johnson, 1980, p.39). Both are theorized to be grounded in bodily experience (Lakoff & Johnson, 1980). For CL, metaphor and metonymy are "fundamental to the structure of the conceptual system rather than superficial linguistic devices" (Evans, & Green, 2006, p.293). In fact, Lakoff and Johnson argue that "human thought processes are largely metaphorical" (1980, p.6) and that "the human conceptual system is metaphorically structured and defined" (op.cit.). Not only do we speak of entities in terms of other entities, but we actually think in this way, and even partially structure our actions

following other events' structures (Lakoff & Johnson, 1980, p.7). This is the main premise of *Conceptual Metaphor Theory*, introduced by Lakoff and Johnson in 1980.

A tenet of Conceptual Metaphor Theory is that metaphors are unidirectional. This means that metaphors map structure from a source to a target domain, but not vice versa. For example, we can understand the metaphor *love is a journey*, but no metaphor exploits the connection the other way around, namely JOURNEYS are LOVE. The implications of this constraint over linguistic creativity are discussed in the section 'Where does linguistic creativity come from? The intricacies of an extraordinary process' in Section 2.7.

Targets and sources are commonly drawn from some domains more than others. In a 2002 survey, Kövecses (as cited in Evans & Green, 2006, p.297) found that domains related to the human body, animals, plants, food and forces most typically function as sources for metaphors. On the other hand, the most common target domains are related to emotion, morality, thought, human relationships and time.

Until the mid-1990s, the dominant belief was that target domains were usually more difficult to talk about in their own terms because they are abstract and lack physical characteristics. Source domains, on the other hand, are more concrete and therefore, more "graspable". Lakoff and Johnson (as cited in Evans, & Green, 2006, p.300) later argued that image schemas could serve as source domains for metaphoric mapping. Image schemas are structures that emerge directly from pre-conceptual embodied experience. "These structures are meaningful at the conceptual level precisely because they derive from the level of bodily experience, which is directly meaningful" (Evans, & Green, 2006, p.302). Therefore, source domains were no longer

only associated to more unambiguous areas like the ones Kövecses mentioned in his survey cited above, they could also be more abstract concepts which can be structured with the help of image schemas. This gives rise to the theory of Conceptual Metaphor Theory: abstract concepts can, at least in part, be traced back to image schemas.

To summarize, according to the traditional view, there is a sharp distinction between literal and non-literal language. However, CL argues that this distinction is not realistic, since figurative language in the classical sense is also part of the way we think and talk in everyday contexts. Both metaphors and metonymy are not merely rhetoric resources, but rather they reflect the systematicity of human thought processes, which are largely metaphorical. Thus, phenomena like metaphor and metonymy are possible because the human conceptual system is metaphorically structured and defined.

A question can be raised here about other forms of (what is traditionally thought of as) figurative language, besides metaphor and metonymy, that are part of everyday speech. How can, for instance, processes like hyperbole, zeugma, irony and wordplay, and the entrenched discursive forms that rely on them – like, for example, jokes – be accounted for from the standpoint of CL? Do the workings of these other processes also exhibit constraints related to directionality and cross-domain mappings? This question is addressed, specifically in regard to jokes as a discursive form that relies on conceptual processes like metaphor and others, in section 3.1 ‘Are jokes metaphors? Source, target and directionality’.

2.5 Universality and Linguistic variation: Metaphorical creativity in discourse

In section 3.2 ‘The Origins of Cognitive Linguistics: Mind and Body Union’, CL’s rejection of rationalist assumptions was introduced. Rationalism, as discussed

earlier, is the philosophical belief that underlies formalist endeavors in linguistics, like Generativism, and it implies that language can be studied as a formal system, without insight into embodied experience. For the generativist framework, this meant that a speaker's knowledge of their language – or *competence* – should be studied separately from their use of language – or *performance* (Evans & Green, 2006, p.108). Generativist theorists also believe that innate, hardwired linguistic universals grammatically constrain human languages and language learning, and that this would account for infants' ability to acquire knowledge of the standard grammar of a language from the relatively poor quality of input they receive from adult speakers (Toppelberg, Collins & Martin, 2004). Because CL theorists believe that the faculty of language cannot be studied as something that happens strictly within the mind, but rather that it should be studied as an embodied phenomenon in interaction with the world, the generativist assumptions mentioned are replaced in CL by the assumption that “knowledge of language is derived from patterns of language use (and) knowledge of language is knowledge of how language is used” (Evans & Green, 2006, p.108). These are the ideas that inform Tomasello's usage-based theory of language (op.cit.).

The usage-based thesis proposes that there *are* some language universals (such as nouns and verbs as expressions of reference and predication), but these arise from general “human cognition universals of communicative needs and vocal-auditory processing” (Tomasello, as cited in Toppelberg, Collins & Martin, 2004), not from a generativist Language Acquisition Device. Specifically, humans possess two cognitive skills (that are not exclusive to the faculty of language), that enable us to acquire and produce language: intention-reading and pattern-finding (op.cit.).

Usage-based theory also defines an *utterance*, as “a situated instance of language use which is culturally and contextually embedded (...)” (Evans & Green, 2006, p.110). The notion of *context* is crucial to that of utterance, since, for CL, the context of an element is embedded in can affect its *coded meaning* (Evans & Green, 2006, p.112). An element’s coded meaning is its idealized meaning, a generalization that arises from the prototypical sense it takes across utterances (op.cit.). An element’s coded meaning can be affected by the presence of the other elements in the utterance that holds them (this is called *utterance context*) or by the background knowledge against which the utterance is understood (Evans & Green, 2006, p.113). The meaning an element takes against its context is called the *pragmatic meaning*, and this can differ from the element’s coded meaning (op.cit.). Because any utterance or part of it is always embedded in a context, pragmatic meaning is, in a sense, an utterance’s ‘real’ meaning (op.cit.). The fact that meaning in language is, to a degree, always dependent on context, is what accounts for *ambiguity* in language (Evans & Green, 2006, p.113).

Furthermore, Kövecses (2010) explains that creativity in discourse can be based on metaphor. He distinguished creativity based on the source domain and on the target domain (2010, p.289). Notwithstanding, he suggests another form of metaphorical creativity in discourse, called “context-induced” creativity, where the emergence of a particular metaphorical expression is due to the influence of some aspect of discourse (2010, p.292). He indicates five factors that seem to produce unconventional and novel metaphors; the immediate linguistic context itself, what we know about the major entities participating in the discourse, physical setting, social setting, and the immediate cultural context (op. cit.).

The usage-based notions discussed here are relevant because they account for linguistic creativity. The fact that language acquisition involves an impressive amount of learning and abstracting both coded and pragmatic meanings from utterances we hear around us, and that novel contexts can yield ambiguity in meaning, can account for the emergence of novel and even intentionally incongruent or ad hoc meanings in discourse. The power that utterances have to allow speakers to create novel or non-coded meanings stems from the fact that all units in language are only prompts for meanings construction, not discrete bundles of coded meaning. This notion is discussed in the next section, 2.6 ‘Language as an Access Point’. The topic of linguistics creativity and its links with metaphor, on the other hand, is revisited in section 2.7 ‘Where does linguistic creativity come from? The intricacies of an extraordinary process’

2.6 Language as an Access Point

The previous section discusses how a unit’s coded or idealized meaning is not the full extent of its meaning. The presence of other units in an utterance, and the nature of the pragmatic context in which the communicative event is embedded, can affect the meaning of a unit. From this, it follows that units (like words, phrases, sentences) cannot be linked exclusively to one coded meaning (Evans & Green, 2006, p.206). Rather, units are linked to a vast repertoire of *encyclopedic knowledge* (*Ibid.*, p.206).

Encyclopedic knowledge encompasses both word meaning – or what has been called *dictionary knowledge* by formal linguists – and extra-linguistic knowledge (Evans & Green, 2006). Linguistic meaning is utterly dependent on this type of

knowledge, which is based on speakers' daily interaction with other speakers and the world (*Ibid.*, p.207).

For CL, language underspecifies conceptual structure, i.e., it underspecifies knowledge representations, including the structure and organization of concepts (Evans & Green, 2006, p.159). The concepts that can be encoded in language are called lexical concepts (*Ibid.*, p.180). Lexical concepts are only a subset of all the concepts a speaker can know. This means that there are more concepts than there are words to refer to them. Lexical concepts are susceptible to externalization as lexical forms (*Ibid.*, p.159).

Because strict definitions fail to capture the full range of meaning associated to any given lexical concept, CL opts for an encyclopedic view of word meaning and semantic structure (Evans & Green, 2006, p.160). Linguistic units do have conventional meanings associated to them, but they are not primarily discrete bundles of meaning, but rather points of access to repositories of knowledge relating to a domain, that allow users to understand words in context (*Ibid.* p. 214). Lexical concepts are prompts for speakers to build or recall conceptual structures; they provide access to extensive networks of encyclopedic knowledge (*Ibid.* p. 221).

There are two main theories that model the structure of encyclopedic knowledge: Fillmore's Frame Semantics approach and the theory of domains developed by Langacker (*Ibid.*, p. 206).

The Frame Semantics approach tells us that the meaning of words and grammatical structures in general are evaluated on the basis of frames (*Ibid.* p. 222). Semantic frames are schematizations of experiences that are stored in the long-term memory at a conceptual level. They are permanently being updated and are useful for

drawing inferences (*Ibid.* p. 222). Fillmore resorts to the notions of *figure* and *ground* for explaining frames; the first as the specific lexical concept referred to and the latter to the background frame through which the lexical concept can be understood.

How do these frames work? Lakoff (2008) gives the example of the frame HOSPITAL. “We think of doctors, surgeons, patients, nurses, receptionists. Of instruments like scalpels, of places like operating rooms and of what happens there: surgeons operate on patients with scalpels in operating rooms. But what if one walks into the hospital, they held you a scalpel and they say: you are operating on this doctor, this interaction does not fit the frame”. From this example, it can be gathered that semantic frames provide us with structured organized information. This information is what allows us to understand words or sets of words. Therefore, these words behave as ‘access points’ to the information organized within the frame.

Frames like the COMMERCIAL EVENT frame (*Ibid.*, p. 225) present a number of participant roles that are going to be determined by the valence of the verbs. The valence refers to arguments that the verb requires and the semantic roles that these arguments are going to take. Buyers, sellers, money, and goods are some of the arguments that constitute this frame. Consequently, verbs within this frame like ‘buy’ and ‘pay’ require different numbers of arguments. ‘Buy’ point to the relation between the BUYER and the GOODS, while ‘pay’ relates the BUYER and the SELLER. This can be attested in sentences like the following:

- a. I bought a new scarf from that woman
- b. I’m paying the delivery boy right now

Both sentences fit the frame by being adequate to the valence and every lexical concept has its meaning within the frame (*Ibid.*, p. 227). It cannot be said the same about the next two:

- a. I'm buying the delivery boy right now
- b. I paid a new scarf

In these cases, the expressions that take the semantic roles of the frame are not properly distributed, thus, they do not fit the frame and cannot be figured out.

According to Evans and Green (2006), if we consider Frames as systems of knowledge representation, these provides an *Event-sequence Potential*. This means that, by choosing one verb, we are profiling a particular route that connects the arguments and in which there are aspects that are mandatory, and some others are optional (*Ibid.*, p. 227). In the cases in which optional elements are obviated we can grasp their presence because of the knowledge supplied by the frame. Frames, as presented in the above examples, are quite useful in accounting for the connection between knowledge and language use (*Ibid.*, p. 228).

Linking the concept of Event-sequence Potential to jokes, what these do is under specify specific aspects of the frames blend, so that it generates a semantic potential beyond what is profiled.

The second theory discussed here is the Theory of Domains. According to it, basic domains and abstract domains constitute encyclopedic knowledge (*Ibid.*, p. 230). Similar to the way that frames function, this theory claims that lexical concepts cannot be understood without knowledge structures called domains. Domains are, in words of Langacker (in Evans & Green, 2006), cognitive entities: mental experiences,

representational spaces, concepts or conceptual complexes. The only requirement that this knowledge structures have to fulfil is being able to provide information useful for the interpretation of a lexical concept.

In this theory, concepts are understood to be build up by means of multiple domains. The extent of domains that structure one concept is called domain matrix (*Ibid.*, p. 231). For instance, the knowledge associated with a word such as *apple* may cover a wide range of domains like PHYSICAL OBJECT, SPACE if we recall its prototypical shape and size, and TIME related with its origin and duration. Basic domains such as SPACE, TIME, COLOR, TEMPERATURE, PRESSURE, PITCH, EMOTION and PAIN are the foundations for abstract domains (*Ibid.*, p. 234). An important feature about domains is that they hold hierarchical relations. Therefore, one lexical concept can belong to one domain while belonging to a superordinate one at the same time. Basic domains are at the bottom of the hierarchy because they are pre-conceptual, deriving directly from the experience (*Ibid.*, p. 233).

Within repertoire of knowledge that is accessed through the use of words, not all the pieces of information present bear equal relevance for the understanding of a lexical concept (*Ibid.*, p. 237). We can still use the word *whale* without being aware of its mammal status. The example given by Evans and Green (2006) is the word 'hypotenuse', which is an access point to vast sources of knowledge related to triangles, geometric figures, geometry, space, etc. but not all these are necessary to understand the meaning of the word. From this distinction, the notions of profile and base arise. Profile is the entity referred by the word and the base is the core of the domain matrix that is required to grasp meaning. In synthesis, at the moment of

decoding a message, we interpret the meaning of lexical concepts by selecting the portion of the knowledge that best fits the context.

Although it may seem that semantic frames and domains are very similar, the theory of domains comes to put a patch on issues that were not accounted for in the theory of Frame Semantics. First, the fact that concepts are constructed drawing from more than one domain (*Ibid.*, p. 230). Also, frame semantics accounts mainly for abstract domains, the distinction between basic and abstract domains does not exist. Therefore, and adding to the first problem mentioned above, a frame for MARRIAGE, for instance, does not hold relations to any other more basic frame that take part in the construction of it (*Ibid.*, p. 231). From these facts, it can be better understood why domains are ordered in hierarchies.

The connection between language in use and domains can be better attested through the notion of *Active Zone*. Usually there is only one part of the object's profile which is activated in an utterance, for instance in the sentence: he handed me this blanket, the *Active Zone* of the profiled here is his 'hand' (*Ibid.*, p. 239). This allows us to disambiguate sentences and select the meaning that is more appropriate to the context as given by the information in the domain.

These two theories appeal to the notion of encyclopedic knowledge with the purpose of structuring a sound system of conceptual knowledge accessed by lexical items that allows to understand language in use.

As mentioned before, encyclopedic knowledge is an organized system and one of the most fundamental processes that contribute to this organization is categorization. Categorization is the process in which we are capable to identify members that are

alike as part of groups. Also, categorization processes are basic for the construction of Mental Spaces (Kövecses, 2010), a concept that will be fundamental later on for the understanding of the model posed in this present work.

The classic view of categorization holds that what entities require to be members of a category is to satisfy a set of necessary and sufficient conditions. The problem that we face immediately when working with this perspective is that there are many members of categories that, though belonging to it, do not comply to all necessary and sufficient conditions. While a square may be a useful example in the case for the classical view, the category 'games' serves in favor to the Prototype theory. In the classic Wittgenstein example, it can be said that games are for having fun, but this is not true to all games, for example a professional golf player that not only practice it for fun but to making a living. 'Games require skill', also not true in all cases, if we consider playground singing games we would hardly said that this require skill, at least not a complex one (*Ibid.*, p. 252).

Prototype theory proposes an organization based on prototypes or exemplars of the categories. This theory is funded in two main principles, cognitive economy, that is, obtaining as much information as possible from the environment with less energy investment possible; the second is perceived world structure which states that we organize entities and events within the categories according to the correlation between their occurrence (*Ibid.*, p. 255). Categories can be distinguished by their level of inclusiveness. Seeking for the optimal relation between the two principles mentioned above, it was found by Rosch and her team that this level was of the basic-level

categories. These are just in between the most inclusive, the subordinate level, and the least inclusive, the superordinate level (*Ibid.*, p. 257).

It is very important to point out that the research carried out by Rosch in the 1970s has been fundamental for the development of this theory. From a variety of experiments, they found out many aspects of the structure of categories as constructed around a prototype. For instance, they could determine that objects at the basic-level category were more rapidly recognized as members by people (*Ibid.*, 263).

Furthermore, members at the basic-level are typically one-word elements and are the most frequently used in speech (*Ibid.*, 263). However, Laurence and Margolis presented a number of criticisms against this theory, such as the problem of ignorance and error, that is to say, it does not account for those cases in which we have a concept but are wrong about their features; the problem of missing prototypes, in other words, there are some categories for which there are no prototypes as in the cases of categories that do not exist in the real world or categories that are too heterogeneous (*Ibid.*, 268). Finally, the problem of compositionality, that focuses on how complex categories that arise from the conjunction of two do not present the prototypical features of each of the components (*Ibid.*, 268).

Lakoff will come to account for these problems with his idealized cognitive models or ICMs (*Ibid.*, 269). These are more or less stable mental representations that constitute theories about the world. They form Mental Spaces: bundled structures of knowledge that are recalled during the meaning construction (*Ibid.*, 270). These three theories have helped build many of the principle of cognitive linguistics and it is important to notice that these approaches have been developed in order to account for

linguistic phenomena from quite different perspectives of its study. Major points to highlight here are the high level of organization that characterizes the inventory of knowledge underlying language. Its dynamicity, as the process of meaning construction proceeds in time, different portions of this inventory are sanctioned. Its variation and stability, as for some people there are entities or events that show dissimilar depending on their level of knowledge. Nevertheless, there are patterns that permit the existence of theories that address it.

2.7 Where does linguistic creativity come from? The intricacies of an extraordinary process

Until this point, Conceptual Metaphor Theory does not answer how we can create novel concepts. Conceptual metaphors work by just transferring features from one frame to another, in a unidirectional manner. (Evans & Green, 2006). However, it would just involve reading one frame in terms of the other, both already existing, and the metaphor would involve a mere relation (op.cit.). What is needed to solve is where do new concepts come from, considering most of the times they are not one element referred in terms of the other, but a more complex semantic unit.

Nonetheless, by mixing this proposal and the Mental Spaces Theory, Fauconnier & Turner (2002) have developed the Conceptual Blending theory. This model does not only stand for language, but for thought and imagination in general, and permits explaining the generation of new concepts. What these authors state is that there are two conceptual inputs, mediated by another mental space called Generic Space. Generic Space is constituted by what is common between the inputs, that is to say, categories that permit to map features of both inputs. This will produce a new

conceptual structure called blended space. It is relevant to mention that the two inputs, being based on Mental Spaces Theory, are considered as mental spaces and not as domains of knowledge. The difference lies on the fact that domains are rather stable structures, while mental spaces are temporary structures, generated in a specific instance. These two input spaces are related by categories located in the generic space, called counterpart connectors, that allow matching cross-space counterparts from the mental spaces and selecting them into a new blended space. Thus, as a result of this, the

blended space is a selective projection of features from both inputs, and a different and novel structure, distinguishable from the previous spaces.

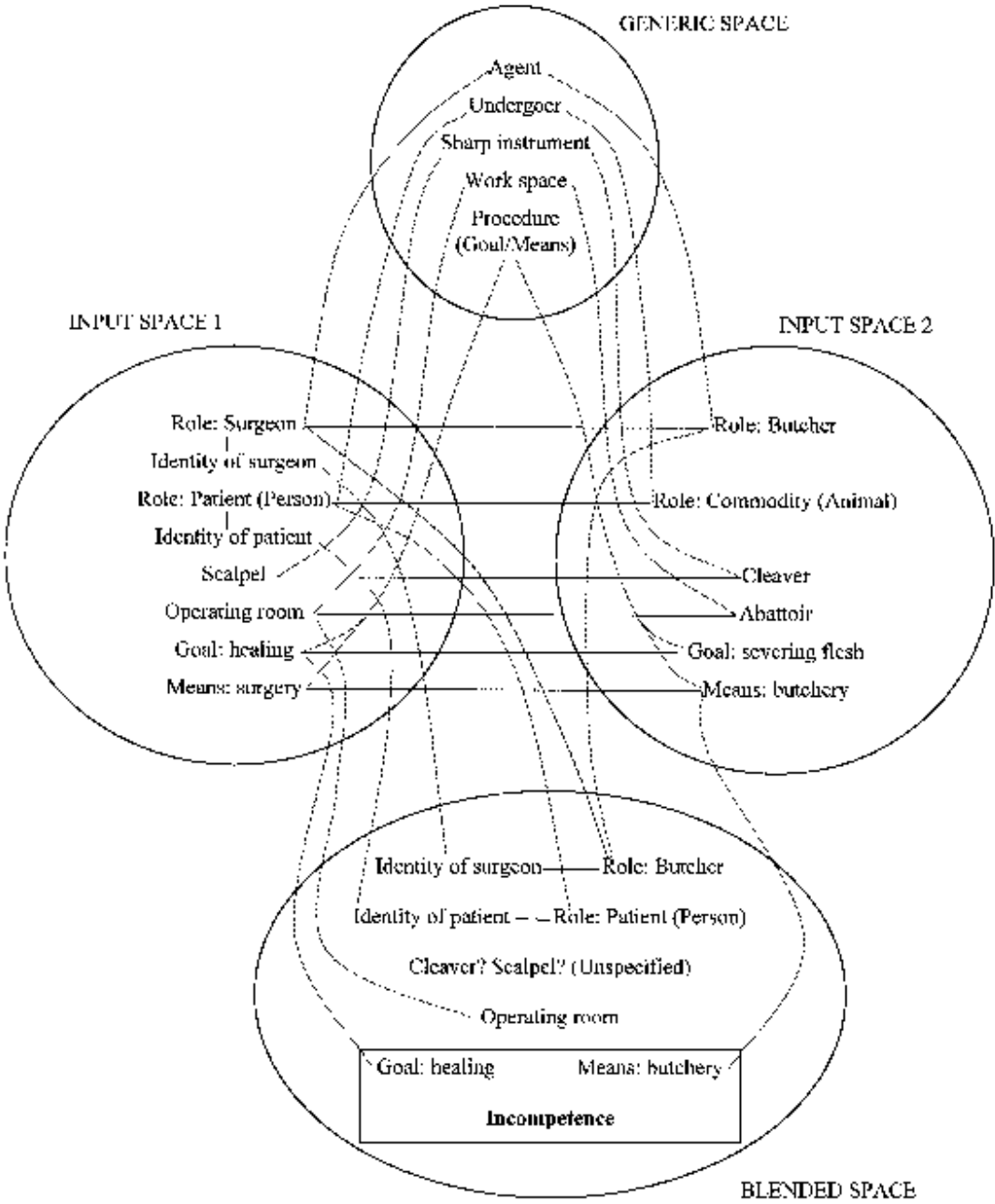


Figure 1. Conceptual integration network: Surgeon as butcher

Figure 1. Representation of blending in "That surgeon is a butcher"

For instance, Fauconnier & Turner (2002) have proposed “That surgeon is a butcher” as an example of blend. Grady, Oakley & Coulson (1997) have constructed a representation of this blend, which can be seen in Figure 1. In this example, the input “surgeon” has been blended with the input “butcher”. The features of each input have been mapped onto each other, establishing counterparts (e.g. “operation room” - “abattoir”). The mapping of these counterparts arises elements in the generic space, which are the common that connects both features (e.g. workspace). Once all this has been settled, a selective projection of the features is done towards a new space, called “blended space” or just “blend”. In this space, features are transferred to create a novel concept, the idea of a surgeon being like a butcher. Nonetheless, in the blend there is also room for non-previous features to be embraced, which are called the “emergent structure”. Those features appear from the comparison between both inputs, despite not being included in the inputs (e.g. Incompetence, as a surgeon with features of a butcher goes against the ideal of the former).

In this sense, Conceptual Blending Theory makes two significant contributions to the Conceptual Metaphor Theory. On the one hand, it proposes an emergent structure, different from the inputs. This feature is fundamental to understand the generation of novel ideas, considering there is no room for them in the model of Conceptual Metaphor. On the other hand, it affirms conceptual metaphors are a derivative of compound metaphors, so they could be included into this theory as well. The only exception that would be left out of a Blending model are primary metaphors, which must be analyzed through the model of Conceptual Metaphor (Evans & Green, 2006)

This theory argues for the point that new ideas are not generated spontaneously. Instead, they are the product of mixing already existing elements in a certain fashion. This process does not occur by transferring features in one direction, but instead, by matching different mental spaces, constructing a network. By this manner of achieving conceptual integration, a new structure arises, which is known as *Blend*, and this would give room to novel linguistic expressions.

2.8 Jokes in Cognitive Linguistics

Jokes and humorous constructions in general can be studied from different perspectives. Both formalist and cognitive-oriented approaches have tried to explain the way in which we construct and interpret humorous language (Bergen & Binsted, 2015). However, the drawback of formalist accounts here is that they do not give importance to context, and humorous language, and jokes in particular as a subset of it, seem derive their effect heavily from contextual meaning and a play on unresolved ambiguity (Attardo, 1994; Bergen & Binsted, 2015). For this reason, the present work takes a cognitive approach to the linguistic study of jokes as a conventional form in humorous discourse.

Cognitive authors Veale et al. (2015) not only recognize the importance of language as a means to access our minds, but also they give credit to humour as a means to exploit every level of language: “our jokes and witticism can exploit the highest structural levels of language, from discourse and genre conventions to narrative forms, down through sentence structures, word-order conventions, agreement constraints, all the way down to morphology, spelling, pronunciation and stress patterns” (p. 2). Such a powerful and ubiquitous ability within language can give us new insight into the way

we conceptualize the world around us. Because of this, it is important to use proper tools to describe and explain humorous language.

According to Veale et al., CL can provide us with some of those tools. For instance, metaphors, frames, mental spaces, and conceptual integration are all concepts traditionally used in CL, and that can be also used to give a comprehensive account of humorous constructions (2015, p. 3). Furthermore, Bergen and Binsted (2015) state that the applicability of CL to humor derives from its emphasis on the embodiment of language. They mention two reasons for this; first, the nature of the language used for humor is strongly influenced by the particular social contexts in which it is used and the social purposes to which it is put. Second, extralinguistic cognitive systems play an important role in processing humorous language (p. 50).

Among the tools that CL provides to humor researchers, Antonopoulou et al. (2015) advocate for Construction Grammar (CxG henceforth) as the best approach to account for the various elements that take part in the formation of humorous constructions. This is the topic of the following section.

2.8.1 From a usage-event to a discourse effect: Jokes and discursal incongruity

As explained in section 2.1, ‘The Symbolic Thesis: Formal Models and Semanticity in Cognitive Linguistics’, cognitive approaches to grammar hold that the fundamental unit of grammar is a linguistic unit called symbolic assembly or construction, consisting of a semantic pole (meaning) and a phonological pole (form). Unlike Saussure’s linguistic sign, constructions may escape the single lexical boundaries. In their work, Antonopoulou et al. (2015) state that the necessary

incongruity for humorous interpretation resides in the association of these linguistic units with specific discourse patterns or contexts.

One key point in CxG is that as a Cognitive usage-based approach it supports an integrated approach to humor analysis, in which information about the discursual/textual/register characteristics with a particular form can be represented in the meaning pole of the corresponding construction (Antonopoulou et al., 2015, p. 13). Moreover, “the dichotomy between Semantics and Pragmatics is rejected and information about topicality, focus, register, genre etc. is represented in constructions alongside purely semantic information” (Antonopoulou et al., 2015, p. 13). Hence discursual incongruity and humorous coherence of whole texts can be seen as residing in constructional properties and in this way integrated in a theory of Grammar.

In sum, discursual conventions belonging in different genres can be mixed to create humor, provided that the audience recognizes the original genres and contexts. The conventionalized, discourse-based features are responsible for the incongruity, and these would not be detectable if they did not have a high degree of entrenchment, i.e., their salience in the contexts in which they prototypically occur (Antonopoulou et al., 2015, p. 42).

2.8.2 Jokes as constructions: The components of jokes

Bergen and Binsted have claimed that, despite the essential role that language plays in humor, linguists have paid relatively little attention to it, preferring to study language in, what they call, neutral contexts (2015, p.49). The authors say, “it is often taken for granted that the word ‘humor’ refers to humor effected at least in part through

language. Types of humor that do not involve language are qualified appropriately – ‘physical’ humor, ‘musical’ humor, and so on.” (op.cit.).

In comedy, humorous effect is, more often than not, achieved through language; moreover, normal everyday language is often used for the very purpose of creating a humorous effect (Bergen & Binsted, 2015). The authors state that “humorous utterances constitute a significant portion of normal daily linguistic interactions, and stand as one of language’s major and universal functions” (Bergen & Binsted, 2015, p.49).

Bergen and Binsted identify a gap in humor research: is that humor researchers often take as their object of study the social production and reception context of humor, but leave aside the study of its linguistic structure, while linguists tend to do the opposite (Bergen & Binsted, 2015, p.49). This is why Bergen and Binsted present a pragmatic focus on the topic of jokes. From the standpoint of Construction Grammar, they take into consideration general aspects of linguistic structure and use, and identify a connection between cognitive grammar and construction grammar, which can also be applied to a description of the functioning of jokes (Bergen, Binsted, 2015).

Bergen & Binsted (2015) extended the basic units of language, which vary from very specific — particular words— to very general — like sentence patterns— as constructions that can include meaning components. Nonetheless, they conclude that there is very little room for theories of grammatical knowledge and use in the study of linguistic humor: “there seems to exist particular pervasive canonical joke forms, which are specified in syntactic, lexical, and sometimes phonological terms.” (2015) Emphasizing that the difference in humorousness cannot be attributed to the

grammatical forms solely, i.e., while the grammar itself is not inherently funny, some humor has grammatical constraints, since it often uses particular sentence forms.

Conversely, Veale (2015) shed light on Raskin and Attardo's General Theory of Verbal Humour (1991), which views jokes as a "narrative that is compatible with multiple scripts, one of which will at first appear primary until the punch-line contrives an incongruity that must be resolved" (Veale, 2015)

Attardo augmented this view with a graph-theoretic account of script representation that views scripts as arbitrarily complex symbolic structures, later creating and adapting a key model that would allow for the conception of jokes as constructions, which is the Isotopy-Disjunction Model (IDM) (Attardo, 1994). The IDM is a text-processing model which is based on the idea that, in a joke, an otherwise normal linear processing of the text is disjointed by an anomalous element that is particular to a joke text (Attardo, 1994). In other words, the textual processing of a joke differs significantly from that of a non-humorous text (op.cit.).

In more specific terms, the model of a joke which emerges from the IDM is as follows: the text begins by explicitly setting a context which will be the background of the joke (Attardo, 1994). This can be done briefly — or omitted altogether — if the context is ensuing implicitly from the text, until an anomalous element (disjunctive) then occurs in the text; this anomalous element causes the reader to jump from the initially constructed sense to a second, incongruent sense (op.cit.). According to Attardo, this element occurs at the end of the text and, in the case of a verbal joke, a backtracking of the disambiguation process occurs after the disjunctive, and a reinterpretation of the connector follows (1994).

In this model, a connector is any segment of text that can be given two distinct readings (Attardo, 1994). The disjunctive plays off of this ambiguous element by causing the passage from one possible actualization of the connector to another, which had been previously discarded by the process of selection (op.cit.). This disjunctive mechanism, varies from referential to verbal jokes (op.cit.).

In order to clarify, referential jokes are based exclusively on the meaning of the text and do not make any reference to the phonetic or syntactic realization of the lexical items which make up the joke, while verbal jokes make reference to the surface realization of the text and the meanings of the elements of the text (Attardo, 1994). This gives evidence of the fact that jokes are a type of text in which the linearity of the text is very important, both superficially and at a deeper level (Attardo, 1994).

Similarly, it is necessary to remark that, superficially, the ordering of the disjunctive/connector pair in the utterance level of the text is relevant. While, at the importance of the rhematic role of the disjunctive falls in the communicative dynamism encoded in the semantic representation of the text.

Attardo (1994) addresses to curtail funniness to transgression of Grice's Cooperative Principle and conversational maxims applied into jokes, presenting initially the problem of maxims as a paradox because jokes seem to violate Grice's maxims, but at the same time they can be understood with an amazing ease and quickness. He claims that a radical dichotomy between serious and humorous uses of language cannot be kept up in reality (1994). He considers Grice's model of a speaker who is absolutely committed to truth and relevance in communication to be a mere abstraction, as opposed

to a realistic speaker, who effectively uses humorous remarks every day (Attardo, 1994, p.287).

2.8.3 Jokes, Metaphor and Blending

It seems that humorous components have a more complex semantic, conceptual or cognitive organization than typical figurative speech (Krikmann, 2009). The fact that children in their language acquisition in first place understand metonymies, then metaphors and only later jokes and more complicated forms of humor, makes it evident that they possess a more complex structure (op.cit.).

As described in section 2.4, ‘Literalness and Metaphoricity: Traditional view and Cognitive Linguistics’, various schools and authors have used different terms to describe the parts of metaphors. In *Philosophy of Rhetoric* (1936; in Müller) Ivor Armstrong Richards refers to them as tenor and vehicle. George Lakoff and Mark Johnson, who initiated the cognitive theory of metaphor (Lakoff and Johnson, 1980; Lakoff, 1987; Lakoff and Turner, 1989), call them target and source. The Cognitive Metaphor Theory alludes to the understanding of one idea, or conceptual domain, in terms of another (Lakoff and Johnson, 1980).

To review, the source of a metaphor is the domain whose select elements are mapped onto another domain, called the target (see section 2.4). Metaphors are unidirectional, meaning each metaphor has specific mappings, selectively highlighting specific aspects, from source domain to target domain, that are not the same ones even if the roles of the domains are inverted. For example, the metaphors PEOPLE ARE MACHINES and MACHINES ARE PEOPLE, cited in Evans and Green (p. 297), share the same domains, but different elements are selected from the source domain to be

mapped onto the target one in each case (human feelings and volition are commonly mapped onto machines, while machines' computing efficiency is mapped onto people).

Evans and Green (2006) and Saeed (2016), state that Blending Theory evolved from two traditions in cognitive semantics: Conceptual Metaphor Theory and Mental Spaces Theory. Evans and Green argue that it is closer related to the latter in its architecture and central concerns (p. 460). Nevertheless, they consider Blending Theory a theory apart from Mental Spaces, since it has been elaborated to consider phenomena that had escaped the scope of Mental Spaces Theory and Conceptual Metaphor Theory (Evans & Green, p. 456). Saeed further explains that Blending Theory took elements from the idea of conceptual metaphor, which tries to explain the speakers' competence to conceive and develop extended analogies (2009). This competence that the speakers have, in cognitive semantic forms, concerns the speakers taking information from different domains, connecting and integrating them to conceive new relationships between all the elements (op.cit.).

The most important contribution of Blending Theory is that meaning construction implicates an integration of structures that results in more than the total sum of its parts (Evans & Green, 2006, p. 460).

Afterward, Gilles Fauconnier and Mark Turner pose the term Mental Spaces (Fauconnier and Turner, 1994; Turner and Fauconnier, 1995). In the case of blends, many of them seem to have a strong natural capacity to produce humor. But the analyses carried out until now do not distinguish accurately which blends do result in humor and which ones do not, being the conceptual integration theory conceived in some way as a "theory of everything" with a huge area of application. It is noticeable

that there are various things that are humorous and figurative at the same time, so it is reasonable to assume that the dimension of humor of human verbal and non-verbal language is not entirely apparent, but gradual.

Although IDM is exclusively applicable to humorous discourse, Conceptual Metaphor theory and Conceptual Blending theory have a much wider scope, since they attempt to describe the cognitive underpinnings of human language in general. Thus, the latter theories can also be applied to describe humorous expressions and jokes from a conceptual standpoint. Müller (2015), in a review of literature concerning connections between humor and metaphor, has said that no research has concluded an identity between humorous expressions — which include jokes — and metaphor (Müller, p.114). However, he makes the case that there are significant cognitive similarities between the two; both are ways of uniting two different concepts or domains, a property that the author refers to as *conceptual duality* (Müller, p.114). A significant difference between them lies in the way in which they process this duality (Müller, p.115): in conceptual blending terms, while conventional, non-humorous metaphors tend to emphasize the similarities between two input spaces in a congruent, smooth blended space, humorous expressions tend to emphasize the input spaces' dissimilarities, by highlighting or foregrounding them — the contrast between them — rather than the blended space, which allows their incongruence to become apparent.

The following section delves further into the cognitive similarities between metaphor and humorous expressions reviewed by Müller, and discusses a novel way in which certain concepts from cognitive metaphor theory could be applied to a

characterization of jokes as a subset of humorous expressions. Integrational network has already been applied to jokes in the literature. Vivian Cook (2011) carries out a comprehensive analysis of jokes using Fauconniers terms, stating that in order to get a joke, we must perform conceptual integration and construct a blended space. For instance, he exemplifies the process with the following joke:

“What do you get if you cross a kangaroo with an elephant?”

“Holes all over Australia”

In which there are two inputs spaces containing specific information which is profiled due to the punch line. The first input contains features of kangaroos (such as size, location, etc), and the other one about elephants (containing the same type of information). This blend results in a new specimen (the emergent structure), “has the size of an elephant, lives in Australia and gets about by hopping” (97). He concludes that the joke works only because “the operation of blending is a fundamental aspect of how we think”. However, as will be discussed in section 3.2, ‘Are jokes metaphors? Source, target and directionality’, the humorous effect of a joke cannot be explained solely as the result of a blend being incongruent. There are incongruent blends that are not funny (see section 3.2). Here, we identify a gap in the current way Blending Theory models jokes.

3. Theoretical Framework: Towards a new treatment of jokes

3.1 A working definition of jokes

It must be initially made clear that the notion of ‘a joke’ cannot be defined by a set of inherent, ‘necessary and sufficient’ components — Attardo, in fact, extends a word of caution regarding structuralist definitions of jokes (2001, p.vii) — but is rather

identified in discourse by some prototypical characteristics. Therefore, there are instances in which the categorization of an expression as a 'joke' may be fuzzy.

Attardo considers that jokes are first and foremost a kind of narrative, and comments that a good enough definition of joke might be simply "a short narrative text which is funny" (2001, p. vii).

This research is primarily concerned with what Attardo calls "canned" or "narrative" jokes (2001, p.61). A prototypical canned joke is a) a short humorous narrative ending in a punchline, which b) has been rehearsed (previously learned or created by the narrator), and c) is detached from the conversational context in which it occurs, often prefaced by an announcement by the narrator (Attardo, 2001, p.61-2). Canned jokes are similar to urban legends and folk-tales in that they circulate widely, "in numberless variants, i.e., the same joke is presented in different wordings" (Attardo, 2001, p.70), and the original author of any given joke is not really known (op.cit.). In the simplest terms, Attardo says "the most prototypical case of a canned joke [is] a short text taken from a (book entitled) '5000 jokes'" (op.cit.), and this notion is precisely what will inform the present research's working definition of joke.

3.2 Are jokes metaphors? Source, target and directionality

In a 2015 study of metaphorical descriptions of humor, Müller presents a brief review of literature concerning connections between humorous expressions and metaphor (p.111-2). Though he found no authors claiming that humorous expressions and metaphors are the same thing ("identity of metaphor and humor is rather unlikely, since not every metaphor strikes us as funny, nor can we base humor identification on metaphor analysis" (Fónagy 1982, Oring 2006; in Müller, 2015 p.114)), he attests that

a consensus is reached regarding the notion of *conceptual duality* (see section 1.3): in the broadest terms, humor and metaphor have in common that both are used by speakers to bring together two (or more) different ideas or concepts (Müller, 2015).

Crucially, Müller explains that there is no exact identity between humor and conventional metaphor because the way they process their conceptual duality is different, and has a different purpose: a successful metaphor highlights the similarities between two ideas with the intent of increasing the understanding of one of them, while humor highlights the dissimilarities between ideas purposefully to achieve a humorous effect (Müller, 2015, p.115-6). Even if a metaphor combines highly incongruous domains, it does not always result in a humorous effect, so humor cannot be explained solely as the union of incongruent ideas, as the tenet conceptual duality would have it (Müller, 2015, pp.114, 117).

It has now been established that the tenet of conceptual duality is quite basic, and on its own lacks the explanatory power necessary to account for the humorous effect of jokes vis a vis non-humorous incongruous metaphor. It is useful, however, because it establishes a common ground between theories of humor and cognitive linguistic theories that, together, may have the combined explanatory power needed, in the following way. Conceptual duality is compatible on the one hand with Attardo's IDM — in which the union of incongruent ideas is represented as the opposition of two incongruous scripts — and on the other with the cognitive linguistic theories of Conceptual Metaphor and Conceptual Blending — in which the union of incongruent ideas can be represented more dynamically as the understanding of a target domain in terms of a source domain, and as the emergence of a blended mental space that

selectively integrates aspects from two input spaces, respectively. Furthermore, Langacker's notion of construal of conceptual content (see section 2.6 for accounts of cognitive semantic theories), specifically the dimension of focus, can also be applied to an understanding of jokes, as will be shown next. Having been established, this common ground between IDM and cognitive linguistics theories, can be exploited to bring forth a more powerful model of jokes, one that refers both to their text processing nature, and to their conceptual nature. In what follows, we will attend specifically to how Conceptual Metaphor theory can be applied to a description of jokes as entrenched short humorous expressions.

Firstly, it is important to note that the assertion that jokes can be described in terms of metaphor theory is not an assertion that all jokes use conventional metaphor as the mechanism of the punchline. For example, in

i.) A man walks into a bar and asks for something cold and full of rum. The bartender recommends his wife.

The effect of the punchline depends on the reader being able to construct the metaphor WIFE IS AN ALCOHOLIC DRINK. However, there are plenty of jokes whose humorous effect does not, on the surface, hinge on a metaphor. Take for example

ii.) "Dad, can you write in the dark?"

"Sure son, why?"

"I need you to sign my report card"

In which, superficially at least, there is no metaphor in the punchline, of the kind REPORT CARD IS DARKNESS or anything similar. The point here is not that jokes

include conventional metaphors within them, but that as a whole, their humorous effect can be explained through some concepts that are used in Conceptual Metaphor theory to describe the effect of metaphor. Specifically, we refer here to directionality between source and target.

In Conceptual Metaphor Theory, the source of a metaphor is the domain whose select elements are mapped onto another domain, called the target. Metaphors are unidirectional, meaning each metaphor has specific mappings, selectively highlighting specific aspects, from source domain to target domain, that are not the same ones even if the roles of the domains are inverted. For example, the metaphors PEOPLE ARE MACHINES and MACHINES ARE PEOPLE, cited in Evans and Green (p. 297), share the same domains, but different elements are selected from the source domain to be mapped onto the target one in each case (human feelings and volition are commonly mapped onto machines, while machines' computing efficiency is mapped onto people). Consider the following jokes:

iii.) "What's the difference between a well-dressed man on a bicycle and a poorly dressed man on a unicycle? Attire."

iv.) "I used to be addicted to soap, but now I'm clean."

In these jokes, we can see a kind of directionality between two elements that are coming together (recall that this is the notion of conceptual duality), and we can see that the jokes would lose efficacy if these elements were inverted and the mapping between them maintained.

In iii.) we have the domains of DRESS CODE on VEHICLES. No particular aspects are being highlighted in either, until we hear the punchline, "attire", after which

a mapping between the two is forced. The phonetic image /ataɪə/, which both domains have in common, serves as a kind of ad hoc link between the two: this means that the one sound image /ataɪə/ is, thanks to the utterance context, recruiting two meanings that are far apart in the semantic chain and belong to different domains, but uniting them in one instantiation. Then, because the context of the joke partly sanctions “a tire” and partly “attire”, the sound image /ataɪə/ is forced to house an incongruity; that the concept of “attire” and “a tire” would be conceptually identical (in section 3.4, ‘Between concepts and construal: Interpretative duality and duality of generic space’, we return to this idea in proposing an original concept, the *Ad-Hoc Generic Space*). However, if we imagine the joke inverted: “Attire is the difference between a well-dressed man on a bicycle and a poorly dressed man on a unicycle”, its humorous effect feels diminished by some degree, possibly because for the ad hoc linking of the two domains to be possible, it is necessary for them to be presented first, after which the ad hoc mental space, containing both meanings of “attire”, can be mapped onto each domain, against which one of the interpretations of /ataɪə/ will always be incongruous.

Similarly, the inverted joke “I’m clean now, but I used to be addicted to soap”, loses strength by putting the disjunctive at the beginning of the text, where it still has no domains to be interpreted against.

Here we can also rescue the notion of foreground and background, part of Langacker’s tenet of focusing in conceptual construal. An important part of an expression’s meaning is in the way its conceptual content is construed. “As part of its conventional semantic value, every symbolic structure construes its content in a certain fashion” (Langacker, 2008, p.55). Let’s say conceptual content is a scene, and construal

a way of viewing it; how closely we examine it is specificity, what we choose to look at is focusing, which elements we pay most attention to is prominence and where we view it from is perspective (op. cit.). As conventional humorous expressions, jokes construe their conceptual content in a certain way. They emphasize the incongruity between input spaces (Müller, 2015). The incongruity can be said to be in the foreground, in Langacker's construal terms (2008). As Müller mentions, jokes differ from metaphor in that the first highlight the input spaces rather than the blend, while the latter do the opposite. We can say, then, that jokes place the incongruous blend in the foreground, not the background, so that the difference between the mental spaces being joined is brought to attention. This might explain why the directionality of the joke has to go from input spaces, to the ad hoc blend, and the humorous effect is diminished if inverted. The following section delves further into the characteristics of jokes as blends.

3.3 Are jokes blends?

We base the present analysis of jokes on Conceptual Blending Theory, claiming that jokes are blends. Specifically, we claim that jokes are a particular type of blend, different from the classical model of Conceptual Blending Theory. This type of blend differs from the classical model in certain aspects which are, in fact, central characteristics of jokes. These characteristics concern the input spaces, and the generic space. The importance of the linear processing of jokes, which is also relevant to our original proposal, is described in detail in section 3.5 Jokes and Time: Mapping the processual character of Jokes into its architecture.

In Conceptual Blending Theory, according to Fauconnier and Turner (1997), the classical blend is a rather simple operation. In the blend, there is a partial mapping between two input mental spaces, which yields a third space; the blend. The blend, includes an emergent structure that was not provided by the inputs; i.e., it can present novel features not found in Input 1 nor Input 2.

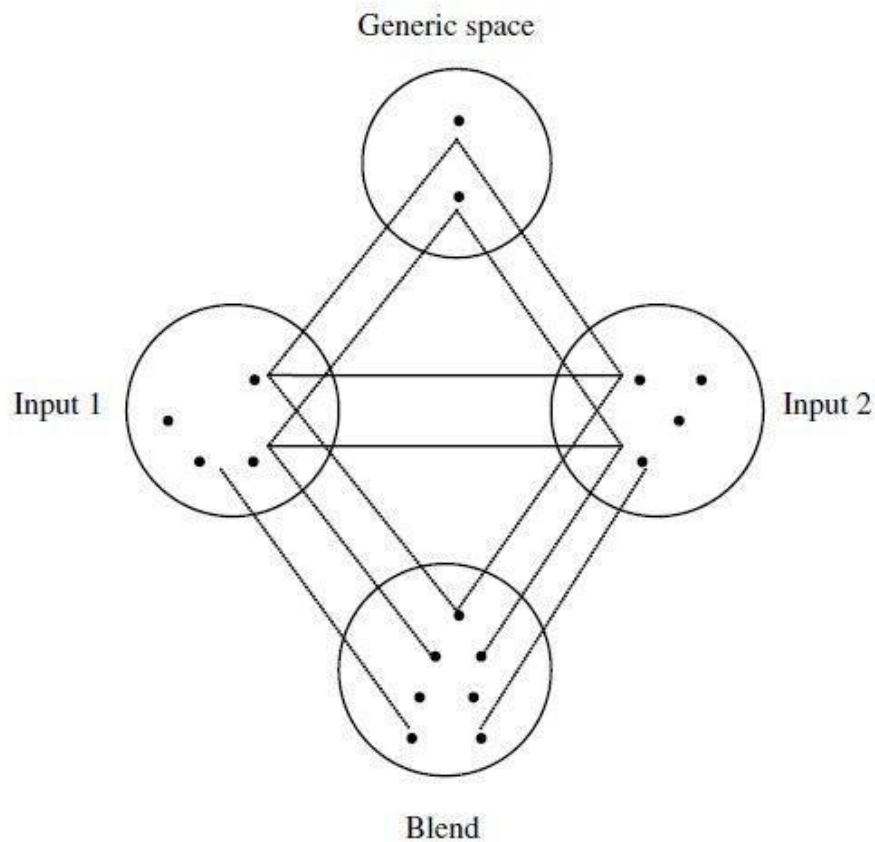


Figure 2. Fauconnier and Turner's Conceptual Integration Network

The figure above (Figure 2) depicts Fauconnier and Turner's diagram of the classical blend. In a blend, a partial mapping is constructed between I_1 and I_2 , the two corresponding input spaces. The common structures or features shared by the inputs emerge in the *Generic Space* (Fauconnier and Turner, 1997, p. 149-151).

In this respect, the classic blending implies two input spaces which through mapping produce one emergent structure. However, this work hypothesizes that in the blend of jokes, it would occur that both input spaces are themselves frame-based blends. This would mean that input 1 is itself a frame-based blend, which is at the same time comprised of two inputs (which we call X and Y). The same case would apply for input 2, considering it also as a frame-based blend composed by inputs α and β .

It was mentioned earlier in section 3.2 that jokes emphasize the incongruity between the input spaces, since they depend partly on this to achieve a humorous effect. As well, according to Müller, humor is said to arise from apprehending two related but incongruent ideas (p.113). This work assumes the term incongruity with its non-technical meaning. In the same manner, it is thought that the punchline seems to trigger the incongruent interpretation of the joke. Think about the example shown above, and repeated here:

(1) "I used to be addicted to soap, but now I'm clean."

In this particular case, the connector *I'm clean* allows the possibility of two readings, providing the senses *clean off of drugs* and *clean off of dirt*. In the first part of the joke, the *buildup* activates the sense₁ which is *someone who used to be addicted to consuming soap but now has rehabilitated*. However, when the punch line comes, the connector *I'm clean* prompts the sense₂ which is *someone who used to be addicted to using soap as a cleaner but now has rehabilitated*. The second reading is possible because of the multiple meanings of the connector, and the incongruity generated by the use of the disjunctive *soap* instead of a more prototypical substance results in a humorous effect. In this manner, jokes possess an incongruous interpretation that is

prompted after the punchline. As mentioned at the beginning of this section, the characteristics of dual generic space and time will be treated in detail in sections 3.4 and 3.5 respectively.

3.4 Between concepts and construal: Interpretative incongruity and duality of generic space

In order to grasp the sense of interpretative incongruity in a joke, it is first necessary to look at Attardo's Isotopy-Disjunction Model of Jokes (1994). As explained in section 2.8.2 'Jokes as constructions: The components of jokes', the linear understanding of a joke is disrupted by an incongruity, namely the so-called disjunctive (Attardo, et. al, 1994). The kind of disjunction will differ depending on whether the joke is referential or verbal. According to Attardo et. al, referential jokes, unlike verbal jokes, are based on the meaning of the text and do not make any reference to the phonetic or grammatical realization of the word that jokes are made of. (p.28). Thus, only verbal jokes have a connector (Attardo, 1994).

Since this work proposes that jokes are a special type of blend, the whole process of the conceptual integration must be explained in Fauconnier's terms. Particularly, considering that the elements that the inputs of the blend have in common are placed in the area of the generic space (Fauconnier, 2002), the projection of an incongruent reading is conceived in that area. In other words, both inputs have an element in common within the actual joke. However, considering the literature and the different examples of generic spaces (Fauconnier, 2002), this element may differ from other mappings in the sense that it is non-entrenched. According to Glynn (2014), the non-entrenched categorizations are those which are detailed, context dependent

categorizations which are beyond polysemic and synonymic relations. Therefore, they are not semantics relations *per se* (Glynn, 2014, p. 13), but actually they need further mapping in order to be processed. In the case of jokes, the fact that both producer of the joke and hearer are conscious about the implicatures of communicating a joke, prompts some relations that might have not been depicted without the actual context of jokes.

Thus, this non-entrenched element that is common in the inputs that compose the joke will be placed in the network in a special generic space called: *Ad hoc Generic Space*. This generic space will differ from a second one, which has been called *Conceptual Generic Space*. The Conceptual Generic Space contains all the abstractions in common between inputs that are entrenched. This generic space can be found in any blend, and the entrenched relations can be extracted from the inputs only by the depiction of their frames, and they need no further consideration such as the context of the utterance.

The main similarity is that both constitute generic spaces, in the sense that both represent a meaning correspondence (at different levels) between elements of each input.

The consequences of the possibility of having a double generic space are the following:

- a. If this feature holds only of jokes, then this type of text presents a higher level of complexity, in integrational terms, in relation to other types of blends.
- b. Since both generic spaces represent different levels of cognitive projections, jokes also make use of a greater and more nuanced part of our cognitive system.

3.5 Jokes and Time: Mapping the processual character of Jokes into its architecture

One of the features that has been traditionally attributed to language has been its linear nature. This involves that in either written or oral language, the message is structured and interpreted from a starting to a finishing point and not altogether. Therefore, time plays a significant role in the processing of discourse, affecting jokes also. However, it is useful to make a distinction regarding time.

Langacker (2008) states a difference between processing time and conceived time. Regarding the first, the author considers: “Conceptualization is inherently dynamic—not something that statically exists, but rather something that happens. It resides in mental processing (or neurological activity) and therefore occurs through time.” (Langacker, 2008, p. 79) This means that the first words in an utterance will prompt the start of the construction of a concept, while the following words will progressively bring new information into it. In consequence, the conceptual construal is developed through a staged process, step by step, and while its components are processed, the construal is still being constructed.

The fact that discourse is interpreted linearly implies that discourse processing must include a feature of directionality. Thus, jokes should behave in the same way. However, a different directionality for interpretation seems to be at work in the case of jokes, which makes them distinguishable as discursive units. The Isotopy-Disjunction Model proposes that a phase of backtracking reconfigures a first interpretation of a joke. IDM proposes that humorous texts have a disruptive element, called disjunct, that leads to a second reading. This is possible by a relation with a connector, which is

being linked to the disjunctive and the previous text. Usually, what is known as punchline, the last part of the joke, belongs to the disjunctive although sometimes that position is used by the connector or it is the disjunctive and connector at the same time.

Despite this model seems to embrace appropriately the linear nature of language, it does not deal with cognitive processes in relation to jokes processing. Therefore, Conceptual Blending Theory is still the best model in order to portray how jokes are processed in conceptual terms. Nevertheless, directionality must be incorporated to this model as well, due to the fact that every process -including jokes interpretation- consists of a series of stages that are developed throughout a processing time.

3.6 Hypothesis and Questions

Bearing in mind what has been discussed above, this study proposes a model for the conceptual analysis of jokes based on Fauconnier's Conceptual Integration Theory or Blending Theory. The model here posed elaborates on the blending model of Conceptual Integration Theory with the purpose of including new aspects that can account for jokes' humorous effect, thus filling a gap in current Conceptual Integration Theory, and cognitive approaches to humor studies in general.

We adopt the Conceptual Integration assumption that jokes are incongruous blends, meaning that it is assumed that jokes can be modelled as a network in which mappings are established between the common features of two input mental spaces, generating new generic mental structures ('Generic Space' in Conceptual Integration). Features from both inputs, plus novel features that arise in the structure of the generic mental space, are selectively projected onto a mental space called the blend.

However, Müller's (2015) insight that not all incongruous blends achieve nor intend to create a humorous effect is also taken into account. It is hypothesized that what triggers the humorous effect in jokes specifically is that their linear structure purposefully profiles or foregrounds a non-entrenched or conceptually incongruent mapping between features from two inputs, forcing an ad-hoc generic space to emerge. At the same time, the joke's structure also allows conceptually feasible mappings between the two inputs, which emerge in a Conceptual Generic Space that corresponds in nature to Fauconnier's Generic Space. While the presence of the Conceptual Generic Space allows the joke to make sense to the hearer/reader as a narration, the Ad-Hoc Generic Space creates a structured ambiguity in meaning that can only be plausible in the context of the joke.

Thus, the presence of two distinct generic spaces is what we hypothesize differentiates jokes as humorous incongruent blends from non-humorous incongruent blends. The double generic space is an original addition to Conceptual Integration Theory. While the Conceptual Generic Space emerges from conceptual commonalities between cross-input features that are prototypical or entrenched, the Ad-Hoc Generic Space emerges because the utterance context of the joke also partially sanctions two different incompatible meanings for an underspecified element in it, forcing a non-prototypical, non-entrenched commonality at a phonological, morphological or syntactic level that does not fully collapse into one meaning conceptually, but rather remains as an unresolved, counter-conceptual ambiguity in the meaning of the joke. For example, one form may be contextually underspecified so that two different and conceptually distant meanings could plausibly be ascribed to it. The ambiguity in the

meaning that corresponds to that form is unresolved because the context does not fully sanction either one. Thus, the form becomes a forced, counter-conceptual common feature between these two distant meanings, and arises in the Ad-Hoc Generic Space.

To summarize:

1. Jokes are a special type of blend whose inputs can themselves be identified as blends.
2. Their conceptual integration network is characterized by the presence of two generic spaces, namely, the Conceptual Generic Space and the Ad-Hoc Generic Space.
3. The Ad-Hoc Generic Space represents a forced mapping of non-entrenched commonalities.
4. These non-entrenched commonalities can be plausibly mapped only in the particular context of a particular joke because its text underspecifies features that would otherwise make the Ad-Hoc conceptually impossible.
5. Non-humorous incongruent blends fully sanction the differences between inputs, so that ad-hoc commonalities cannot emerge.

The following diagram (Figure 3) represents our proposed model for jokes:

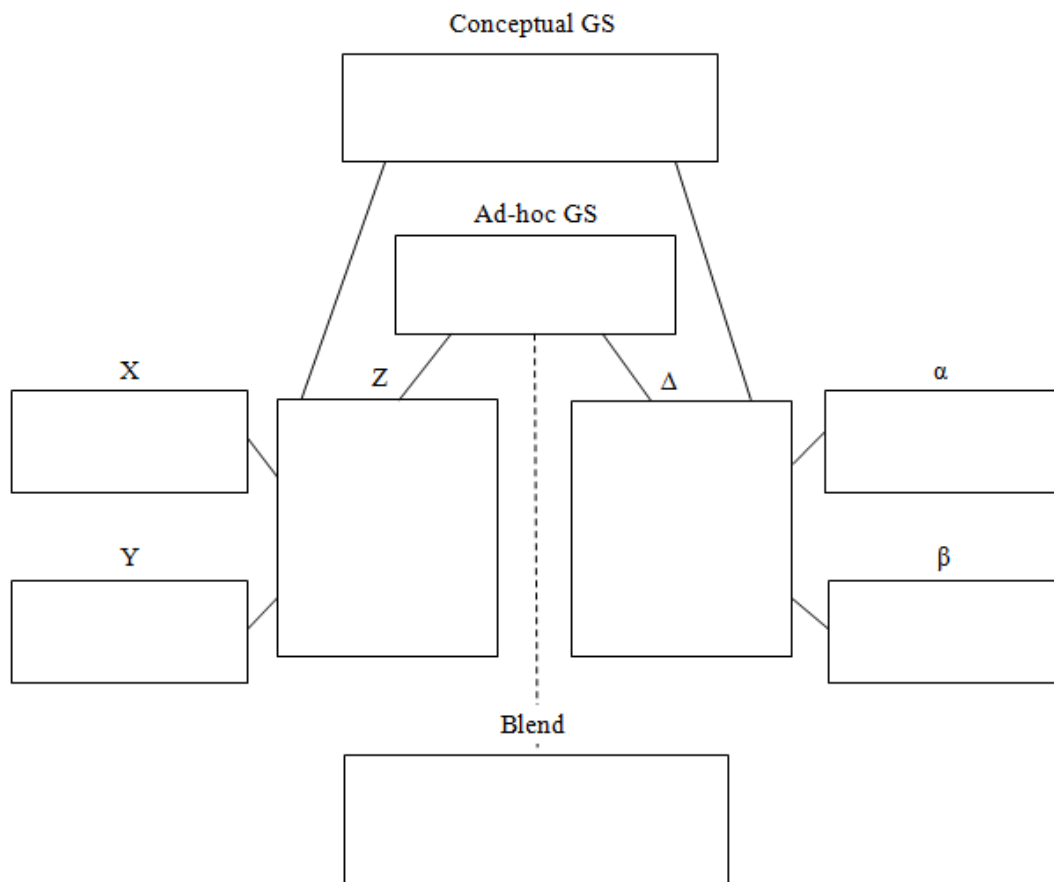


Figure 3. Integration Network proposed

Based on our hypothesis, this study will pursue to answer the following questions which deal with different aspects of our inquiry.

1. What elements of a joke integrational network evidence the difference between jokes and non-humorous linguistic expressions?
2. How can the elements of a joke in IDM Theory be accounted for in terms of Conceptual Blending Theory?
3. How can the characteristic double-reading property of jokes be represented in an integrational network?
4. What are the implications of each of the two generic spaces to the understanding of a joke?

Objectives of the Study

As general objectives, the present work attempts to extricate the conceptual structure of jokes in contrast to other types of blends as well as to clearly distinguish the elements within the jokes' integrational network which are critical for this distinction.

Our specific objectives set are:

1. To determine the differences between the ad-hoc and generic conceptual spaces regarding what is sanctioned in each generic space.
2. To identify the role of the generic and ad hoc generic spaces play in the conceptual network of the blend.
3. To represent each of the two readings of the jokes in the integrational network model proposed above (see Section 3.4).
4. For each joke, to identify possible correspondences between the connector and disjunct, and the elements of the network.
5. To describe how the conceptual differences between both spaces have a systematic relation with both effects, the humorous and non-humorous effects.

4. Methodology

4.1 Materials

After a search in the electronic commerce company website amazon.com for "joke books", we selected two books. *4000 Decent and Very Funny Jokes*, by Olav Laudy (2011) and *The Mammoth Book of Jokes* by Geof Tibballs (2006) were chosen over other search results, because they contain short canned jokes (as defined in the framework). From this corpus, we selected the canned jokes that were no longer than two sentences for practical reasons; we estimated the analysis of longer narratives would

take longer, and their description and diagramming would not be economical in terms of space.

These books group jokes by theme (e.g. doctor jokes, bar jokes, foreigner jokes, etc.). In order to avoid using jokes revolving around the same themes — merging the same conceptual domains — we picked the first joke from each themed section that was no longer than two sentences and complied with the length requirements. A pool of 50 jokes was gathered, further selecting 25 jokes randomly to carry out the analysis.

4.2 Procedures

Researchers met three times a week for the analysis of the jokes. All discussions involved in the following procedure were carried out in team effort (all 9 researchers partook in all steps involved).

The build-up and punchline of each joke were identified, and researchers determined what conceptual domain each of these segments projects. That is, for each joke, the authors discussed which conceptual frame is prompted when the hearer/reader processes the build-up, and which is prompted when they process the punchline. Examples of frames might be FOOD, BASEBALL, MARRIAGE, etc. Researchers discarded jokes for which a unanimous decision concerning frames was not reached. In these cases, another appropriate joke was selected from the book (the next canned joke of no more than two sentences within the same thematic section). For each joke, the frame prompted by the build-up was tagged as input Z , while the frame prompted by the punchline was tagged input Δ . In some cases, the inputs Z and Δ were themselves clear blends of two other frames or concepts. These were also discussed and identified.

Nevertheless, as these inputs are simple and transfer the whole of their content, these are

only referenced in a single concept without features. Z 's inputs were tagged inputs X and Y . Inputs belonging to Δ were tagged as inputs α and β .

For each joke, researchers determined a sentence to represent the blended space. The blended space was represented as a sentence that reflects the counter-conceptual effect of the joke. That is, its construction was informed by the researchers' understanding of the humorous message of the joke.

Once the domains corresponding to inputs Z and Δ and the blended space had been identified, researchers jointly discussed what the mappings established between Z and Δ were, attending to the fact that these mappings must be relevant to the blended space. This meant that researchers looked for elements in the two input frames, that, if foregrounded in one or two generic spaces — conceptual and ad hoc — could account for the counter-conceptual meaning of the blend. Where features from both inputs were found common at a conceptual, entrenched or a-temporal level, they were classified as belonging to the Conceptual Generic Space. Features were classified as belonging to the Ad hoc Generic Space when they hold contextual, non-entrenched, temporal relations.

Then, Attardo's connector and disjunctors were tagged in each joke, for the purpose of studying possible systematic correspondences between these text processing notions and our conceptual notions during the analysis of results.

Consequently, the team compared each joke blend to a non-humorous blend that combines the same frames involved in the joke, seeking to find the implications of a double generic space that might account for the humorous effect of the jokes. In order to do so, the research team sketched a second blend for each joke, following Fauconnier's model of integrational network, and taking as its inputs frames that arise

from the joke as a whole, not from its linear processing. That is, the inputs of the second network do not derive directly from the build-up and punchline.

For example, for the joke “What do you call a pig who does karate? A porkchop” analyzed under the model proposed, inputs Z and Δ would be conceptual frames that emerge from its build-up and punchline: “A pig who does karate” and “a porkchop” respectively. Inputs X and Y would be “pig” and “karate” (they make up Z). Then, in the second network, input Δ is made up from inputs α “porkchop” from the KARATE frame and β “pork chop” from the FOOD frame.

The final completion of the second blend needed the unanimous agreement of the research group. After the construction of both networks of the same frames, a comparison was carried out in order to identify differences between humorous and non-humorous integrational networks.

4.3 Analysis

For each joke, a diagram was drawn depicting the following: First, input spaces — Z and Δ . Second, the possible (though not mandatory) extra inputs that make up the former, called X and Y (input domains of Z) and α and β (input domains of Δ) — the generic spaces and the blended space. An explanation of the research team analysis is also found next to each diagram. Afterwards, the researchers tabulated the spaces of the diagrams in a spreadsheet.

Regarding the relations and patterns to be recognized, the research group firstly identified the number of jokes that fit the model completely. In relation to that group, the type of joke was taken into account to draw rating conclusions.

For those jokes that did not fit the model, rating conclusions will be drawn regarding what element of the model the jokes lacked, also taking into account the type of joke. Additionally, for those jokes that only had one generic space, a special analysis was performed in order to see which generic space they presented and why, and also why they did not present the other generic space.

For all the previous analysis already mentioned, IDM terminology was added in order to look for any correspondence between these and the ones posed by the model. Special attention was paid to the elements connector and disjunctive, and their correspondences in the integrational model.

As a final step, quantitative analysis was conducted in order to measure the rate of success of the model proposed. Regarding this analysis, the following variables were taken into account in order to conduct it: type of joke (referential or verbal), presence of Ad hoc generic space (yes or no), presence of Conceptual generic space (yes or no), presence or absence of inputs X & Y, the same with inputs α and β , the achievement of the analysis of the non-humorous blend (yes or no) and presence of blended space. Conclusions were drawn considering the percentages that arose. Moreover, a summarizing table containing the results was constructed, followed by charts for each result obtained.

5. Analysis

5.1 Qualitative Analysis

1) Two fish are in a tank. One says to the other, "Can you drive this thing?"

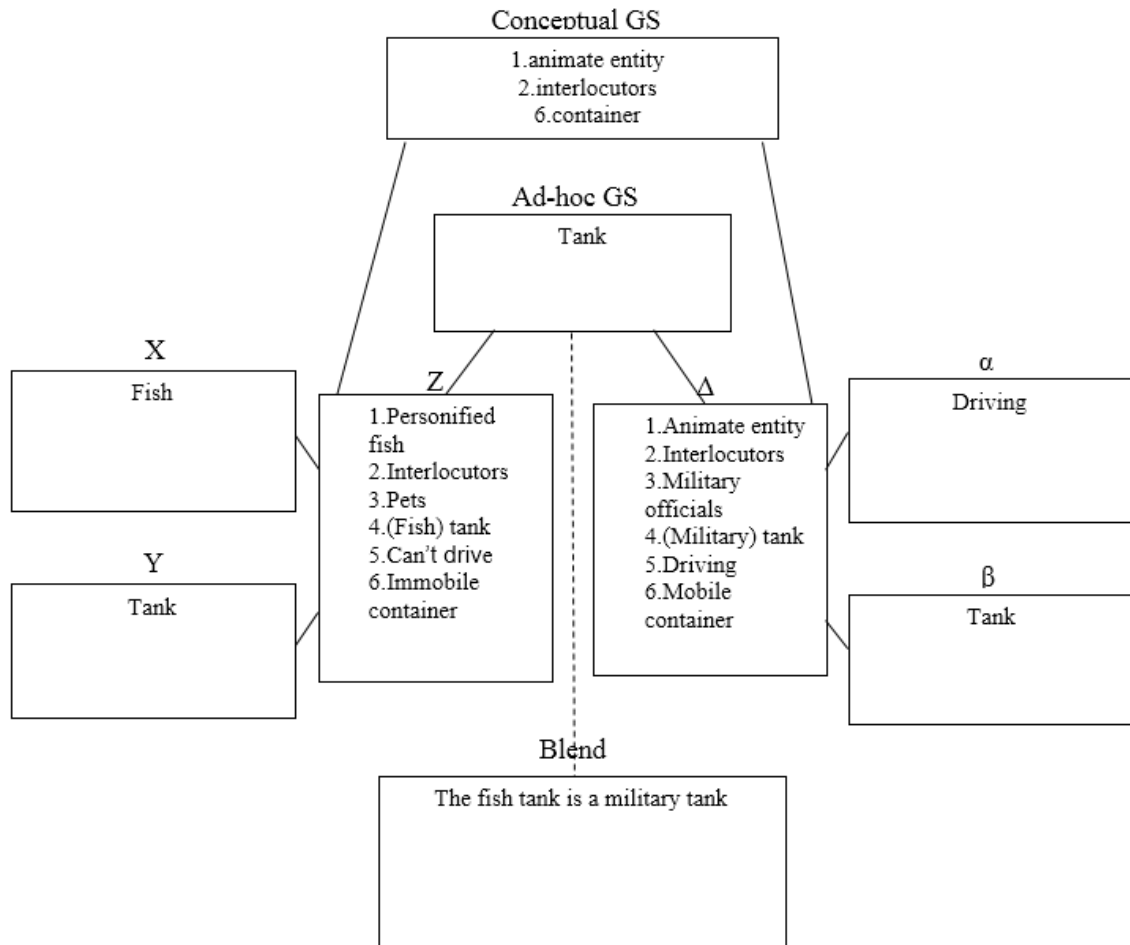


Figure 4. Proposed model applied in the joke "Two fish are in a tank. One says to the other, "Can you drive this thing?""

In the buildup, the words “fish are in a tank” activate ‘fish tank’ for the hearer/reader because keeping pet fish in a tank is part of an entrenched frame, PET FISH. The fish are personified when they become interlocutors (“One says to the other,”). In the punchline, one interlocutor addresses the other about driving something. To “drive” here is a disjunct, since it is not proper to the frame of pet fish, and forces the hearer/reader to backtrack in search of a second interpretation of the text. This is possible by interpreting the connector “tank”, in the buildup, as a military tank, which necessitates personified drivers. The humorous effect of the joke derives from the switch

that must be made from fish as pets in a tank to drivers of a military tank, giving rise to the incongruous blend between fish tank and military tank.

In the buildup, inputs [X Fish] and [Y Tank] produce the blend [Z Fish tank], a mental space that evokes the frame PET FISH. The highlighted features of mental space Z are [1. animate entities], as [2. interlocutors], in a [3. small glass container] in which entities [4. swim] and which is [5. immobile]. Input [A Driving] arises directly from the dialogue and [β Tank] arises from “this thing”, which refers back to the “tank” in the punchline. These produce the blend [Δ Drivers of military tank], a mental space that evokes the frame. The highlighted features of mental space Δ are two [1. animate entities] who are [2. interlocutors] in a [3. big metal container], in the position of potentially [4. driving] the container, which is therefore [5. mobile].

The joke forces a blend between mental spaces Z and Δ in which their identical features, [1. animate entity] and their role of [2. interlocutors], map onto each other and directly onto the emergent Cognitive Generic Space, as does the emergent feature [6. container] that arises from the mappings of the analogous pairs [3.], [4.], and [5.]. These latter mappings are incongruous – there is a kind of partial sanctioning over “tank”, meaning, these features cannot all at once specify “tank” in a conceptually feasible way –, but forced by the wording of the text. The joke specifies the animate entities as [fish] and their action over the container as [driving], while under-specifying the container by naming it by the lexical entry “tank”, which, when blended with the entities [fish] projects an immobile container within which aquatic pets can move, but when blended with the action [driving] projects a mobile container within which the drivers cannot move much, though they can move the container at their will. Thus, the

lexical entry [“tank”] emerges in the Ad-Hoc Generic Space because, through its underspecification, it permits the incongruous mappings that force the incongruent blend [The fish tank is a military tank].

To contrast, a blend between the same inputs [Z Fish tank] and [Δ Drivers of a military tank] that lacked an Ad-Hoc Generic Space might be something like “I keep the drivers of that military tank in my fish tank”, where there is no underspecified element to facilitate incongruent mappings, and therefore, no humorous effect.

2) *Do you serve lobsters? If it can pay, we will, sir.*

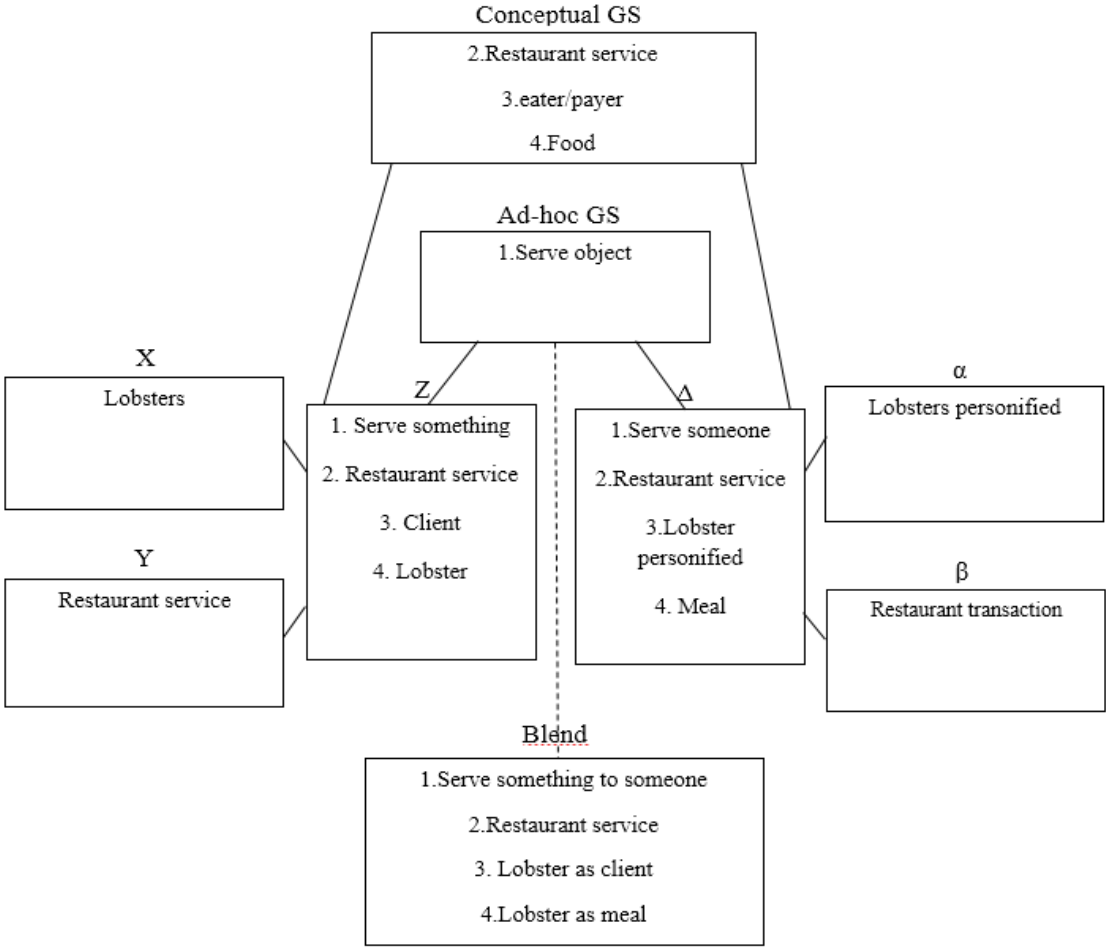


Figure 5. Proposed model applied in the joke “-Do you serve lobsters? -If it can pay, we will, sir.

This joke relies on the syntactic ambiguity produced by the ditransitive nature of the verb “serve”, as it allows direct or indirect objects with the same grammatical structure. In relation with the schema, input Z (“offering lobsters as a meal”) is the product of blending inputs x (“lobsters”) –from the frame SEAFOOD–, and Y (“restaurant service”), from the frame RESTAURANT. On the other hand, input Δ (“offering a meal to lobsters”) is composed by input α (“lobsters personified”) which is a novel blend, and input β (“Restaurant transaction”) from the frame RESTAURANT. In the conceptual generic space, there are three categories. The first generic element, “restaurant service”, is evoked from the mapping of “restaurant service”, from the frame RESTAURANT, in both inputs. The second, “eater/payer” arises from the elements “client”, from the frame COMMERCIAL TRANSACTION, and “lobster personified”. The final category is “food”, which emerges from the concepts “lobster”, from the frame SEAFOOD, and “meal”, from the field FOOD. Regarding the ad-hoc generic space, the element is the syntactic ambiguity produced by the ditransitivity of the verb “serve”, which immediately following the noun phrase might be a direct or indirect object; therefore, “serving lobsters” may refer to serve them as clients or as a meal. It has been put in the ad-hoc generic space because ambiguity tends to be solved by contextual hints, but in this case, this vagueness has been kept to prompt both possible senses. In consequence, the manner in which the text has been presented goes against the entrenched pragmatic tendency to avoid ambiguity, what makes this phenomenon an ad-hoc device. The blended space is represented with the sentence “The restaurant serves lobsters to lobsters”, because it highlights the ambiguity the

grammatical structure “lobsters” may have in terms of function, understanding it as both, direct and indirect object, at the same time.

A parallel can be made between inputs X and α , since they may evoke the same frame. This is relevant for the understanding of the joke, as they are, indeed, the same kind of identity, although the case of the personified lobsters is a novel blend. Inputs Y and β can constitute a parallel as well, as they are the same input from the same frame, which in fact is transferred completely as feature to the blend they are constructing.

In order to distinguish this humorous blend from a non-funny counterpart, we can consider a sentence like “Do you sell lobsters? If you can pay, we will, sir”. This blend would involve the same inputs, “Offering lobsters as a meal” and “offering a meal to lobsters”, but the term “serve” was replaced by the term, “sell”. This term was chosen because, in the frame of restaurant, serving a meal is involved as an act of selling. Thus, the grammatical ambiguity is resolved, because the verb “sell” does not provoke that effect; a noun phrase following immediately the verb only could be a direct object. In this way, keeping the inputs and the conceptual generic space, but modifying the ad-hoc generic space, the blend becomes a non-funny one.

Considering IDM, the connector would be “serve lobsters”, as it evokes both mental spaces involved, while the disjunctive would be “if it can pay, we will, sir” as it introduces the second mental space for the first time.

3) *What do you do if you see a spaceman?*

Park in it man.

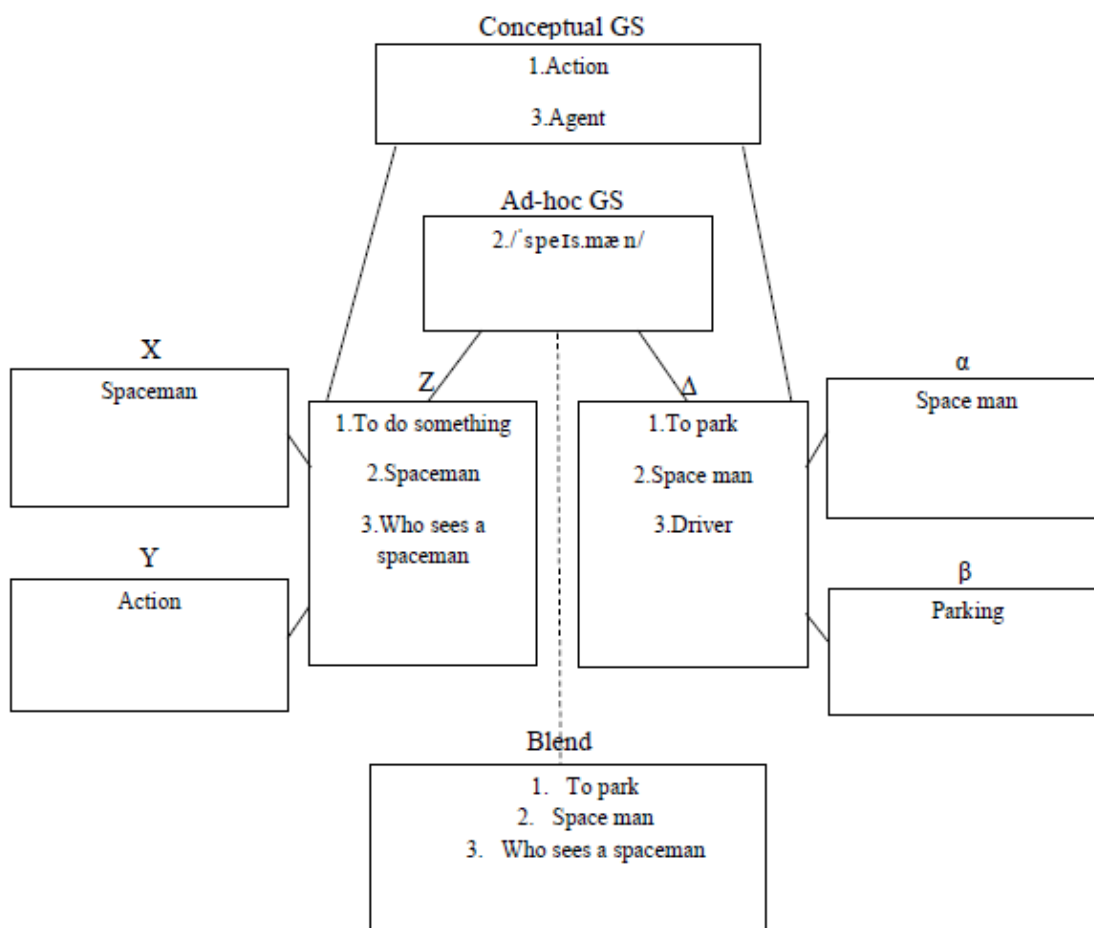


Figure 6. Proposed model applied in the joke "What do you do if you see a spaceman? - Park your car in it man"

This joke relies on the phonemic ambiguity between “a spaceman” and “a space man”, only distinguishable for the space between the words in the second instance. In relation with the schema, input Z (“the action when you see a spaceman”) is the product of blending inputs x (“spaceman”) –from the frame SPATIAL MISSION–, and Y (“action), from the frame MOTION. On the other hand, input Δ (“Parking in a space man”) is composed by input α (“Space man”) from the frame PARKING, and input β (“Parking”) from the frame DRIVING. In the conceptual generic space, there are two categories. The first generic element, “Action” is evoked from the mapping of “To do something”, from the frame ACTION, with “to park”, from the frame DRIVING. The

second, “Agent”, arises from the elements “Who sees a spaceman”, from the frame THE SPEECH ACT, and “driver”, from the frame DRIVING. Regarding the ad-hoc generic space, the element is the phonemic realization /'speɪs.mæn/, which fits to two written forms which are mapped, “spaceman” and “space man”. Although both are written in different fashions, they’re indistinguishable in oral language. It has been put in the ad-hoc generic space because this phonological coincidence is the only relation these two forms may have, but they belong to different and distant frames. The blended space is represented with the sentence “If you see a spaceman, you would park in the space”, because it prompts the two possible realizations of /'speɪs.mæn/ in the same event, which is parking.

A parallel can be made between inputs X and α , since they coincide in their phonemic realization, which is put in the generic space. This is relevant for the understanding of the joke, because of the coincidence it relies on. Inputs Y and β can constitute a parallel as well, as parking belong to the frame ACTION, in a relation of hyponymy.

In order to distinguish this humorous blend from a non-funny counterpart, we can consider a sentence like “What do you do if you see an astronaut? Park in it man”. This blend would involve the same inputs, “The action when you see a spaceman” and “To park in a space man”, but the term “spaceman” was replaced by synonym, “astronaut”. Thus, the phonological ambiguity disappears, and it becomes less coherent text. In this way, keeping the inputs and the conceptual generic space, but modifying the ad-hoc generic space, the blend becomes a non-funny one.

Considering IDM, the connector would be “spaceman”, as it evokes both mental spaces involved, while the disjunctive would be “park in it man” as it introduces the second mental space for the first time.

4) *“Honey, why are you wearing the wedding ring in the wrong finger?”*
“Because I married the wrong man”

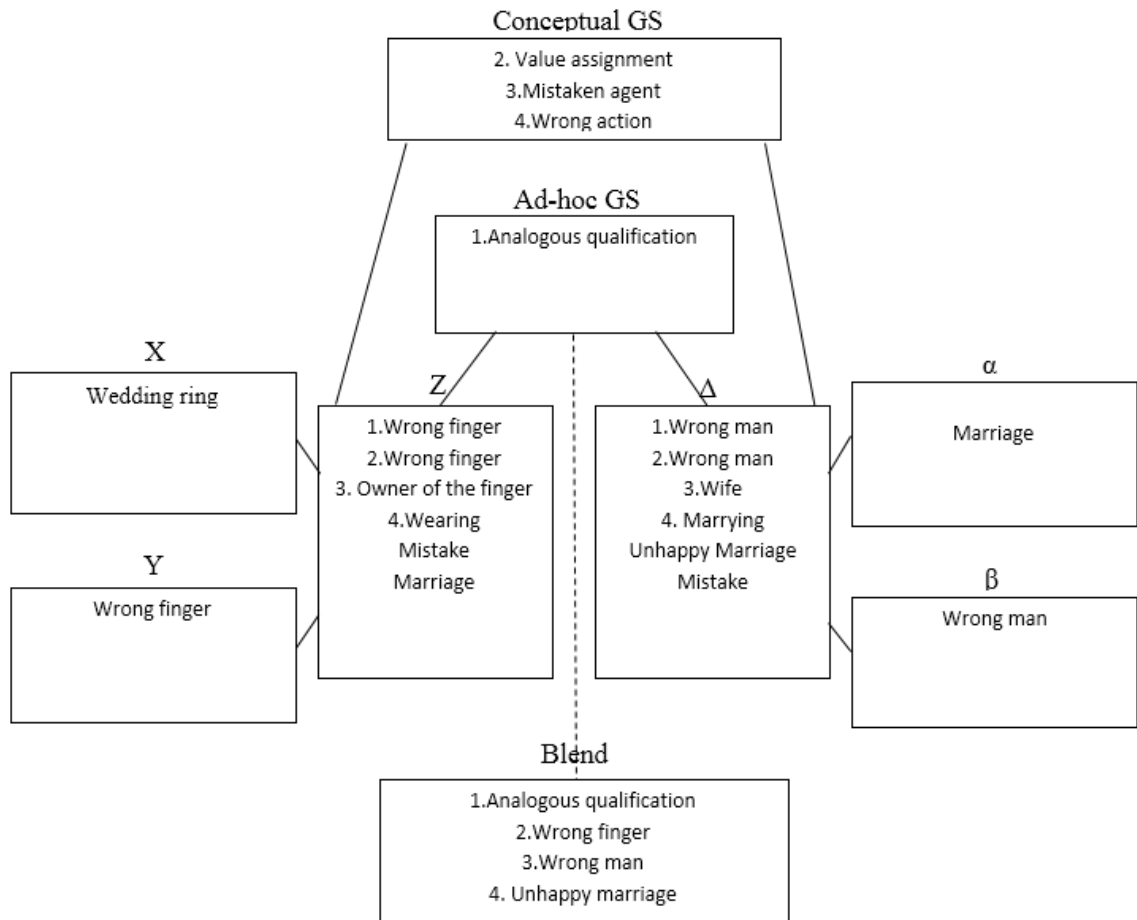


Figure 7. Proposed model applied in joke *““Honey, why are you wearing your wedding ring on the wrong finger?”*
“Because I married the wrong man.””

The interpretation of this joke relies on the analogy or non-entrenched correspondence between “wrong finger” and “wrong man”. In this particular joke and considering the schema above, Input Z (“wedding ring in wrong finger”) is composed

by [x: wedding ring] –from the frame MARRIAGE– and [Y: wrong finger], which invokes the frame HUMAN ANATOMY. On the other hand, input Δ (“married wrong man”), is composed by inputs α (marriage) and β (wrong man). Regarding the conceptual generic space, the first element arises from the mapping between the elements “wrong finger” and “wrong man”, which are induced from the frame MARRIAGE, categorizing into the element “value assignment”. This is due to the fact that both elements from the inputs are objects which were assigned a negative value. Secondly, elements “owner of the finger”, which is evoked from the frame HUMAN ANATOMY and “wife” which is evoked from the frame MARRIAGE, share the generic element of agency in their input, but with the particularity that both committed a mistake, which is the reason for the naming “mistaken agent”. Finally, the third element in the generic space (“wrong action”) arises from the actions “wearing”, which is evoked from frame CLOTHING and “marrying”, from frame MARRIAGE, since in their respective inputs both were based on a mistaken choice. Regarding the Ad-Hoc generic space, its generation has as its base “analogous qualification” between “wrong finger” and “wrong man”, which are inducted from the frames mentioned at the beginning. This element was placed in this generic space because there is no entrenched correspondence between marrying the wrong person and wearing the wedding ring in, for example, the index finger. This connection is merely ad-hoc, arising from the joke itself and nothing more than that. In other words, there is no place for such analogy in our long-term memory. This ad-hoc connection also assumes that the wedding ring in the right finger means that you married the right person. Regarding the blended space, elements 1., 2., 3. and 4. from each input were mapped

into “analogous qualification” (ad hoc), “wrong finger”, “wrong man” and “unhappy marriage”, respectively. Since the emergent structure is this new custom, elements 1., 2. and 3. were needed for the proper composition of the blend. Element 4. was placed because it plays an important role regarding the consequences of marrying the wrong man, and it profiles “marrying” rather than “wearing”. The blend was summarized in the sentence, “Wearing a wedding ring in the wrong finger represents that you married the wrong person”, which is a completely new input space which cannot be identified in the other inputs through backward projection. Although in this joke there is no pun involved, one can still connect the two “wrongs” in the schema, not necessarily in terms of form (since they are the same word with the same meaning), but in terms of position in the argument “wrong X” and in terms of connotation.

A parallel can be drawn between inputs x and α , in the sense they can potentially project the same frame. This may be useful for the proper understanding of the joke, in the sense that it might give a more reasoned blending between the inputs. No primary relation could be drawn from inputs y and β , apart from the generic element “wrong”.

In the attempt to elucidate the difference between this particular joke and its non-funny counterpart, let us briefly analyze the sentence “Because I married the wrong man, I put my wedding ring in my middle finger.” This “normal” blend has essentially as inputs the same ones from the previous analysis: “wearing wedding ring in index (wrong finger)” and “married the wrong man”, but the difference relies on the word middle instead of wrong (the mistake is implied). Even when this controlled difference, not significant difference could be depicted in contrast with the humorous blend. This may be due to the fact that analogies are rather a simple process, which does not necessarily

implicate funniness in their construction. In contrast, puns are mostly related to jokes, which would explain why some jokes do not stand without puns.

Considering Attardo’s terms “connector” and “disjuncter”, there are some elements in this particular joke that can fulfill them. For instance, “wrong” can be said to be the disjuncter, since it triggers the analogous connection previously mentioned. However, since this is, according to Attardo’s distinctions, a referential joke (since it does not rely on a lexicalized element in order to be processed), there should not be evidence of a connector.

5) *What is a ghost’s favorite dessert? Ice cream*

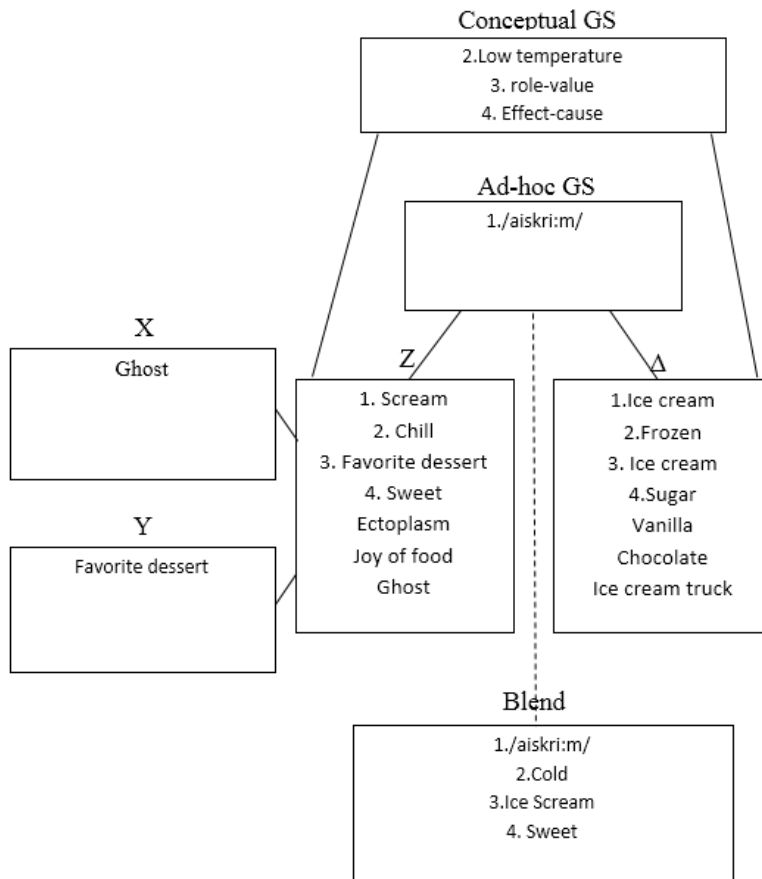


Figure 8. Proposed model applied in the joke "What is a ghost's favorite dessert? Ice cream"

The interpretation of this joke relies on the phonetic resemblance between “ice cream” and “I scream”, considering that there is no other entrenched connection of the meanings involved. In this particular joke and considering the schema above, Input Z (“a ghost’s favorite dessert”) is composed by inputs x (“ghost”) –from the frame GHOSTS–, and y (“favorite dessert”), from the frame CONFECTIONARY. On the other hand, input Δ (“Ice cream”), because of its simplicity, was not decomposed. Regarding the conceptual generic space, the first element arises from the mapping between the elements “chill”, from the frame FEAR, and “frozen”, from frame TEMPERATURE, generating the generic element “low temperature”. This is due to the fact that both inputs implicate the corporal sensation of low temperature, although the former projects the frame FEAR and the latter is more related to chemistry and state of matter. Secondly, elements “favorite dessert” and “ice cream” (from frame CONFECTIONARY as well) relate through a connection of “role-value” in the conceptual generic space, respectively. Finally, the third element in the generic space (“effect-cause”) arises from the elements “sugar” (from frame and “sweet”, where it is assumed that something is sweet because it contains a sweet element like sugar. Regarding the Ad-Hoc generic space, its generation has as its base the phonetic resemblance between “ice cream” and “I scream”. Although this is not a pun considering common definitions, the effect is basically the same: unrelated sense yet similar acoustic form. This resemblance, while very witty, is not entrenched in our long-term memory, because it needs as its context this particular joke to make sense, and no further relation can be drawn from two different orthographies. Regarding the blended space, the phonetic transcription /aɪskr:ɪm/ (IPA) was included because of its essentiality in the understanding of the joke. Moreover, “cold” was added

to contain both elements number 2. in one single concept. “Ice Scream” was included to represent a scream as a dessert and “sweet” in order to maintain the feature of a dessert. The blended space was represented in the sentence “a ghost's favorite dessert is ice scream”, because it merges correctly both unrelated concepts with similar acoustic form. Moreover, “I scream” inducts the same frame that “A ghost” does, while “Ice cream” does it with “favorite dessert”.

No parallel can be drawn from the inputs that compose inputs Z and Δ , since input Δ is too basic to justify a decomposition. However, this simplicity may facilitate the understanding of the joke, since less inputs are involved, and therefore, less information must be processed.

To elucidate the difference between this particular joke and its non-funny counterpart, let us briefly analyze the sentence “the favorite dessert of a ghost is sherbet.” This particular blend has as inputs the same ones from the previous analysis: “a ghost’s favorite dessert” and “sherbet (ice cream)”, but it differs in the fact that there is no pun involved, since “ice cream” was replaced by the synonym “sherbet”. Without the pun, no ad hoc generic space can be elucidated at first sight, and this affects the funniness of the sentence in a considerable way. Again, the conceptual generic spaces could be perfectly maintained, and the blended space would correspond the whole sentence.

6) *Two cannibals are eating a clown. One says to the other:*

“Does this taste funny to you?”

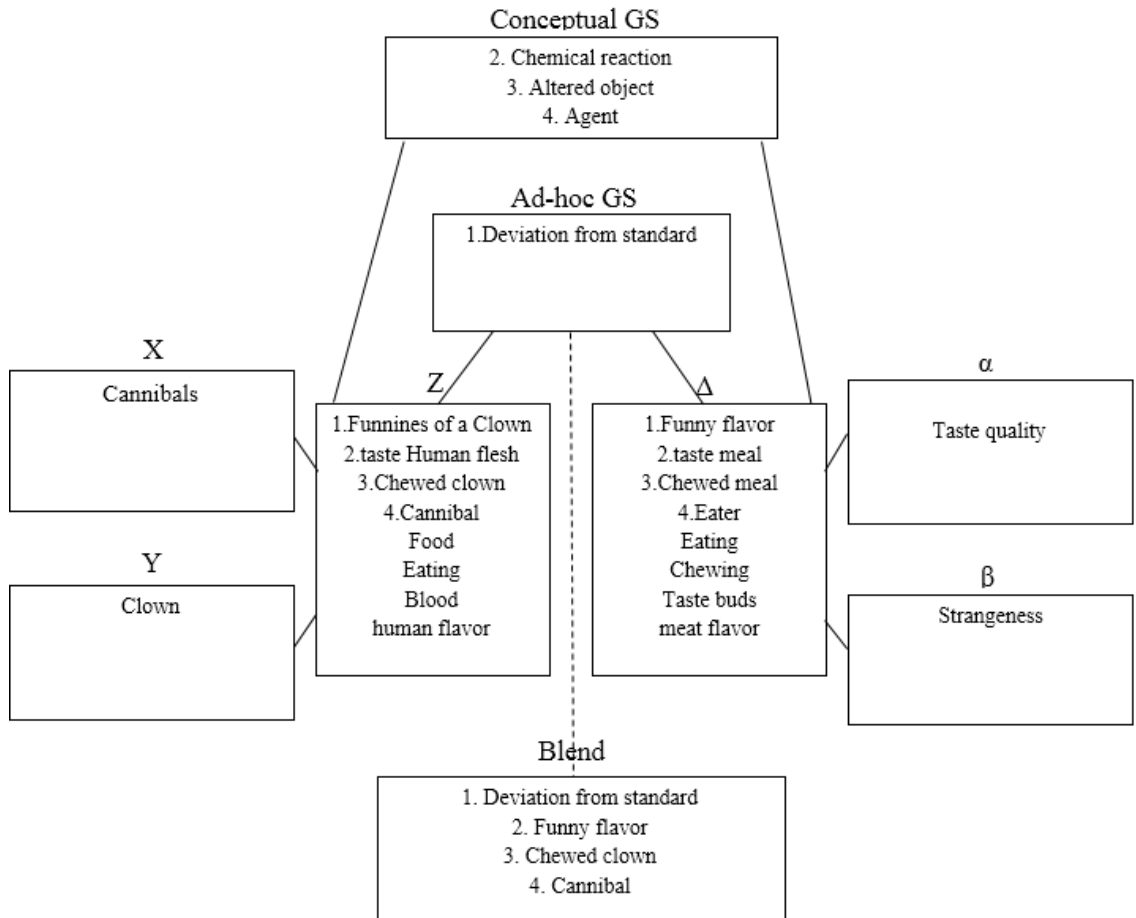


Figure 9. Proposed model applied in the joke "Two cannibals are eating a clown. One says to the other, "Does this taste funny to you?""

The interpretation of this joke relies on the pun “funny”, where the meaning “to provoke laughter” and “to taste weird” merge. In this particular joke and considering the schema, Input Z (“two cannibals eating clown”) is composed by inputs X (“cannibals”), belonging to the frame CANNIBALISM and Y (“clown”), from the frame CIRCUS. On the other hand, input Δ (“this tastes funny”) is composed by inputs α (“taste quality”), from the frame FOOD, and the value β (“strangeness”), configuring a single scope blend. Regarding the conceptual generic space, the first element arises from the mapping between the elements “taste human flesh” (frame CANNIBALISM) and “taste meal”,

(frame FOOD), generating “chemical reaction”. This is due to the fact that both inputs implicate the reaction of food in contact with taste buds, a process which is merely chemical. Secondly, elements “chewed clowns” (CANNIBALISM) and “chewed meal” (FOOD) share the “altered state” element in the conceptual generic space because both play the role of object in their respective inputs, but they were altered by a previous action (chewing) performed by an agent (“cannibal” and “eater”). Finally, the third element in the generic space (“agent”) arises from the elements “cannibal” and “eater” respectively. Regarding the Ad-Hoc generic space, its generation has as its base the pun between funny (weird) and funny (laughter provoking). This particular case has to be analyzed under two considerations. The first one is that the semantic distance between the terms is not sufficiently big to consider them as homonymous, but at the same time, their relation is not close enough in terms of meaning to consider them as polysemy. Additionally, its original meaning is closer to “humorous”, and possibly through time the word absorbed the other definition (“peculiar”). Either way, these limitations led to the following conclusion: considering that a polysemic relation can be considered, and although it is acknowledged that the acoustic image of the word “funny” does not satisfy the explanation for the humorous feature of this joke, the non-entrenched relation that is profiled in this particular joke will be indeed placed in the pun, but with the consideration of the point of transition from one meaning to the other. In other words, what is activated in the ad hoc generic space is “deviation from expectation”, a feature that arises from the contact between the two different meanings only because of the joke. This non-entrenched category is activated by the 2 inputs and the role of “funny” in them. The causality relation which is generated in this particular joke “if I’m funny, I

taste weird” is elucidated in the blend, which is composed by the elements “funny (clown)”, from frame CIRCUS; “funny (taste)”, from frame FOOD; and “chewed clown” and “Cannibal”, from frame CANNIBALISM. Since the understanding of the joke necessarily needs the conception of both meanings of “funny”, both must be located in the blended space. The object and the agent in the emergent input space are those of input Z, since the quoting in the joke implicates that one of the cannibals mentioned in the buildup asked the other if the clown meat tasted funny. The blended space is represented in the sentence “Clowns make you laugh and taste weird”, because of the causality relation previously mentioned.

A parallel can be drawn between inputs x and α , in the sense they can potentially project the same frame. This may be useful for the proper understanding of the joke, in the sense that it might give a more reasoned blending between the inputs. No primary relation could be drawn from inputs y and β .

To elucidate the difference between this particular joke and its non-funny counterpart, let us briefly analyze the sentence “clown flesh tastes weird because clowns work in a circus.” This particular blend has as inputs the same ones from the previous analysis: “cannibal(s) eating (ate) clown” and “strange flavor”, but it differentiates in the fact that there is no pun involved, since “funny” was replaced by “weird”. Without the pun, no ad hoc generic space can be elucidated at first sight, and this affects the funniness of the sentence in a considerable way. Either way, the conceptual generic spaces could be perfectly maintained, and the blended space would be the whole sentence.

7) Which dog can tell you the time?

A watch dog

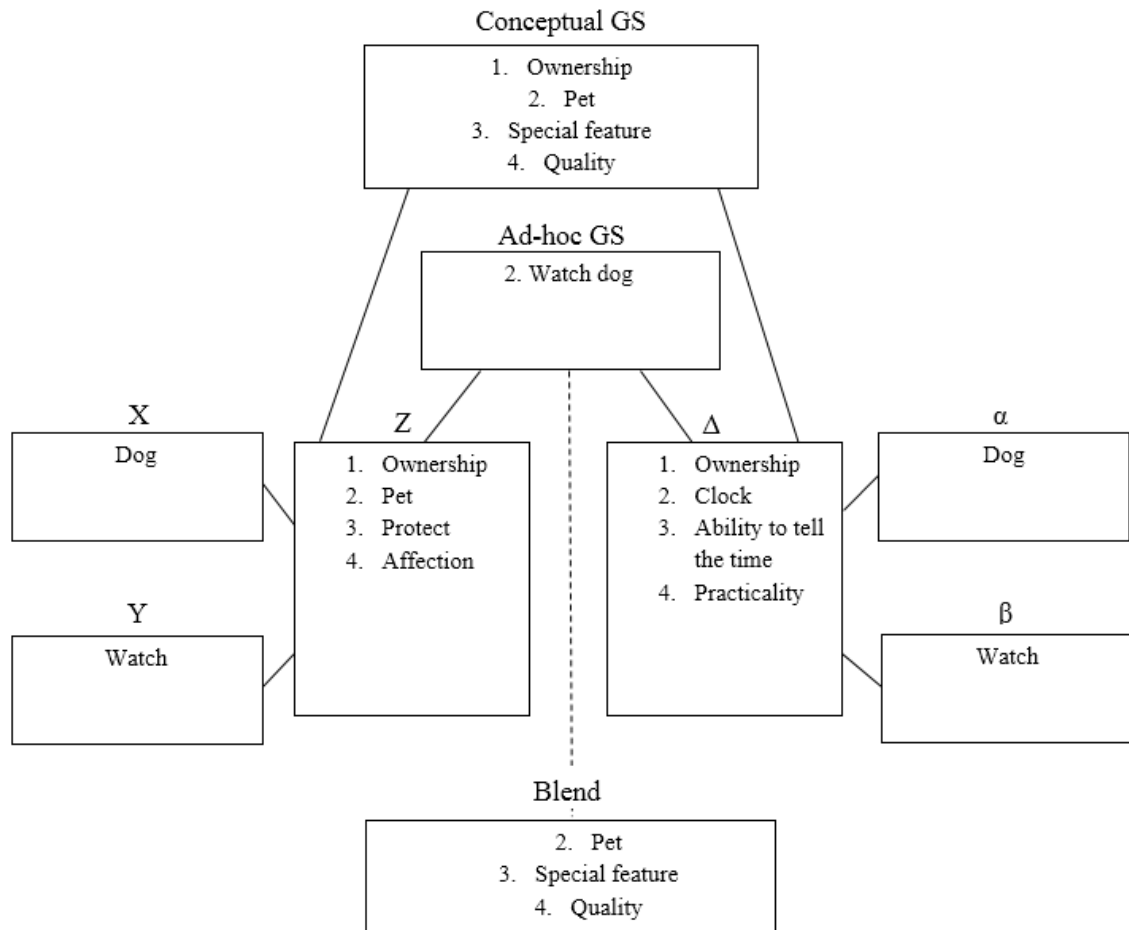


Figure 10. Proposed model applied in the joke "Which dog can tell you the time? A watch dog"

The interpretation of this joke relies on the pun that emerges from the homonymy of watch, meaning to guard, and watch as a clock. Therefore, the concept *watch dog* found in the punchline can be interpreted with its common meaning, a dog which protects or guards private proprietary, or as something which is part dog, part clock. According to the schema, input Z is composed by [x: dog], from the frame PET DOG, and [y: watch], from the frame PROTECTION, and it corresponds to the term *watchdog*. Here, we find the highlighted elements [1. Ownership], [2. Pet], [3. Protect], and [4. Affection]. On the other hand, input Δ is composed by [α: dog], which belongs

to the frame PET DOG, and [y: watch], which belongs to the frame CLOCK. In this blend, the highlighted elements are [1. Ownership], [2. Device], [3. Ability to tell the time], and finally [4. Practicality].

This joke forces a blend between the highlighted elements found in z and Δ . First, the elements of [1. Ownership] found both in Z and Δ are mapped together. Then, the identity of [2. Pet] in z maps onto the identity of [2. Device] in Δ ; next, the feature of [3. Protection] maps onto [3. Ability to tell the time]; and finally, [4. Affection] maps onto the quality of [4. Practicality]. Therefore, in the Conceptual Generic Space we find the mappings [1. Pet], [2. Special feature], and [3. Quality].

The generation of the Ad-hoc Generic Space is based on the homonymy of *watch*, which can mean either "to guard, to protect", or it could refer to a clock. Therefore, the term watch dog could work either way: as a guardian pet, or as a dog that works like a clock.

Regarding the blended space, it was represented with the sentence "a watch dog is a domestic dog that can tell you the time", because it accurately merges the unrelated concepts of guarding and telling the time present in the joke.

The sentence *A dog that can tell you the time is a clock dog* would be the non-funny counterpart of this joke, because if it is analyzed with this same method, we will find that even if the inputs are the same as in the previous analysis, the difference relies on the fact that there is no pun, since the word *watch* was replaced by *clock*, and the hearer/reader would not be able to make the connection between the term *watch dog* and *watch*. In other words, the Ad-hoc Generic Space would not be prompted quickly.

In Attardos's terms, the connector of this joke is watch dog, since it can be understood as dog kept to guard private property or as a dog that is also part clock. This disjunctive of the joke is the question which dog can tell you the time? because it prompts the selection of a different frame than PET DOG, which in this case, would be the frame of CLOCK.

8) "I wish you would pay a little attention"

"I'm paying as little as I can"

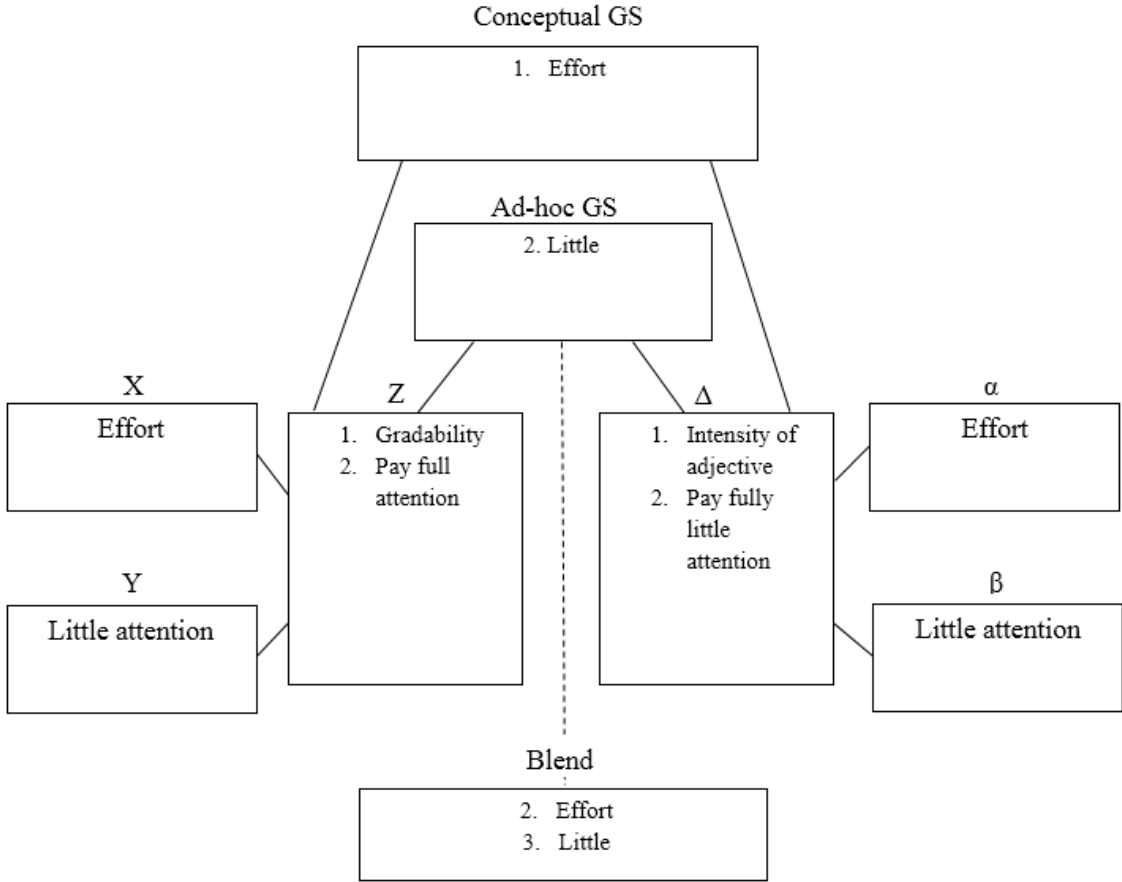


Figure 11. Proposed model applied in the joke "I wish you would pay a little attention" "I'm paying as little as I can"

In the build-up of this joke, the word *attention* presents a binary choice between the presence of attention and the absence of it. Here, there is a metaphorical

scale that goes from little to full attention. Thus, *to pay a little attention* equals *to pay attention* as opposed to *pay no attention at all*. The punchline, however, uses *little* to present a binary choice between the presence of a small amount of attention and the presence of a large amount of attention. In this case, the metaphorical scale only moves within the measurement of little. Therefore, in the punchline *to pay as little as possible* equals *to pay a small amount of attention* as opposed to *pay lots of attention* like in the built-up of the joke. Then, the same form *little* is used with a different intention by each speaker. Then, the connector of this joke is *attention*, while the disjunctive corresponds to the phrase *as little as I can*.

This means that the speaker in the build-up presupposes no attention is being paid and asks for it, which implies an effort from the other person. There is politeness on this request which is evidenced in the use of a metonymy with the expression *a little attention*. Then, the inputs in this joke are [x: Effort] and [y: Little attention], the ICM where both of these inputs are found is POLITENESS. They blend into Z, where the elements [1. Gradeability] and [2. Pay full attention] are found. On the other hand, we find the inputs [α : Little attention] and [β : Effort]. Here, the ICM of POLITENESS is not present even though the inputs are the same. α and β then blend into Δ , where the highlighted elements are [1. Fully little attention] and [2. Intensity of adjective].

As it has been just mentioned above, the inputs X - α , and Z - β are the same. Interestingly enough, the first pair are the ones with the element that belongs in the Conceptual Generic Space: [1. Effort]. The second pair of inputs, on the other hand,

highlight the generic element of [2. Little], because it can be found in both mental spaces of this joke.

The joke's blend is expressed in the phrase *The effort to pay full attention is an effort not to pay attention fully*. On the other hand, the non-funny blend can be expressed as: *"Pay attention!" "I'm paying as little as I can"*. Here, not only the element *Little* from its Ad-hoc Generic Space is not present, it also lacks the ICM of *POLITENESS* and its metonymy.

9) *What do you call a witch who verifies her incantations?*

A spell checker

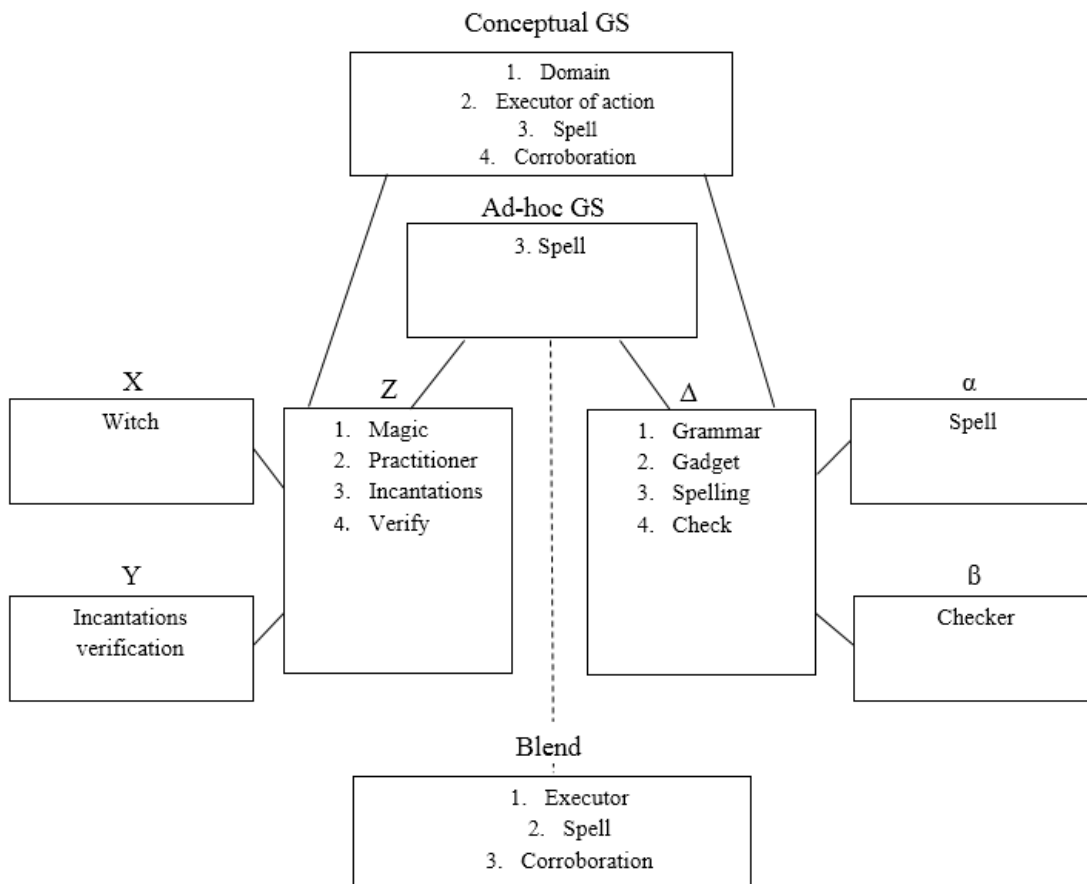


Figure 12. Proposed model applied in the joke: "What do you call a witch who verifies her incantations? A spell checker"

This joke relies on the double meaning the word “spell” has: it can refer to a magic spell, or to spelling. In the built-up of the joke, the inputs that emerge are [x: witch], from the frame MAGIC, and [y: incantation verification], from the frame SORCERY, which forms Z. Here, we can find the highlighted elements [1. Magic], [2. Practitioner], [3. Incantations] and [4. Verify]. Then, the punchline of the joke evokes the inputs [α : Spell] from the frame GRAMMAR, and [β : Checker], which build Δ . Here, the highlighted elements are [1. Grammar], [2. Gadget], [3. Spelling], and [4. Check].

In the Conceptual Generic Space, [1. Magic] maps onto [1. Grammar], forming the generic element [1. Domain]. Then, [2. Practitioner] is mapped onto [2. Gadget], creating the element [2. Executor of action]. The third generic element, [3. Spell] arises from the mapping between [3. Incantations] and [3. Spelling]. The final generic feature in the Conceptual Generic Space is [4. Corroboration] and it derives from the mapping between [4. Verify] and [3. Check].

The Ad-hoc Generic Space in this joke is Spell because it works for both sides of the joke. On the one hand, it might be understood as the action of corroboration of a magic spell, while on the other hand, it might be understood as the correction of the orthographic spelling. This is not entrenched because the context would be needed in order to determine which interpretation is the appropriate one.

Moving on to the Blend of this joke, this is represented by the sentence *A spell checker is a witch who verifies her incantations*, because it merges the two inputs of the joke in a similar manner. However, if a Blend such as *A witch who verifies her incantations is an enchantment corroborator*, then it loses its funny trait. This is

because, by replacing the words *spell* and *checker* with their synonyms *enchantment* and *corroborator* respectively, the Ad-hoc generic space is lost.

In this joke, according to Attardo's theory, the connector is *spell checker*, as it acts as point of access to both mental spaces involved. On the other hand, the disjunctive in this case is *witch*, because it introduces the second mental space.

10) *How did the butcher introduce his wife? - Meat Patty*

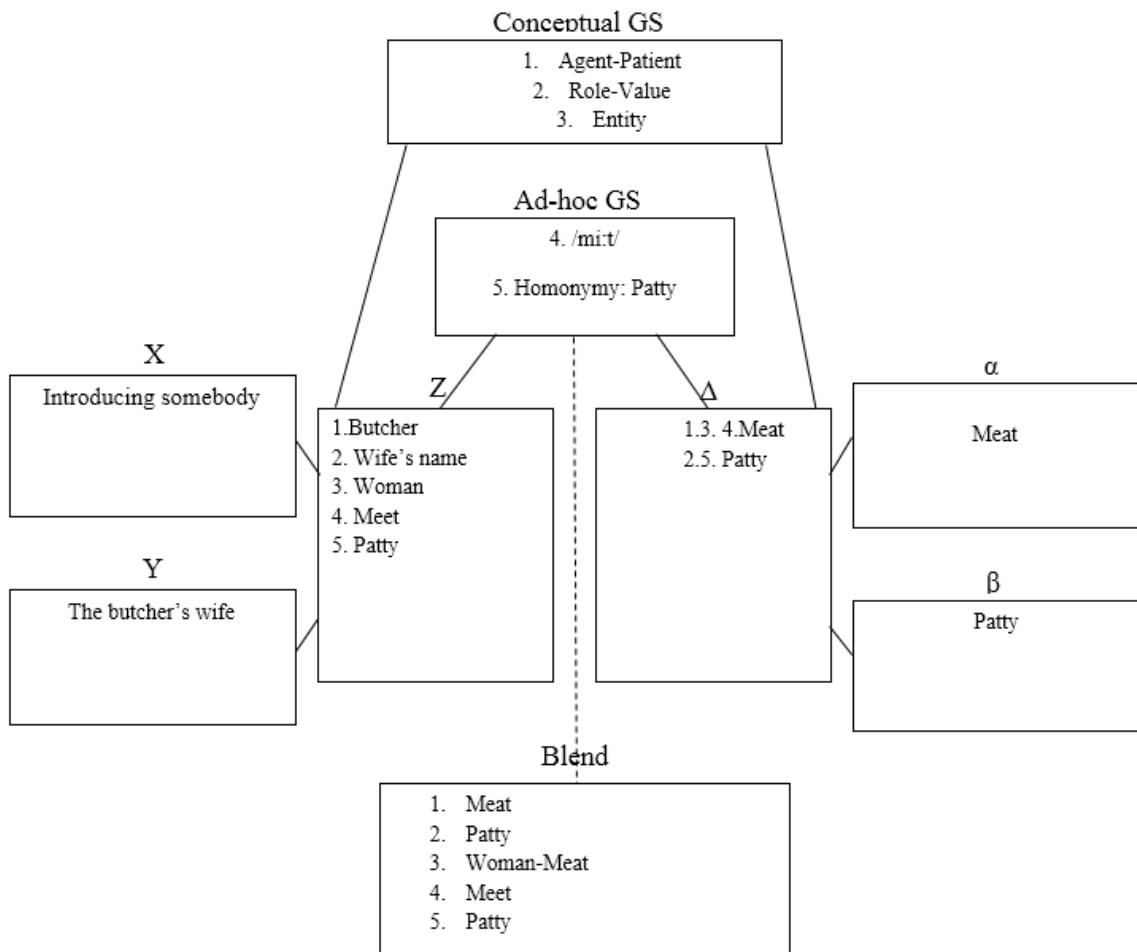


Figure 13. Proposed model applied in the joke "How did the butcher introduce his wife? - Meat Patty"

This joke particularly relies on two points. On the one hand, there is a case of homophony between “meet” and “meat” and, on the other, a case of homonymy of the

word “patty”, which may mean a proper female name or a round cake made, for example, of meat. In relation with the schema, input Z (“Introducing the butcher’s wife”) is the product of blending inputs x (“Introducing somebody”) –from the frame POLITENESS–, and z (“The butcher’s wife”), from the blend of two frames, “butcher” and “marriage”. Only one frame of origin can’t be assigned to the input “the butcher’s wife” because it is a novel concept, rather than entrenched. On the other hand, input Δ (“Meat patty”) is composed by input α (“meat”) from the frame INGREDIENT, and input β (“patty”) from the frame COOKING. In the conceptual generic space, there are three categories. The first generic element, “Agent-Patient”, is evoked from the mapping of “Butcher”, from the frame JOB, and “Meat”, from the frame FIELD. The second, “role-value”, arises from the elements “Wife’s name”, from the frame IDENTITY, and “Patty” from the frame DENOMINATION. Although the term “Patty” refers to a kind of meal rather than a human name, it can be a valid value as a noun and because of a homonymy that will be explained later. The final category is “entity”, which emerges from the concepts “woman”, from the frame GENDER, and “meat”, from the field FOOD. Regarding the ad-hoc generic space, the first element is the phonemic realization /mi:t/, belonging to the terms “meet” and “meat” at the same time, provoking an effect of homophony. This phonemic production of these two words is what make possible to connect them, but this relation is certainly not entrenched, nor any other relation is. The other element is the homonymy of the word “patty”, which may refer to a woman’s name or the culinary preparation. Women who are known as “Patty” are not named after the meal; instead, their names have a different origin. Therefore, the human name and food are not related in an entrenched way. The blended space is represented with the

sentence “The butcher’s wife is a meat woman called Patty”, because the cases of homophony and homonymy evoke both senses at the same time in the frame-shifting.

A parallel can be made between inputs X and α , since they may evoke the same frame. This is relevant for the understanding of the joke, as this permits to shorten the semantic distance certain concepts, constructing a more complex blend. Inputs Y and β do not produce the same effect.

In order to distinguish this humorous blend from a non-funny counterpart, we can consider a sentence like “The butcher introduced her wife named Hamburger”. This blend would involve the same inputs, “Introducing the butcher’s wife” and “Meat patty”, but the term “meat patty” was replaced by a synonym, “hamburger”. Thus, homonymy and homophony are avoided, which were the generic elements evoked by “meat patty”. In this way, keeping the inputs and the conceptual generic space, but modifying the ad-hoc generic space, the blend becomes significantly less funny.

Considering IDM, the connector would be “Meat Patty”, as it evokes both mental spaces involved, but, at the same time, it would be the disjunctive, as it introduces the second mental space for the first time.

11) Two snowmen are in a field. One says to the other, “can you smell carrots?”

This joke relies on a paradox in the role of carrots in the event, by means of an ad-hoc relation. In the main blend, the input Z (“snowmen in a field”) is composed by the input X (“snowmen”), from the frame SNOW, and Y (“field”), from the frame LANDSCAPE. Moreover, the input Δ (“smell of carrots”) is constructed from the blend

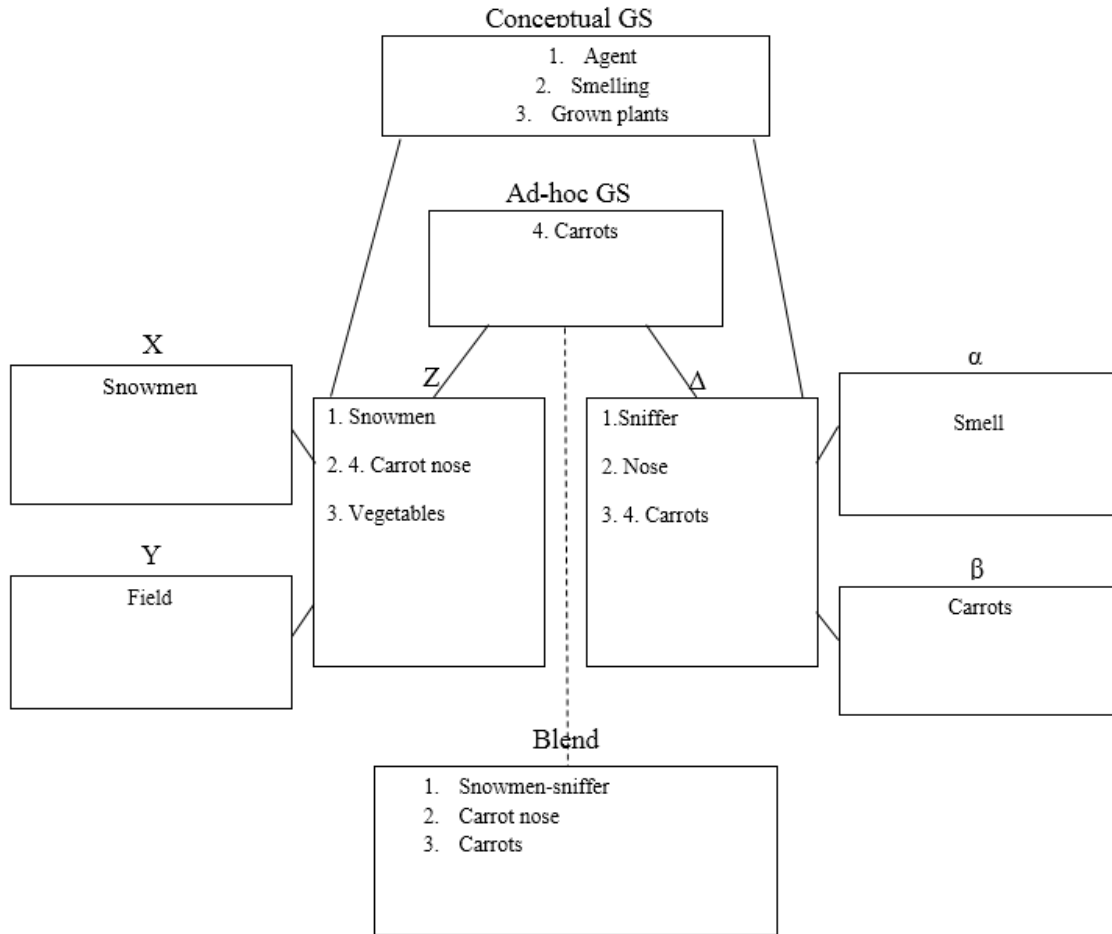


Figure 14. Proposed model applied in the joke "Two snowmen are in a field. One says to the other, "can you smell carrots?""

of input α ("smell"), from the frame PERCEPTION, and input β ("carrots"), from the frame VEGETABLE. The conceptual generic space counts with three generic elements. The first is "Agent", which arises from the concepts "snowmen" and "sniffer", although snowmen is more profiled than sniffer. Then, the second term, "smelling" is prompted by the elements "carrot nose" and "nose"; once again, the former more profiled than the latter. The final generic element is "grown plants", which is evoked from the mapping of "vegetables" and "carrots". In this relation, the second is more profiled than the first, in contrast with the first two categories. The ad-hoc generic space includes the element "carrot", because of the mapping of "carrot nose" and "carrot". This category is

considered ad-hoc due to the fact the role of the carrot nose in input Z is considerably different to the role of carrots in input Δ , but they can be related because in both events there is presence of carrots, a distant and non-entrenched relation. The blend may be summarized in the sentence “Snowmen smell carrots with their carrots in a field of carrots”, hence it highlights and overlaps the two roles carrots have, one in each input, by the fact that snowmen have a nose made of carrot and they are smelling carrots. Furthermore, since they are in a field, it would provide sense to the ambiguity of the origin of the smell.

A parallel can be drawn between inputs Y and β , because they may potentially project the same frame. This is relevant, because the potential frame is the ad-hoc generic element of the joke, established between the two inputs of the main blend. Inputs X and α do not present the same possibility, since snowmen are usually static, while a sniffer is considered an agent, role which couldn't be played by an inanimate object as a snowman, which, at the same time, is a metonymical representation of men.

The sentence “Two snowmen are in a field. One says to the other if he can smell vegetables” represent a non-humorous counterpart to the joke that has been analyzed. The word “carrots” has been replaced by the word “vegetables”, its hypernym. In this sense, the inputs are kept and also the conceptual generic space, but it impedes to construct the ad-hoc relation of carrots between both inputs, because indeed “vegetables” may refer to any kind and not exclusively to the one put in the nose of a snowman.

Regarding IDM, “smell carrots” would be the connector, as it links both mental spaces. Curiously, the disjunctive would be the same phrase, as this highlights the relation of the carrots with their ability to smell.

12) *Two fonts walked into a bar. The bartender said: “Sorry, we don’t want your type in here”*

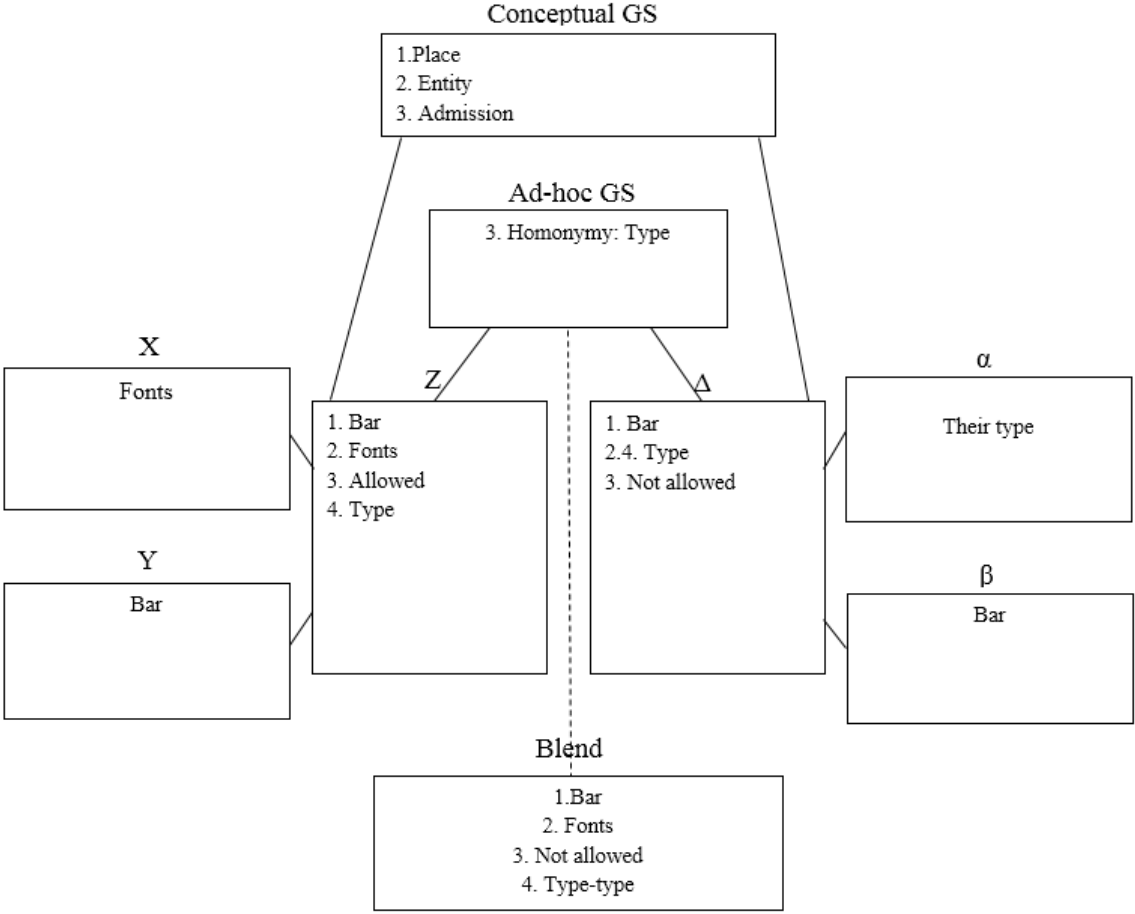


Figure 15. Proposed model applied in the joke "Two fonts walked into a bar. The bartender said: “Sorry, we don’t want your type in here”"

This joke works on the basis of a pun, product of the homonymy of the word type. According to the schema above, input Z “Fonts in a bar” is composed by the blending of input X (“fonts”), from the frame WRITING, and input Y (“bar”), from the frame LEISURE. Moreover, the input Δ (“Not their type in bar”) is composed by input α (“their type”) from the frame CLIENTS, and input β (“bar”) from the frame

LEISURE. The conceptual generic space establishes three main elements. The first is “place”, which arises from the mapping of the coincident element “bar”, from the frame LEISURE. The second, “entity” emerges from the concepts “fonts” and “type”. The last generic element is “admission”, evoked from “allowed” and “not allowed”. This refers to the potential allowance for attending to a bar fonts may have versus the prohibition their type has. Otherwise, the ad-hoc generic space presents the homonymy of the word “type” as an element, because it may refer to a written character as well as to a kind of person. This relation has been put in the ad-hoc generic space because, although both senses are consolidated as valid for the same word, they lack an entrenched connection; in consequence, they have been specially related in this joke. The blend is summarized in the sentence “Fonts are the type not allowed in the bar”, because it makes explicit the pun related to the word “type” and shows the consequence of not being allowed to enter to the bar.

A parallel can be made between the inputs Y and β since they are, in fact, exactly the same. This is crucial, because this coincidence makes more prominent the contradiction between being allowed or not to enter to the same space.

A non-humorous blend to contrast would be “Fonts are the kind not allowed in the bar”. In this sentence, the ad-hoc relation of both inputs by means of the homonymy of “type” is broken by being replaced by a synonym: “kind”. Therefore, although the inputs are kept the same and the conceptual generic space remains as well, the ad-hoc generic is disappeared and so the blend becomes non-humorous.

In relation to Attardo’s concept, “we don’t want your type in here” would be both the connector and the disjunctive. The former, because type applies for fonts and

bars, and the latter, because “type” is the element that produces the backtracking process which would later lead to the humorous effect.

13) “Why don’t oysters give to charity? They’re shellfish”

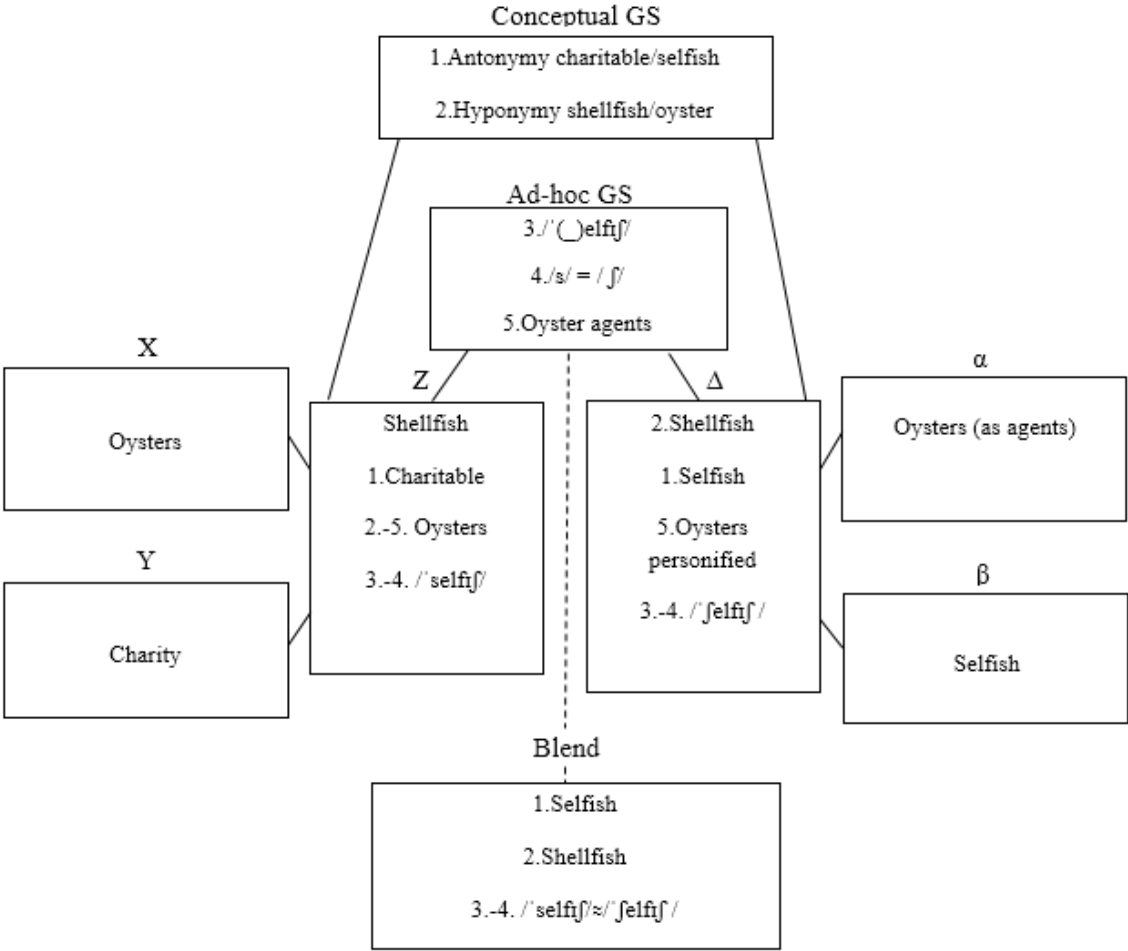


Figure 16. Proposed model in the joke "Why don't oysters give to charity? They're shellfish"

This joke is one that can be categorized as pun because it works thanks to the relationship between the phonemic resemblance between the words selfish and shellfish. As ‘oysters’ can be categorized as a type of ‘shellfish’, this triggers the humorous effect. The integration network that explains this joke is illustrated by Figure 16.

From the figure, it can be gathered that both the inputs X and α have a mental space containing [oysters] from the frame SHELLFISH, but input α profiles [oysters as agent] able to perform human actions. In the case of inputs Y and β , these contain the items [charity] and [selfish] respectively. Inputs X, [oysters] and Y [charity] are invoked by the buildup of the joke (“Why don’t oysters give to charity?”). Hence, input Z is the product of the blend between [oysters] and [charity] that reflect this part of the joke. Within this, there are features such as [shellfish] as the hypernym of [oysters], [1. charitable] immediately prompted by input [Y charity], [2.-5.oysters] as directed from input X, and the phonemic image of the word selfish [3.-5.(‘selfiʃ/)] necessary for the pun to work. Likewise, input Δ responds to the blend of the inputs [oysters], this time as agents, and [selfish] as put in the punchline (“They’re shellfish”), ‘they’ referred to the oysters. Input Δ contains the phonemic and graphemic image of the word shellfish [3.-4. (/ʃelfiʃ/)] and [2.‘shellfish’], the first necessary for the pun to work, [5.oysters personified] prompted by input α and [1.selfish] from input β .

The feature that is held in common by the inputs Z and Δ at a conceptual level is the hyponymic relation between shellfish and oysters. Additionally, the antonymic relation between charitable and selfish is present in the conceptual generic space. Then, moving to the ad-hoc generic space, the phonemic image that both “shellfish” and “selfish” have in common as present in the inputs [3. (/ʃelfiʃ/)] is contained here, as well as the identity relation that makes the pun work, namely, the voiceless alveolar fricative equal to the voiced alveolar fricative [4. /s/ = /ʃ/]. Finally, [5. oysters] as agents in also part of the ad-hoc generic space as present from input α and Δ . Finally,

the resulting blend that the joke employs can be expressed by the sentence [selfish shellfish].

If, in turn, there is a blend that makes use of the same frames but does not carry a humorous effect may be put as ‘egotistical shellfish’, as it works with the same relation of “oysters as agents” and its “selfishness” but gets rid of the pun. In this case, the majority of the elements of the Ad-hoc generic space are erased.

Regarding Attardo’s theory and concepts of “connector” and “disjunctor”, this joke relying on the referential category it can hold in his categorizations, the connector could be the word “shellfish” (present in the punchline), as it both points to its actual phonemic image and to its similarity with the one belonging to the item “selfish”, while the disjunctor in this case should be “charity” as it triggers the selection of the latter interpretation.

14) Why are robots never afraid? Because they have nerves of steel

The above question/answer joke plays with the idiom ‘nerves of steel’. Having nerves of steel implies the ability to remain recollected when facing complicated situations. It turns out to be funny when this information is linked to the robot, as they are prototypically made of some type of metal as steel. At the same time, this is contrasted to the generally known fact that robots are not able to hold feelings and emotions such as fear, proper of humans. Figure 17 presents the schema that summarizes the blends in this joke.

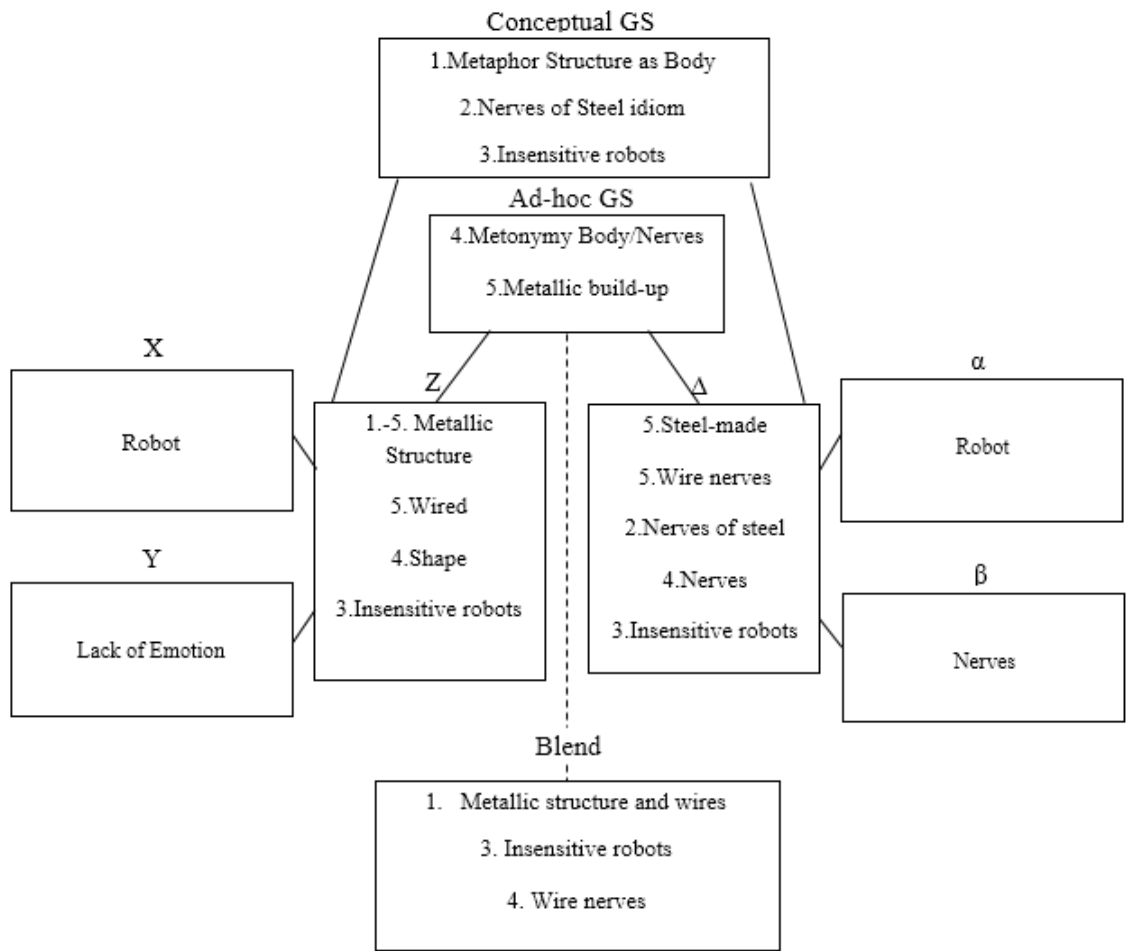


Figure 17. Proposed model applied in the joke "Why are robots never afraid? - because they have nerves of steel"

The inputs X and α contain information about the frame ROBOT, while the input in Y [Lack of Emotion] belongs to the frame EMOTION, input β does to the mental space [nerves]. On the one hand, inputs X [robots] and Y [Lack of Emotion] are evoked from the joke's buildup ("Why are robots never afraid?"). Both these inputs blend into input Z. This input features first [3. insensitive robot] produced in the blend between X and Y. This considering that the robots are profiled as entities who never feel fear nor any other emotion of feeling and prompted by its frame [EMOTION] directly. Then, the metallic structure of robots [1.-5. metallic structure], their inner wiring [5. wired] and finally [4. shape] from the frame ROBOT. On the other hand, inputs α [robots] and β

[nerves] are accessed through the punchline (“Because they have nerves of steel”). The blend between inputs α and β , input Δ , provides the features [5. steel-made], as the material these robots are made of and made relevant by the punchline. Following, the [5. wire nerves] gathered from the wiring of the robot and the [4. nerves] input, then the space [nerves] itself evoked by its input, [3. insensitive robots] and finally the idiom [2. nerves of steel] as present in the punchline.

What is brought to the conceptual generic space is the metaphoric relation that the build-up of the robot and the human body hold [1. Robot Structure/Human Body]. In this particular case, as nerves are inherent to humans and these are responsible for the transmission of the nerve impulse that triggers feelings and emotions this is necessarily transferred to the robot. As well, the idiom [2. Nerves of steel] is part of this space as it is entrenched in language. Also, the shared feature of [3. Insensitive robots] as present from inputs Z and Δ .

The relations that the ad-hoc generic space holds are first, the metonymic connection between [Metonymy Body/Nerves] (container/contained relation), and second, the prototypical metallic structure of the robot [Metallic build-up]

Ultimately, the humorous blend produced portrays a robot that is insensitive to fright due to its steel nerves [Insensitive robot with metallic nerves]. A non-humorous blend that can be constructed using the same frames that play a role in the later is the one in the following statement: robots are never afraid because their nerves are wires. In this blend, that resembles the original joke, keeps the same inputs. On the one hand, X [Robots] and Y [Lack of Emotion] and on the other hand, inputs α [Robots] and β [Nerves]. As these blend into space Z and Δ respectively with almost the same

features, Δ does not have the feature [Nerves of Steel] that connected both senses, the idiomatic and the compositional, which consequently dismisses the humorous effect.

Considering Attardo’s theory, the connector in this joke is the expression “nerves of steel”, due to it serves as point of access to the idiom and the compositional meaning. Moreover, the disjunctive in this case is “robot”, which prompts the selection of the literal meaning of the linguistic expression.

15) *Museum administrator: “That’s a 500-year-old statue you’ve broken”*

Kevin: “Thank God, I thought it was a new one!”

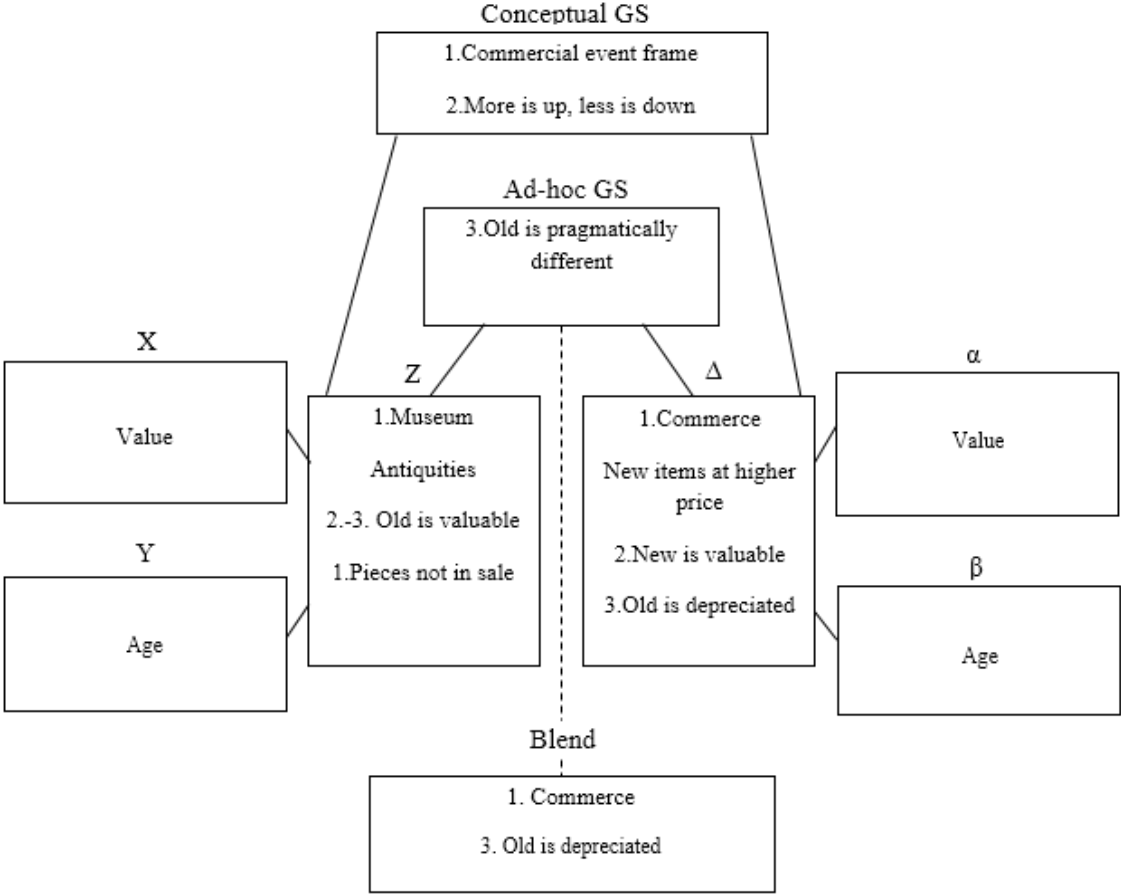


Figure 18. Proposed model applied in the joke "Museum administrator: "That’s a 500-year old statue you’ve broken" Kevin: "Thank God, I thought it was a new one!""

This dialogic joke introduces Kevin in a museum and his partial understanding of the old versus new relation that works in that setting. Museums are prototypically places in which old civilization treasures or famous works of art are kept and shown, hence, their value increases as these get older. This value is, nevertheless, not proper to the commerce outside it: the pieces are not for sale, although they have an estimated value that generally is not publicly known. The joke emerges as Kevin thinks that old has less value than new —a conceptualization natural in the world of commercial transactions— in a place in which the opposite case rules. Figure 18 shows the schematization of the blends contained in this joke.

In this integrational network, the inputs X and α contain the mental space of [value], while inputs Y and β the one of [age]. The information contained in the spaces X and Y blend to produce Z expressed in the buildup: “a 500-year-old statue”. In this space, there are features from the [MUSEUM] frame, there are [antiquities] and works of art. The relation [2.-3.old in valuable] is a direct product of the blend and [pieces not in sale] as one not proper to the usual commerce is also present within Z . Regarding Δ , the inputs [value] and [age] blend analogically into Z . In this space, reflected in the punch line, [value] and [age] hold a relation in which [2.new is valuable] and [3.old is depreciated], typical of [1. Commerce] from the COMMERCIAL EVENT frame. In this frame, the newer the item, the higher the price [New items at higher price].

The common conceptual relations between inputs Z and Δ encompassed by the conceptual generic space are, first, the conceptual metaphor [2.More is up, less is down] prompted by the image that the older, that is more years, the higher the price and, in the contrary situation, the less new the object is, the lower the price and, second, the

[1.Commercial event] frame as it holds a direct relation with input Δ and indirect with input Z, this due to the fact that the museum is, in part, part of the frame as usually a ticket has to be bought, souvenirs are for sale but not the artifacts exhibited inside. Concerning the Ad-hoc generic space, this holds the pragmatic difference in the relation old/new that is present in the joke [3. Old is pragmatically different] which is only proper to the specific context of the joke.

As a result, the final blend obtained can be worded by the sentence: old statue is valuable at the museum as a new item is valuable outside it. A blend that, making use of the same frames, is not a joke could not be produced in this case. In this particular case, this may be explained by the fact that the joke depends on the two different values that of “old” that are pragmatically bound to each of the frames, commerce and museum. As these are inversely proportional, changing one of the them alters the blend completely, making it impossible to maintain the same inputs.

In Attardo’s terms, this joke should not be considered as referential as it does not rest on lexicalized relations. Thus, it should not present a connector.

16) Why couldn't the bicycle stand on its own? Because it was two tired.

The buildup posits the question of why a bicycle can't stand its own. The answer is given in the punchline, where “it” – which refers back to “the bicycle” – is “two tired”. It is a two-fold answer derived from the pun in “two tired”, which is at once the disjunctive (the element that forces the reader to seek two interpretations) and the connector (the element that allows the double interpretation). “Two tired” can be doubly interpreted as a personified bicycle being too tired to stand (“too tired” being an

entrenched phrase) or as the bicycle not standing because it has two tyres, that is, two

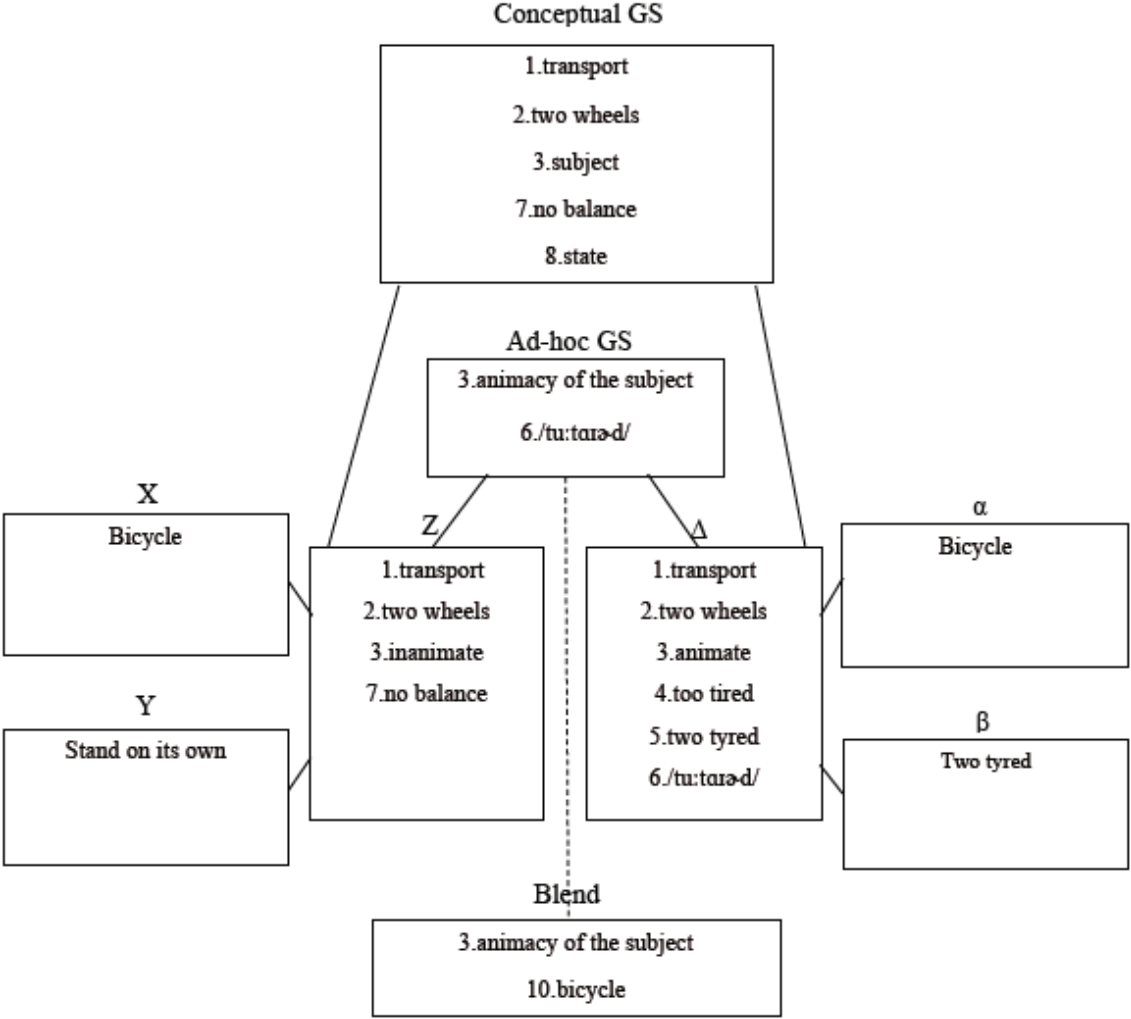


Figure 19. Proposed model applied in the joke " Why couldn't the bicycle stand on its own? Because it was two tyred"

wheels. The pun forces the hearer/reader to switch between the non-entrenched but contextually better fitting “two tyred”, and the entrenched but contextually less adequate “too tired”. While the inanimate subject (a bicycle) and the spelling (only a factor for readers) tug the audience towards the first interpretation, the fact that “too tired” is more entrenched as a phrase, and a conceptually suitable answer if only the subject was animate, tugs the audience to the second interpretation.

Inputs [X bicycle] and [Y stand on its own] produce the blend [Z bicycles can't stand on their own]. The highlighted features of this mental space are [1. transport], [2.two wheels], [3.inanimate] (basic conceptual components of a [bicycle]), and [4.no balance]. Inputs [α bicycle] and [β two tyred] produce the blend [Δ the bicycle is two tyred]. The highlighted features of this mental space are [1. transport] and [2.two wheels], plus the sound image [4./tu:taɪə-d/] and the spellings [5.too tired] and [6.two tyred], which are here meant to represent the two signified interpretations. The feature [3. animate] emerges in Δ because the interpretation [too tired] needs an animate subject. This insight derives from the entrenched metonymic relation between a TIRED HUMAN and her LOSS OF BALANCE (i.e. one might say "I'm so tired, I can barely stand on my own two feet!"). The identical features [1. and 2.] map onto each other and emerge in the CGS. The feature [3. inanimate] maps onto the analogous [3.animate], and emerges as [3.subject] in the CGS. The feature [8. state] emerges in CGS as a commonality between features [4.] and [5.]. [7.no balance] emerges in CGS as part of the question that becomes necessarily a part of the answer. [9. subject animacy] emerges in the Ad-Hoc Generic Space representing the not-yet-collapsed potential animacy of the subject (the bicycle) that must exist for the incongruous blend to be possible. The final, incongruous blend is "the bicycle is animate and inanimate", because this is the conceptual oxymoron that is forced by the double interpretation of the pun within the context of the joke. It contains the features [3. animacy of subject] and [10.bicycle].

An example of a non-humorous blend of the same two mental spaces (Z and Δ) might be "Why couldn't the bicycle stand on its own? Because it had two tyres", in

which the use of the verb ‘to have’ instead of ‘to be’ is perfectly entrenched for inanimate objects, and restricts the function of “two tyres” to that of an object, not allowing its interpretation as a subject complement, which in the humorous blend allowed the phrase to be interpreted as two different states.

17) What route do crazy people take to go through the woods? The psycho path

The interpretation of this joke relies on the pun *psycho path*, where the meanings “a person who is insane” and “a path in the woods named psycho” merge. In relation to the schema for this specific joke, input [Z routes in the woods for crazy people] is comprised of [X routes in the woods] and [Y routes for crazy people], which project the frame ROADS. Regarding [Δ the psycho path], it is composed by inputs [α psycho], and [β a path]. In this case, [α psycho] projects the frame INSANITY, whereas input [β a path] projects the frame ROADS. Speaking of the conceptual generic space, the element “name” arises from the mapping between [1.name of the route] [input Z] and [1. psycho] [input Δ]. Moving on, the second element in the conceptual generic space is “function”,

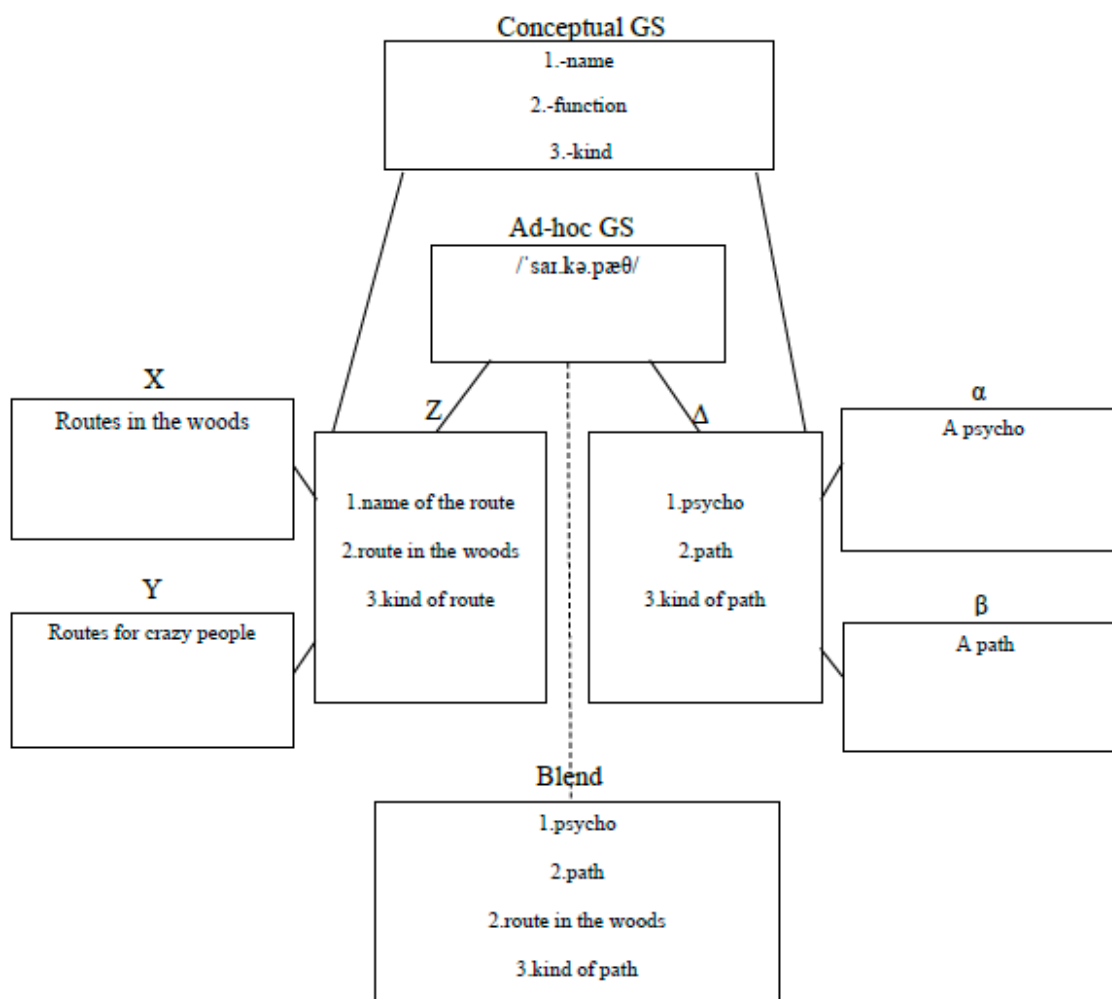


Figure 20. Proposed model applied to the joke "What route do crazy people take to go through the woods? The psycho path"

which is generated by the elements [2. route in the woods] [input Z] and [2. path] [input Δ]. Given the fact that they share the quality of road, their function is to guide from one point to another. Finally, the third element presented in the conceptual generic space is “kind”, and it arises from the elements [3. kind of route] [input Z] and [3. kind of path] [input Δ], meaning that both are intended to be used by a specific kind of people only.

With respect to the Ad-Hoc generic space it corresponds to the element /'saɪ.kə.pæθ/, this is possible because of the existence of the word *path* in the word *psychopath*. Taking into account its phonetic transcription, it is understood that it may be

pronounced with a pause in between as to generate the effect of having two words instead of one. This allows the creation of a pun, for two meanings are prompted. The first one corresponds to the concept *psycho path*, signaling a path in the woods named psycho. While the second one points to *psychopath*, meaning a person who is insane. Therefore, it is the effect produced by the possibility of the two senses which derive from pronouncing *psychopath* as *psycho path*, what permits the activation of the Ad hoc generic space. Moreover, the relation between these two different but related senses is only implied in this particular joke, consequently they can be argued to be non-entrenched. Finally, the blended space is represented in the sentence [the psycho path is the route in the woods for psychopaths]. Bearing that in mind, the elements contained in the resulting blend are [1. psycho], [2.path], [2. route in the woods], and [3. kind of path].

As to understand the non-funny counterpart of this blend, it is necessary to consider the sentence “psycho road is the name of the route that crazy people take to go through the woods”. In this case the same frames that appear in the joke are involved, nonetheless the word *path* has been replaced by *route*. Given the fact that the word *path* is essential for the construction of the image sound *psychopath*, if it is removed the pun vanishes. Consequently, this affects the activation of the Ad-Hoc generic space, which is central to the blend of jokes proposed as said before.

Bearing in mind Attardo’s terms, the concept *crazy people* is classified as the disjunctive, for it is the element that breaks the script of the joke. As well, the connector in this joke is identified as the expression *psycho path*, which coincides to be the punchline. The second interpretation is prompted once the connector is reached in the

punchline, and a reinterpretation of the disjunctive occurs as to understand this second interpretation.

18) *What do you call Santa's Helpers? Subordinate Clauses*

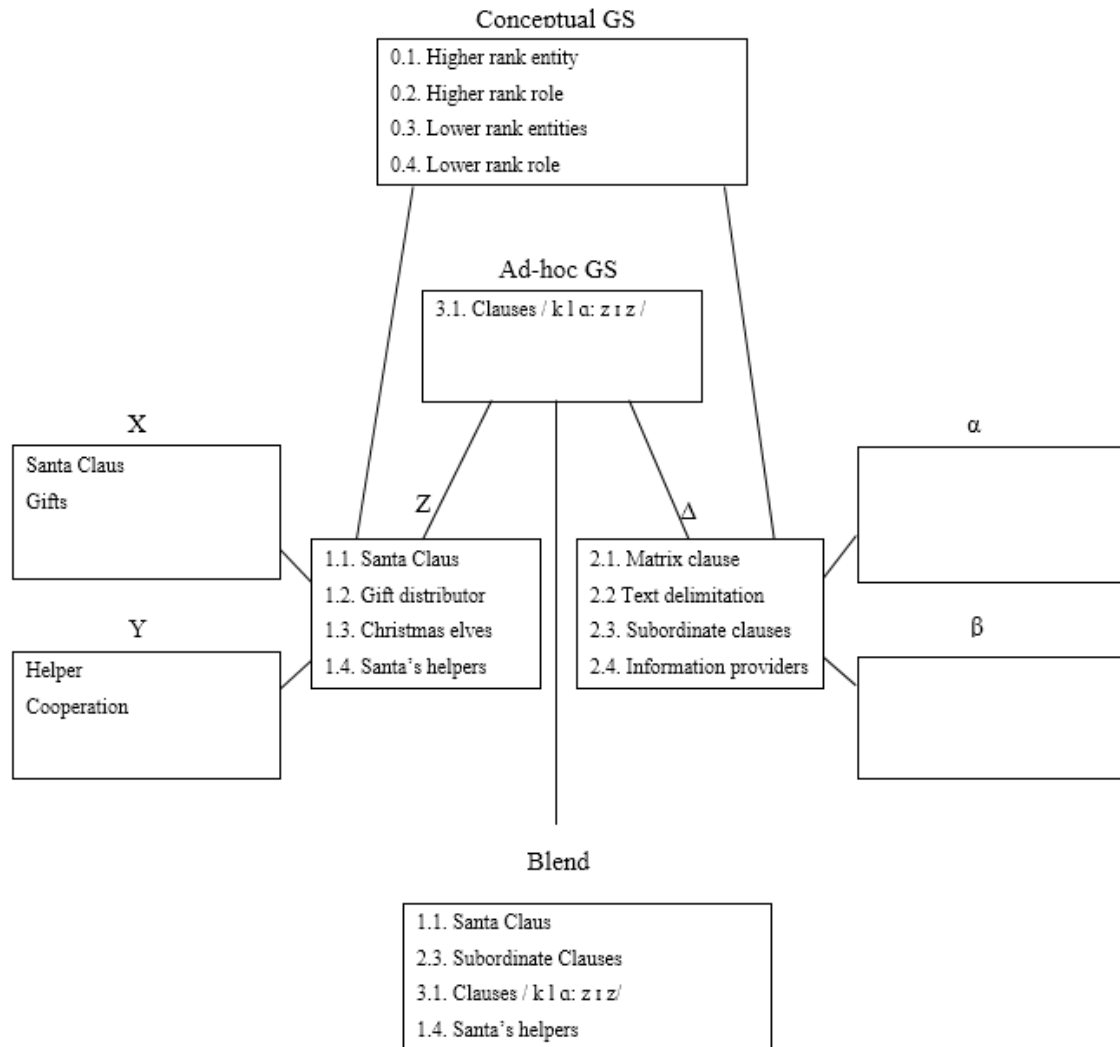


Figure 21. Proposed model applied in the joke "What do you call Santa's Helpers? Subordinate Clauses"

In the build-up of the joke, the frame SANTA'S HELPERS is activated by the phrase "Santa's helpers". This element belongs to input Z which we will name after its frame. Also, Z is not a simple space since it receives elements from the spaces X and Y which belong to the frames CHRISTMAS and ASSISTANCE respectively. This distinction and the use of spaces X and Y is significant because it allows us to see the

composition of the space Z. The punchline (“subordinate clauses”) activates the second frame; GRAMMAR, and its mental space is Δ , which we will also call “Subordinate Clause”. The conceptual generic space (CGS henceforth) of the integration network reflects a relation of hierarchy between the elements of each input space (Z and Δ). So, an element such as “higher rank entity” in the CGS finds counterparts in both of the input spaces, in this case, “Santa Claus” and “Matrix Clause” respectively. Likewise, the element “lower rank entity” of the CGS finds the counterparts “Christmas elves” in Z and “Subordinate clauses” in Δ . Subsequently, and thanks to the process of mappings or correspondences between spaces, elements of each space are linked together in a cross-space counterpart relation.

To understand this joke and its humorous effect, the generation of the Ad-hoc generic space (Ad-hoc GS henceforth) is fundamental. The punchline “Subordinate clauses” does not refer to the grammatical elements as a first reading would suggest, but to the plural form of the name “Claus” which is Santa’s names and, as it turns out, the name of his helpers as well. Then, the word “Clauses” is a pun because it is used with a humorous purpose to refer to another word, in this case the plural of “Claus”. This realization is what produces the humorous effect. The homophony of the words “Claus” and “Clause” allows us to link the word to any of the frames. Because of its indeterminacy, the Ad-hoc generic space is generated to account for this element. Once the phonological form of the word is linked to the frame SANTA’S HELPERS, the Blended space is generated and the emergent structure arises; Subordinate Clauses is the name of Santa’s helpers because they are called “Claus” and are subordinated to him.

To address a non-humorous version of this joke, let us analyze the following construction; “What do you call Santa’s helpers? Subordinate phrases”. In this construction, the same frames are invoked, and the same mental spaces are created but not humorous effect is achieved. Because there is no pun involved, there is no double reading in the reference of the element “phrase”. Hence, no Ad-hoc GS is generated, and again, no humorous effect is achieved.

19) An x-ray specialist married one of its patients. Everybody wondered what he saw in her.

When an average person engages another sentimentally, it is because the former sees something special, a value or values in the latter. This is reflected in the conceptual metaphor HUMANS ARE CONTAINERS. That is, we conceptualize people as being capable of containing different types of attributes. However, this joke is not about an average person but an x-ray specialist who can also look into a person’s body and see their internal organs. Then the funniness of this joke comes from the ambiguity produced by the punchline, which can refer to both the specialist looking at her fiancée’s value as a person, or at her internal organs.

The Blended space of this joke receives elements from the mental spaces Z “X-ray specialist” from the frame X-RAY SPECIALITY, and Δ “Average people” from the frame HUMAN BEHAVIOUR. Once every counterpart was identified in the cross-mapping process, the selected elements to be projected from each input to the Blend were “X-ray specialist” and “Sees internal organs” from Z and “Average person” and “Sees people’s values” from Δ . The projection of these elements allowed the emergence of the

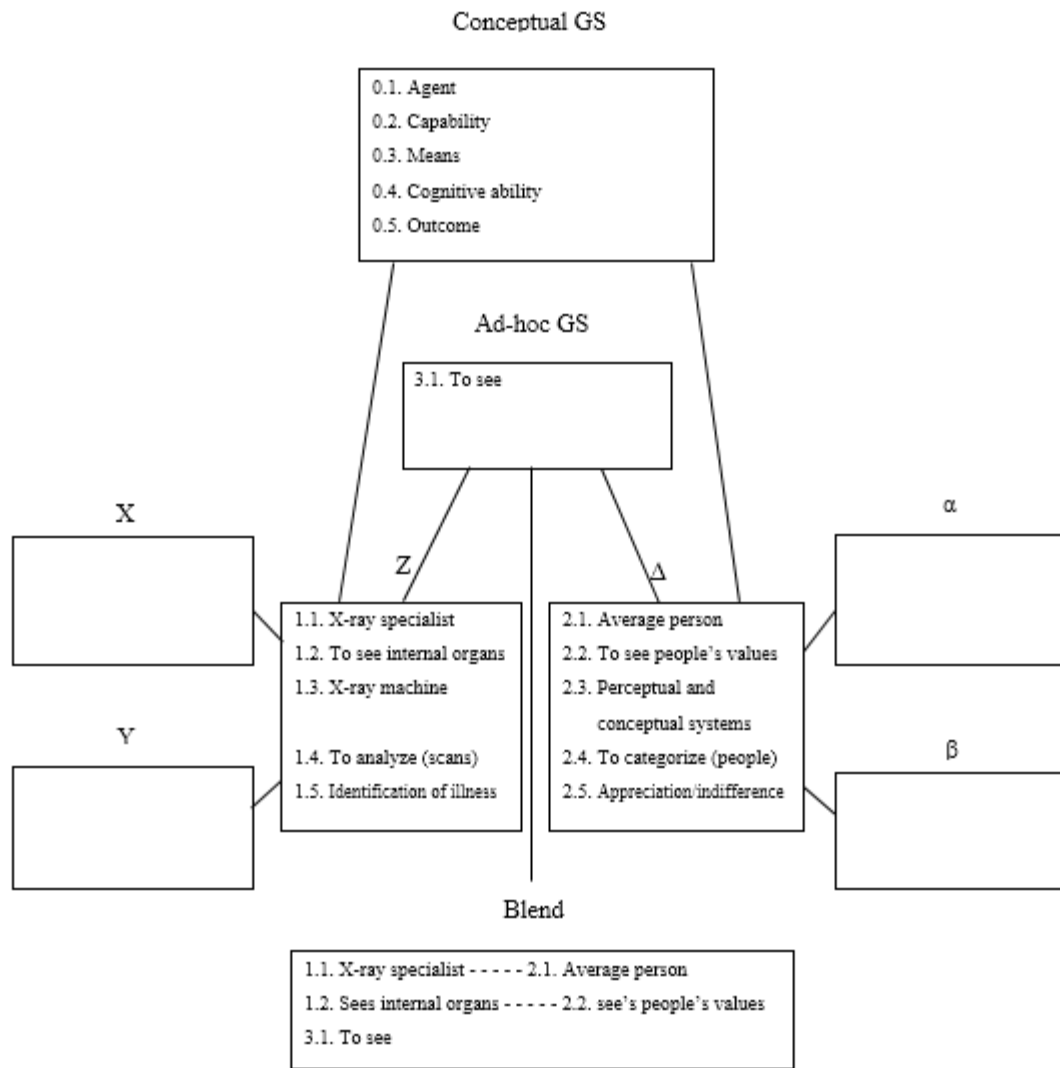


Figure 22. Proposed model applied in the joke "An x-ray specialist married one of its patients. Everybody wondered what he saw in her."

structure: "An x-ray specialist can see both the values of a person and his/her internal organs" which, in turn, reflect the ambiguity of the interpretation of the punchline (Everybody wondered what he saw in her).

Regarding the Conceptual Generic Space, this allowed the identification of every counterpart between inputs 1 and 2. And in regard to the Ad-hoc Generic Space, this addresses the element that triggers the ambiguity in the interpretation of the joke. The

element is the verb “See” (instantiated in its past form “saw” in the punchline) which can be linked to both frame, specifically to the x-ray specialist’s capability to see people’s organs, or to his capability to see her fiancée’s values.

Having analyzed the humorous interpretation of this structure, let us now focus on its non-funny counterpart. To exemplify the difference between the two we use the construction “An x-ray specialist married one of his patients. Everybody wondered why he chose her”. Here we do not have the presence of the connector “See” (as in “what he saw in her) that allows for a double reading of the construction when linked to the frames X-RAY SPECIALTY and HUMAN BEHAVIOUR. In other words, if the verb “See” is not present the Ad-hoc Generic space is not generated, the ambiguity of the punchline is not created, and no humorous effect is achieved as a consequence.

20) *A dyslexic man walked into a bra...*

The final element of this joke is an example of what Attardo (2015) calls a *disjuncter*. A *disjuncter* or frame-shifting trigger normally occurs as a sentence-final noun. In the build-up of the joke, the frame DYSLEXIC is activated by the phrase “A dyslexic man”. This element belongs to input Z that we are going to call “Dyslexic man”. Input Z is not a simple space since it receives elements from the spaces X and Y which belong to the frames DYSLEXIA and AGENT respectively. When we get to the end of the joke, that is, when we encounter the word “bra” (the disjuncter) another very dissimilar frame is activated; LINGERIE. Element “bra” belongs to input Δ “Lingerie”. That a

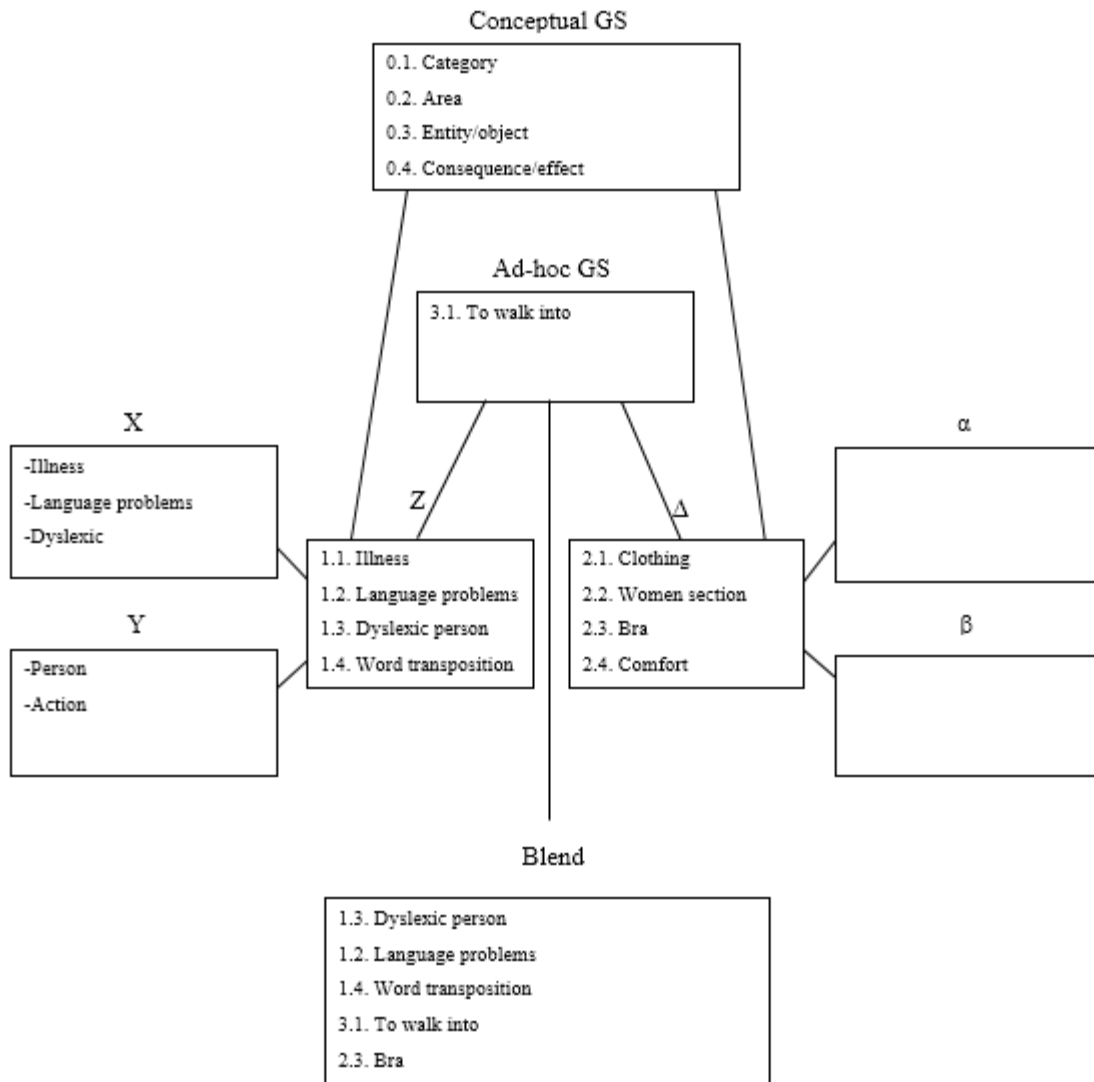


Figure 23. Proposed model applied in the joke "A dyslexic man walked into a bra..."

dyslexic man walks into a bra does not make a lot of sense and does not produce a humorous effect either. That is why the *disjunctors* forces us to go back and revise the frame DYSLEXIC. In the revision of the frame, the element “language problems” encourages us to look for a possible “word transposition” in the joke. When we get to the element “Bra” again, the Ad-hoc space is generated by the polysemy of the verb “walk into”. That is, “walk into” represents what Attardo calls the *Connector*; the element whose both senses allow for a double interpretation of this construction. In the first sense; “bump

against someone or something”, we get a non-humorous interpretation that makes little sense (a man walking into a bra). Conversely, in the second sense; “to enter a place”, we get a humorous effect since this sense allows for the rereading of the word “bra” into “bar”. The resulting emergent structure of the Blend is that the dyslexic man did not really walked into a bra but into a bar. Due to the language problems of the man, the joke presents the transposition of the word “bar” into “bra”.

A non-humorous construction of this joke would be; “A dyslexic man walked into a brassiere”. Here the same frames are invoked, and the same spaces are created but no humorous effect is achieved. The reason is the absence of the element “bra” (the *disjunct*). This element is the one transpositioned from the word “bar” and it is necessary for the element “dyslexic person” to be relevant. “Brassiere”, in exchange, cannot be transpositioned. Hence, it is not connected to the language problems of the man, and does not allow for a second reading when connected to the verb “walk into”. The element generated in the Ad-hoc GS which allows the second and humorous reading.

21) *Did you hear about the cannibal who had a wife, and ate kids?*

The interpretation of this joke relies on the pun *ate*, where the meanings “cannibal who has a wife and eats kids” and “cannibal who has a wife and eight kids” merge. In this case the pun is providing two meanings that help prompting a coherent interpretation of the joke, i. e. it triggers the meanings of *eight* and *ate* with respect to *kids*. Then, in relation to the schema for this specific joke, input [Z cannibal who had a wife] is composed of input [X Cannibal] and input [Y Married Cannibal]. With reference to these inputs each one projects a specific frame, these are CANNIBALISM and MARRIAGE respectively. Regarding input [Δ ate kids], it is constituted by input [α eat] and input [β kids]. In a sense,

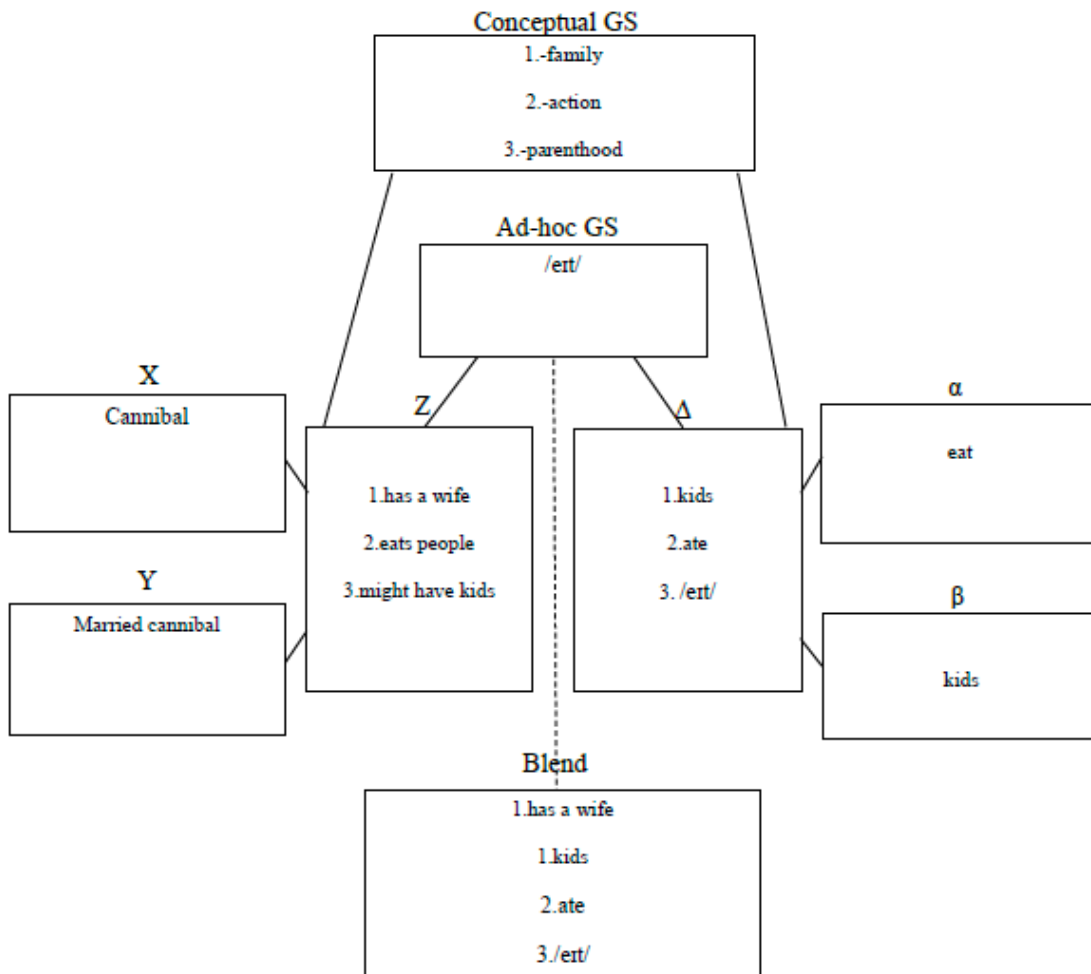


Figure 24. Proposed model applied in the joke "Did you hear about the cannibal who had a wife and ate kids?"

both these inputs “eat kids” represent a frame-based blend with a slot-filler, where the slot is helping to create a particular perspective on “kids”, especially since it is not prototypical. In this respect, [α eat] projects the frame FOOD, while input [β kids] projects the frame FAMILY. Concerning the conceptual generic space, the element “family” arises from the mapping between [1. Has a wife] [input Z] and [1. Kids] [input Δ]. Moreover, the second element in the conceptual generic space is “action” which is generated by the elements [2. Eats people] [input Z] and [2. Ate] [input Δ]. Finally, the third element

“parenthood” arises from the elements [3. Might have kids] [input Z] and [3. /eit/] [input Δ].

Moving on to the Ad-Hoc generic space, it permits the emergence of the element that provides the ambiguity that triggers the two senses of the joke. This element is /eit/, given the fact that the word *eight* and *ate* correspond to this very same phonetic transcription. When pronouncing the pun /eit/, it generates an ambiguity regarding its meaning, allowing it to stand for either *eight* or *ate*. This mentioned ambiguity is what triggers an effect of two senses in the interpretation of the joke. Consequently, it is possible for the meaning of /eit/ to stand for either “ate kids” or “eight kids”, what means that the pun is helping to produce a coherent interpretation of the joke as stated previously. In terms of the interpretation of the joke, it generates the senses “cannibal who has a wife and eats kids” and “cannibal who has a wife and eight kids”. In the end, this may be elucidated in the blended space, resumed in the phrase [The cannibal who had a wife and eight kids, also ate kids.]. Considering this, the elements contained in the resulting blend are [1.has a wife], [1. kids],[2.ate],[3./eit/].

Regarding the comprehension of the non-funny counterpart of this blend, there is no need of replacing the word *ate* but only of modifying its tense. What results in the blend represented in the sentence [Do you know the cannibal who has a wife and eats kids?]. Considering that the pun relies on the fact that it is pronounced /eit/ as explained before, when changing its tense from past simple to present simple, also changes its pronunciation to /i:ts/ making the pun vanish. Nonetheless, the same frames are involved, but since the pun disappeared the Ad-Hoc generic space is not activated. Affecting a central characteristic of the blend of jokes, as mentioned before.

In terms of Attardo's theory this joke is considered to be verbal, since it does rely on lexicalized relations. Consequently, this joke must possess a connector, which has been identified to be *ate*. This connector is what prompts a second interpretation of the joke, that is now understood in terms of the disjunctive *wife*.

22) *A man went to the bank and asked the cashier, "Will you check my balance?"*

So she pushed him

The interpretation of this joke relies on the polysemy of *balance*, allowing the possibility of it to stand for "checking his account's balance" or as in "checking his equilibrium". In relation to this specific joke, input [Z. Will you check my balance?] is comprised of input [X. A man going to the bank] and input [Y. The bank's cashier]. Both inputs [X] and [Y] project the frame BANK. With that in mind, input [Δ She pushed him] is comprised of input [α . The bank's cashier] and input [β Pushed him]. Consequently, [α . The bank's cashier] projects the frame BANK, while [β Pushed him] projects the frame EQUILIBRIUM, since the action of pushing the man is intended to test his balance in the sense of distribution of weight. Taking this into account, in the

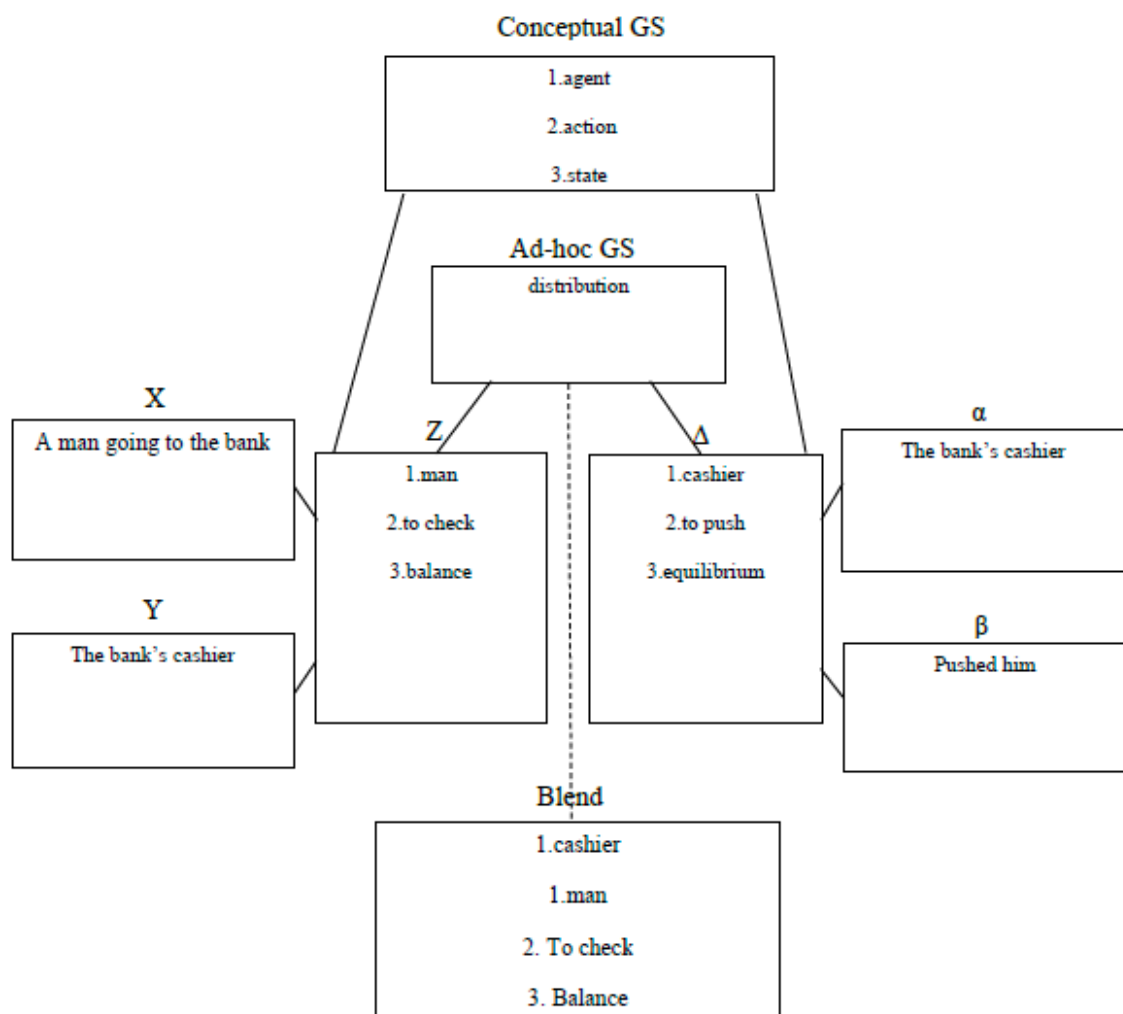


Figure 25. Proposed model applied in the joke "A man went to the bank and asked the cashier, "Will you check my balance?" So she pushed him."

conceptual generic space the element “agent” arises from the mapping of [1. Man] [input Z] and [1. Cashier] [Input Δ]. Proceeding on this track, the element “action” is generated by the mapping of [2. To check] [input Z] and [2.To push] [Input Δ]. At last, the final element “state” is composed of [3. Balance] [Input Z] and [3.Equilibrium] [Input Δ].

Moving on to the Ad-Hoc generic space, the element *distribution* is found as it highlights the non-entrenched relation between the senses triggered by *balance*. Taking this into account, balance represents a case of polysemy in which two different but related senses are extrapolated. Nevertheless, since these senses are related in terms of

distribution, it is this relation what becomes central to the activation of the Ad-Hoc generic space, and not per se the polysemy of balance. In this respect, *balance* may symbolize either the sense of “distribution of credits and debits” or “distribution of weight”. Thereupon, the expression to check your balance may be interpreted as either “to check the distribution of money on your bank account” or “to check the man’s distribution of weight by pushing him”. The possibility of generating these two interpretations by means of the ambiguity of the polysemy of *balance* in *check your balance* is what achieves the humorous effect in the joke. Finally, the elements contained in the final blend are [1. cashier], [1. man], [2. to check], and [3. balance]. This blend is represented in the phrase [the cashier checked the man’s balance instead of his account’s balance].

In relation to the non-funny counterpart of this joke, take as an example [A man went to the bank and asked the cashier, “Will you check my equilibrium?” so she pushed him]. Since the humorous effect of the joke relies on the polysemy of *balance* in the expression *to check your balance*, it becomes indispensable for the dual interpretation of the joke. Therefore, when replacing *balance* for *equilibrium* the polysemy disappears and ergo there is no activation of the Ad-Hoc generic space. Even though the blend possesses the same frames, if the Ad-Hoc generic space is not activated it will affect the humorous effect of the joke.

With respect to Attardo’s theory, this joke is understood to be categorized as verbal, since it is built upon lexicalized relations. The term connector has been determined to be the expression [will you check my balance?] but more specifically the word *balance*. Moreover, the disjunctive is placed in the punchline represented by the

expression [so she pushed him]. In this case, the second interpretation is prompted by the disjunctive once the punchline is reached. This is what generates a reinterpretation of the joke in terms of the connector.

23) “Name two pronouns” “Who, me?” “That’s very good!”

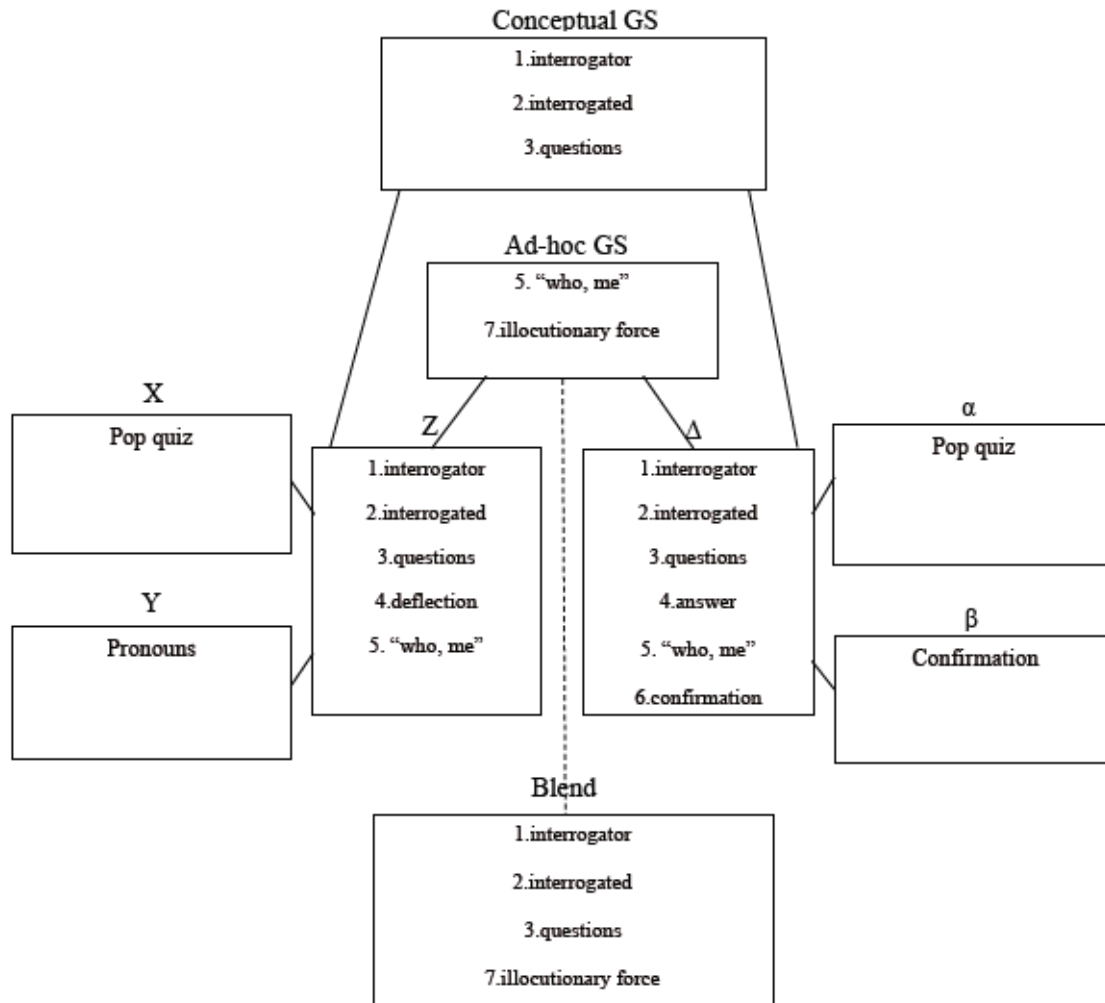


Figure 26. Proposed model applied in the joke “Name two pronouns” “Who, me?” “That’s very good!”

This joke establishes a dialogue in which one character interrogates another about a grammar point. The frame SCHOOL or POP QUIZ may be evoked by this structure. In the buildup, each character gets one speech turn; character A instructs

character B to name two pronouns, and B responds by saying “who, me?”. Because of the interrogation mark, the hearer/reader most probably interprets this utterance as a deflection of the instruction: the illocutionary force of “who, me?” would then be phatic (B is asking A if the instruction was directed at B). However, in the punchline, A answers “That’s very good!”, leading the hearer/reader to understand that A interpreted “who, me?” as a referential illocutionary act, i.e. as an answer in which “who” and “me” are uttered as examples of two pronouns. In this case, the disjunctive of the joke is the utterance in the punchline, “That’s very good!”, as it motivates a re-reading of the text in search for a second interpretation. “Who, me?” is the connector, the element that enables a different interpretation.

The buildup is a blend, [Z Interrogation about pronouns], made of the inputs [X Pop quiz] and [Y Pronouns]. The features of mental space Z are the roles [1. interrogator] and [2. interrogated], the [3.question], the underlying intentionality of [4.deflection] of the answer, and the form of the utterance [5.“who, me”]. The punchline represents mental space [Δ That’s very good], a blend from inputs [α Pop quiz], same as input X, and [β Confirmation], because the utterance is meant to confirm that A’s answer was satisfactory. The features of Δ are close to those of Z. The features [1. interrogator], [2. interrogated], [3.question] in Δ map with their identical counterparts in Z, while Δ ’s [4.answer] maps with Z’s [4.deflection], since these are the two roles that the utterance [5.“who, me”] can take in the respective mental spaces. [5. “who me”] is also a feature in Δ because it is presupposed by the confirmation, and it maps with its twin in Z. Lastly, Δ includes the feature [6. confirmation], the role of the utterance “That’s very good!”. The Conceptual Generic Space includes features [1.], [2.] and [3.],

while the Ad-Hoc Generic Space contains the utterance [5.] and the new feature [7.illocutionary force], which emerges from the ambiguity of the intention in “who, me” (phatic or referential) that is necessary for the final incongruous blend “The deflection of the answer is the answer”, which includes features [1.], [2.], [3.] and [7.].

24. *What do prisoners use to call each other? Cell phones*

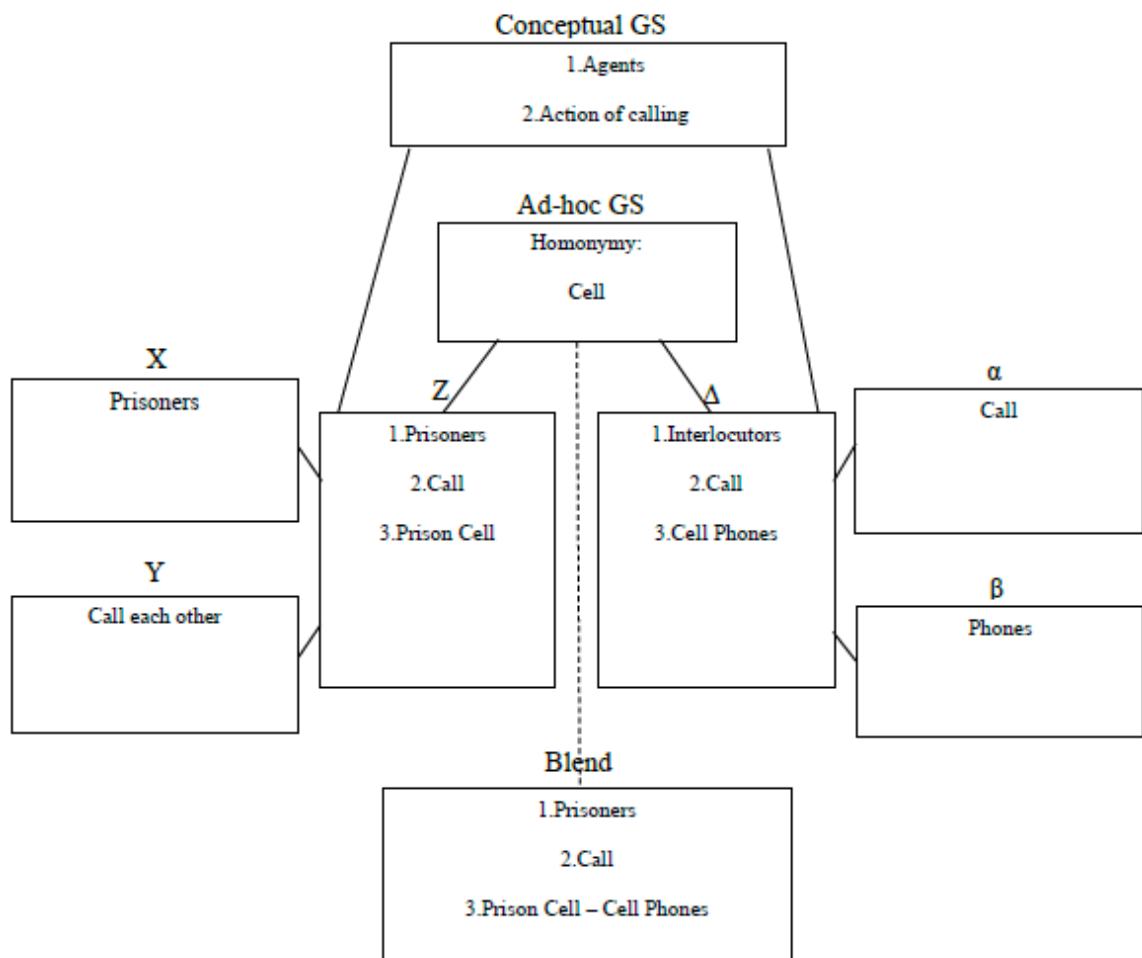


Figure 27. Proposed model applied in the joke "What do prisoners use to call each other? Cell phones"

This joke relies on a case of homonymy of the word “cell” which may mean a prison cell or the first word composing the word “cell phones”. On one hand in the schema, input Z (“Prisoners Calling each other”) is a result of the blending between input X (“prisoners”), from the frame PRISON, and y (“call each other”) from the frame

COMMUNICATION. On the other hand, input Δ (“Cell phones”) is composed by input α (“cell”), and input β (“phones”). In the conceptual generic space, there are two categories. The first generic element, “Agents” is evoked from the mapping of “Prisoners”, from the frame JAIL, and “Interlocutors”, from the frame CONVERSATION. The second category arises from the mapping of “Call”, both belonging to the frame COMMUNICATION. Regarding the ad-hoc generic space, there is a case of homonymy of the word “Cell”, which may refer to the place where prisoners are held, or the first component of the words cell phone, this relation is not entrenched since there is no direct relation between these elements, given that cell phones are not named after the prisoners’ cells, instead, it has a different origin. The blended space is represented by the sentence “Prisoners with cell phones in a cell”, evoking both senses of the word at the same time in the case of the homonymy.

A parallel can be drawn between inputs γ and β , since they may evoke the same frame. This is relevant for the understanding of the joke, as it allows to shorten the semantic distance between certain concepts, constructing a richer blend. Inputs X and α do not produce the same effect.

In order to distinguish this humorous blend from a non-funny counterpart, we can consider a sentence like “What do prisoners use to call each other? Mobile phones”. This blend would involve the same inputs, “prisoners calling each other”, and “cell phones”, but the term “cell phone” was replaced by the synonym “mobile phone”. Hence, Homonymy is avoided, which was the generic element evoked from “cell”. This way, the ad-hoc space may be modified, making the blend significantly less funny. Considering Attardo’s terms “connector” and “disjuncter”, there are some elements in

this particular joke that can fulfill them. For instance, “call” can be said to be the connector, and disjunctive at the same time, since it triggers the analogous connection and disruption previously mentioned.

25. *Never hit someone with glasses. A baseball bat does a much better job.*

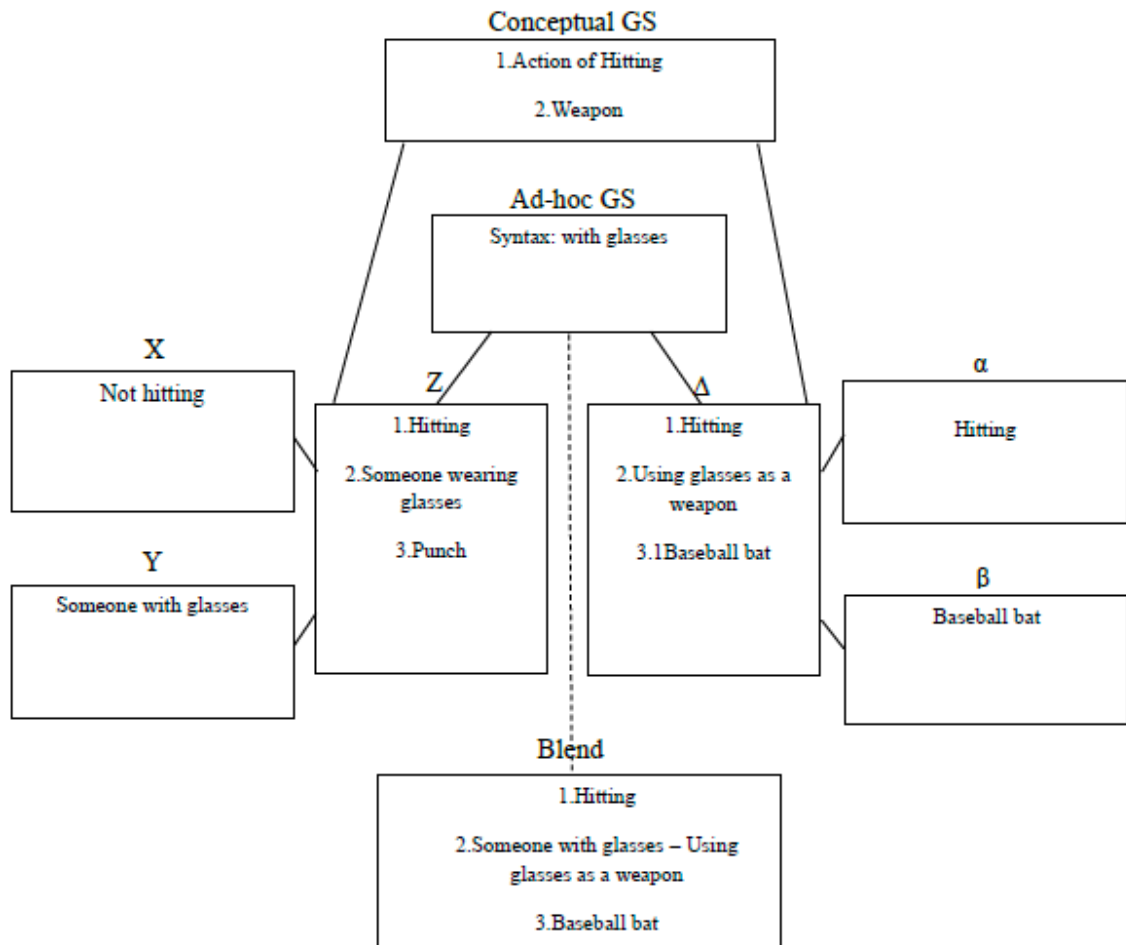


Figure 28. Proposed model applied to the joke "Never hit someone with glasses. A baseball bat does a much better job"

This joke relies on a structural homonymy of the prepositional phrase “with glasses”, which may on the one hand refer to a person wearing glasses or, on the other hand, using glasses as a weapon. Regarding the schema, input Z (“Not hitting someone with glasses”) is a result of the blending between input X (“Hitting someone”) from the

frame -HIT- and input y (“with glasses”), from the frame MANNER. On the other hand, input Δ (“Hitting with a baseball bat”) is composed by input α (“hitting”) from the frame —ACTION—, and input β (“baseball bat”), from the frame —OBJECT—. In the conceptual generic space, there are two categories. The first generic element “action of hitting” is evoked from the mapping of “Hitting”, from the frame ACTION. The second category arises from the mapping of “punch”, which in this case alludes to a prototypical hit, and “baseball bat”, from the frame —WEAPON—. Regarding the ad-hoc generic space, there is a case of structural homonymy of the prepositional phrase “with glasses”; it can be understood as a person with glasses, or using glasses as a weapon. This relation is not entrenched since there is not a possibility of having the performer of the action and the object used to do it in the same level

. The blend may be represented by the sentence “Don’t hit someone with glasses with glasses” evoking both senses of the word at the same time.

A parallel can be drawn between inputs X and α , since they are actually the same element, and hence, may evoke the same frame —ACTION—. Inputs Y and β do not present a relevant connection.

In order to differentiate this humorous blend from a non-funny counterpart, a sentence like “A baseball bat does a much better job to hit someone with glasses than glasses”. This blend would involve the same inputs, “hitting someone with glasses”, and “a baseball bat does a much better job”, but the order of the elements has been altered and “than glasses” has been added to help to avoid syntax ambiguity. This way, the ad-hoc generic space may be modified, making a non-funny blend. Considering Attardo’s terms “connector” and “disjuncter”, there are some elements in this joke that can fulfill

them. In this case, “with glasses” can be said to be the connector, and “a baseball bat does a much better job” can be said to be the disjunct, since it triggers the previously mentioned effect of ambiguity.

5.2 Quantitative Analysis

From the quantitative analysis, it was observed that out of the 25 jokes that were analyzed, 23 resulted to be verbal jokes (as opposed to referential ones). That is to say, a substantial majority of the jokes presented a connector. Regarding the Structural elements in the Integration Network, the complete sample registered both Conceptual Generic Space and Ad hoc Generic Space. Moreover, concerning inputs X and Y, 24 jokes contained them while 21 jokes had inputs α and β .

The production of a non-humorous blend built up from the same inputs was not achieved in all the cases. Nevertheless, most of the jokes from the sample, namely 23, were suitable to create this blend. Coincidentally, the two jokes that could not prompt a non-humorous blend were the referential ones.

6. Discussion

From these quantitative data, some rating conclusions can be drawn. As can be appreciated in Figure 30, from the 25 jokes analyzed, 23 were verbal and 2 were referential (following Fauconnier’s terminology). The considerable difference in the corpus is due to the following considerations: the jokes were randomly selected, only leaving aside those jokes that were potentially offensive to any social, ethnic or political group.

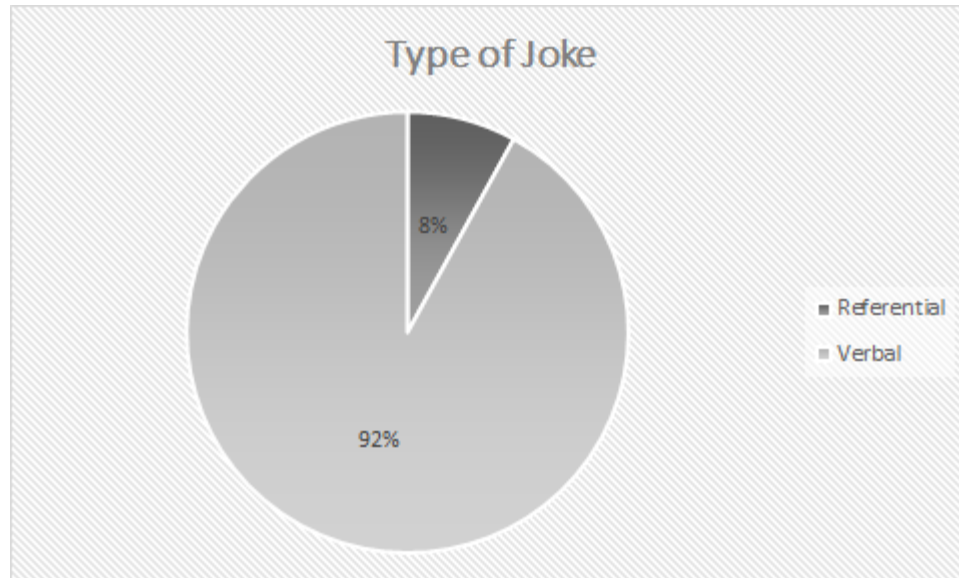


Figure 29. Type of Joke following Attardo's classification

Secondly, considering the percentage of jokes that contained an Ad hoc generic space (100%) —as shown in Figure 31—, it can be stated that all these jokes actually presented a non-entrenched categorization that was crucial for the proper understanding of them. This result corroborates the hypothesis that jokes are a special kind of blend, which necessarily have to be analyzed taking into account more elements than those which standard Blending Theory can provide. Specifically, this result show that the consideration of non-entrenched, contextual elements can be included in conceptual analysis, and more specifically, in Blending Theory.

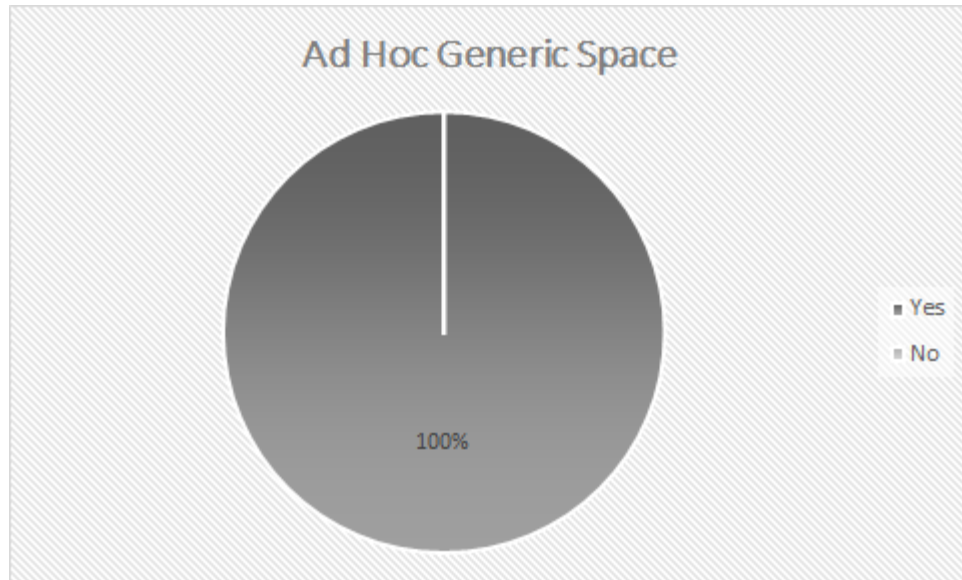


Figure 30. Founding of Ad hoc Generic Space

Considering the fact that in many verbal jokes the connector was in direct relation with the ad hoc generic space, it only took the dissolution of the connector or pun in order to lose the humorous feature. In contrast and as shown in Figure 31, although ratings conclusions would be naive considering the amount of referential jokes that were analyzed (only 2), the dissolution of the humorous effect in referential jokes could not be achieved by the research team, a pattern which can be appreciated in Table 1 and Figure 33. This might be due to the fact that referential and verbal Ad hoc generic spaces act and are constructed differently, therefore their deconstruction may involve different processes which were not considered by the researchers in the analysis.

	TYPE	AD HOC GS	NON HUMOROUS BLEND	X & Y	α & β	CONCEPTUAL GS
1 (Fish Tank)	VERB	YES	YES	YES	YES	YES
2 (Serve Lobster)	VERB	YES	YES	YES	YES	YES
3 (Space man)	VERB	YES	YES	YES	YES	YES
4 (Wrong man)	REF	YES	NO	YES	YES	YES
5 (Ice cream)	VERB	YES	YES	YES	NO	YES
6 (Cannibals)	VERB	YES	YES	YES	YES	YES

7 (Watch-dog)	VERB	YES	YES	YES	YES	YES
8 (Little attention)	VERB	YES	YES	YES	YES	YES
9 (Spell checker)	VERB	YES	YES	YES	YES	YES
10 (Meat Patty)	VERB	YES	YES	YES	YES	YES
11 (Smell carrot)	VERB	YES	YES	YES	YES	YES
12 (Two fonts)	VERB	YES	YES	YES	YES	YES
13 (Shellfish)	VERB	YES	YES	YES	YES	YES
14 (Nerves of steel)	VERB	YES	YES	YES	YES	YES
15 (Museum)	REF	YES	NO	YES	YES	YES
16 (Two tired)	VERB	YES	YES	YES	YES	YES
17 (Psycho path)	VERB	YES	YES	YES	YES	YES
18 (Subordinate clauses)	VERB	YES	YES	YES	NO	YES
19 (X-Ray)	VERB	YES	YES	NO	NO	YES
20 (Dyslexic man)	VERB	YES	YES	YES	NO	YES
21 (Ate his wife)	VERB	YES	YES	YES	YES	YES
22 (Check his balance)	VERB	YES	YES	YES	YES	YES
23 (Who, me?)	VERB	YES	YES	YES	YES	YES
24 (Cell phones)	VERB	YES	YES	YES	YES	YES
25. (Hitting with glass)	VERB	YES	YES	YES	YES	YES

Table 1. Tabulation of Joke's Blends Elements

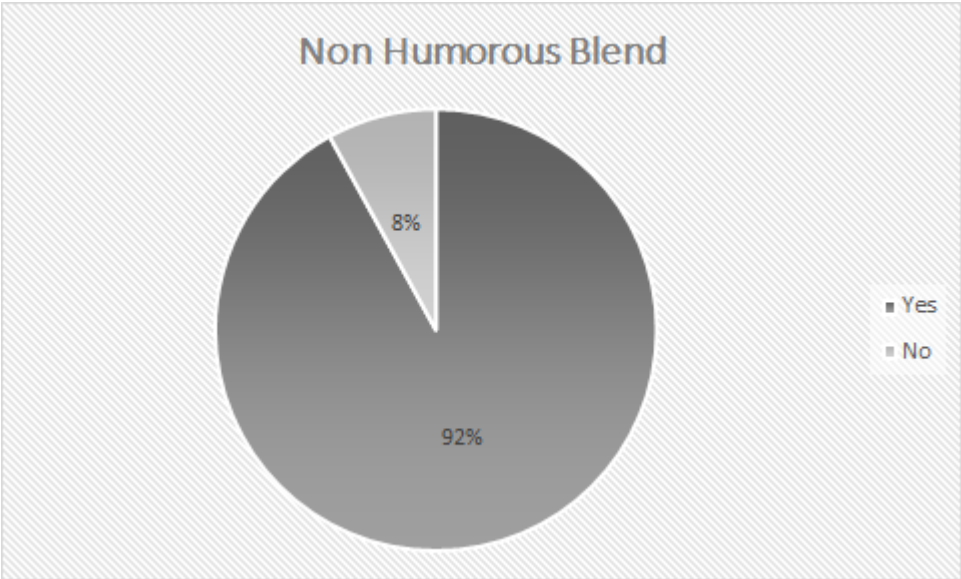


Figure 31. Achievement on the creation of a non-humorous blend

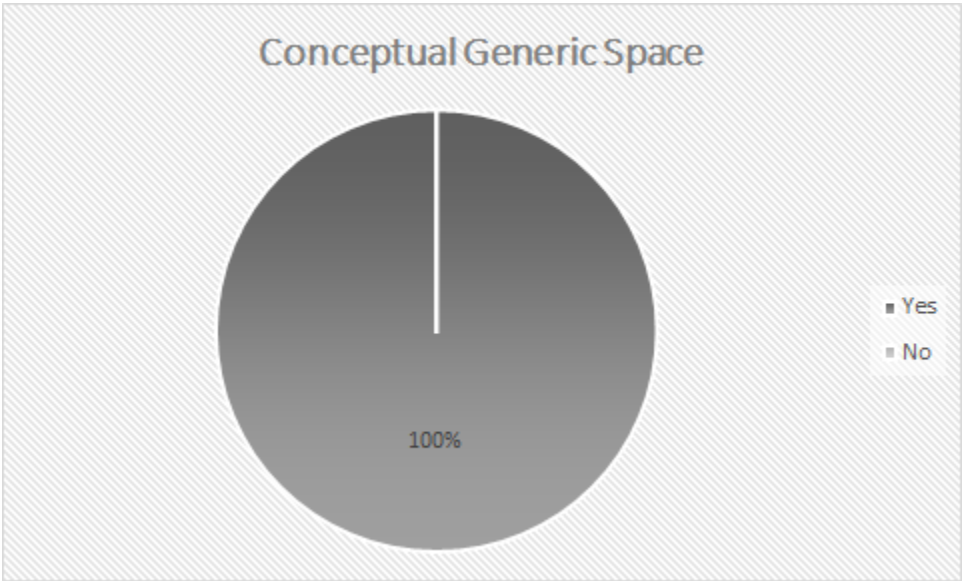


Figure 32. Presence of a Conceptual Generic Space

Nevertheless, and as expected, all jokes presented a conceptual generic space (see Figure 34). Since this generic space is generated by means of standard mapping among features of the inputs involved (following Fauconnier’s theory), and considering the success of Conceptual Integration theory, a 100% rate was no surprise. This pattern

proves that jokes, just as any other input, can be analyzed in terms of Blending Theory.

Of the 25 jokes that were analyzed, every one of them presented a new emergent blended space that could not be encountered in the inputs through backward projection (see Figure 35). This also elucidates the fact that jokes can perfectly be analyzed in terms of Blending theory, as Cook has already confirmed in his analysis. The Blend space emerging in each joke presented an incongruent, non-entrenched mental space which was represented with a sentence, as can be appreciated in the analysis of jokes.

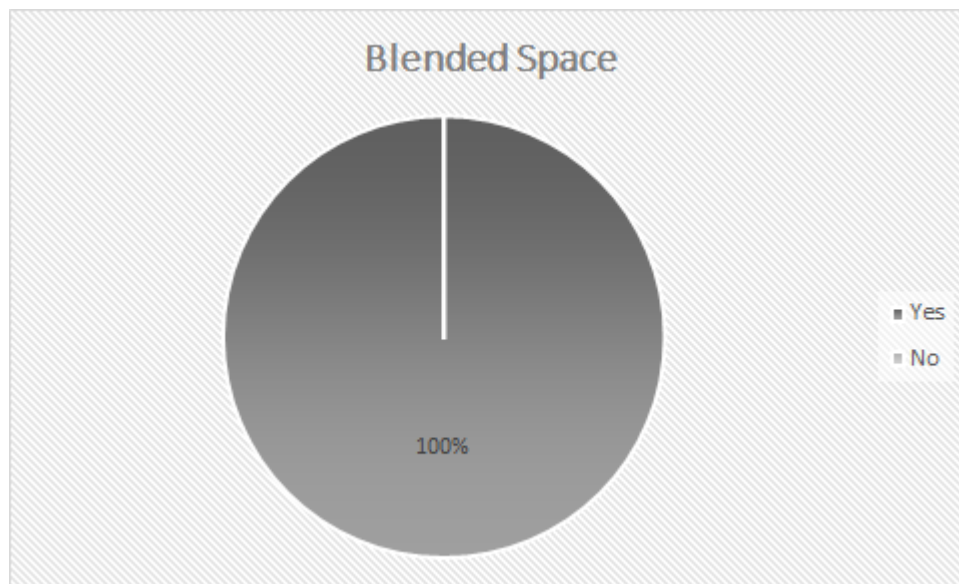


Figure 33. Achievement on Presence of Blended Space

Regarding the inputs that blended into inputs Z and Δ (X and Y ; α and β , respectively), no evident statistic pattern could be drawn in terms of entrenched correspondence within the schema. Considering the analysis of jokes, their presence in the network might just depend on the complexity of the inputs. In other words, if inputs Z and Δ clearly showed potential decomposition, the mentioning of the inputs X , Y , α and β were considered. However, considering the analysis of jokes, there were occasions

in which the frames inducted into these inputs in particular were the same in both sides of the network (Z and Δ). Although this feature was only present in some jokes, its contribution to the humorousness of the joke cannot be ignored, considering that complex and innovative jokes tend to be funnier or cause more pleasure (Giora, Fein, Kotler & Shuval, 2003).

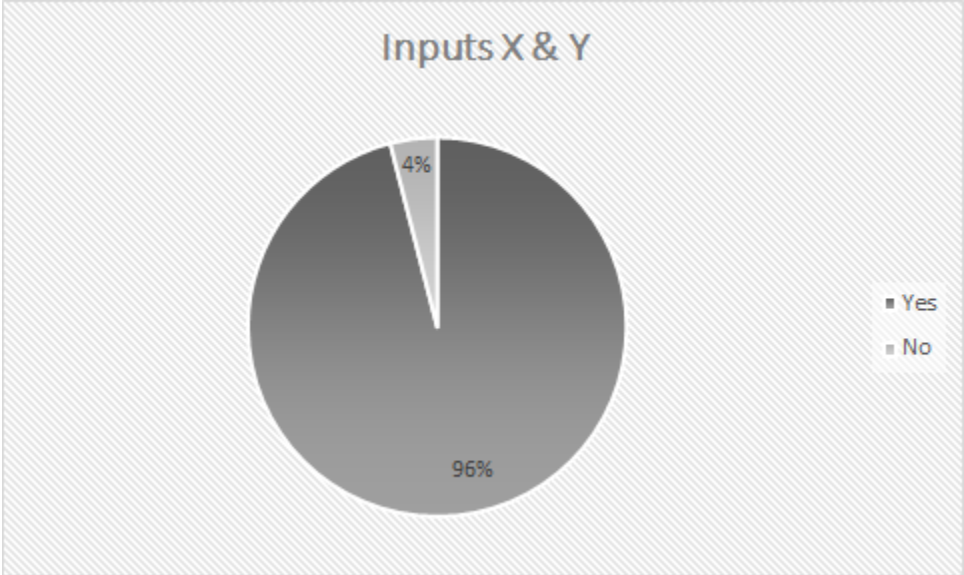


Figure 34. Founding of Inputs X and Y

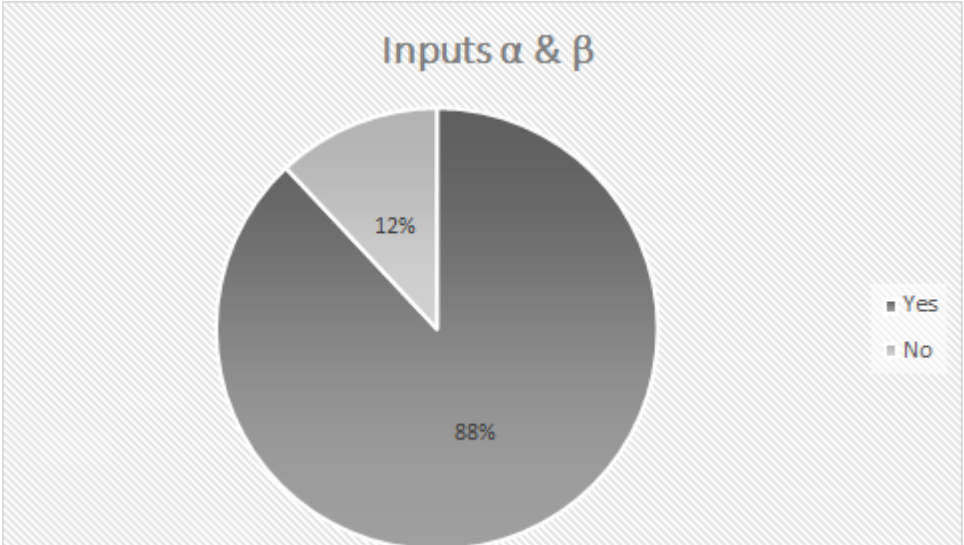


Figure 35. Founding of Inputs α and β

7. Conclusion

Concluding with this work, it has been stated that jokes are a special kind of blend that necessarily needs a novel schema for their proper understanding in conceptual terms. It has been addressed that the Conceptual Integration Theory was not sufficient for a proper understanding of the uniqueness of jokes. Hence, a new schema has been presented based on Fauconnier's Conceptual Blending Theory, in which 25 jokes were analyzed under these new terms.

After the completion of the analysis of the jokes, a quantification of the results was carried out to measure how successful the schema was. The analysis showed that additional considerations could be taken when analyzing jokes, such as the non-entrenched categorizations that are made in the processing of them, which were highlighted in a new space in the network, labelled Ad hoc Generic Space. All the novel elements were considered in this analysis, plus the addition of Attardo's distinctions between "connector" and "disjunctor", in the search for emergent patterns. The results from quantitative analysis showed that the whole corpus of jokes analyzed presented an Ad hoc Generic Space and a Conceptual Generic Space. This supports the idea of duality of Generic Space previously hypothesized. Moreover, the formulation of a blended space through the mapping of inputs was successful in every joke. This number reinforces the idea that jokes can perfectly be analyzed using Fauconnier's terms. Although the comparison of the schemas with their non-humorous counterparts was successful in every verbal joke, the process could not be achieved by the team when it came to analyzing referential jokes. Further research could be carried out in order to look for anomalies in referential jokes and Ad hoc generic spaces.

Since the random selection of jokes ended up in an unequal percentage of types of jokes, further research could be carried out regarding Attardo's distinctions, in which the researcher might focus in one of them only, or to work with a controlled corpus in which the amounts are equal. Another important contribution that could be carried out in the future regarding jokes analysis is the construction of a typology of jokes based only on Cognitive Linguistics premises.

Limitations

1. Gathering of data: as a group, we did not consider the fact that verbal jokes outnumber referential jokes. Since this difference was reflected in our corpus, it provoked the impossibility of making any conclusions regarding referential jokes.
2. Cultural bias: since we analyzed Anglo-Saxon jokes, the proper understanding of the jokes cannot be assured completely, considering that the researchers speak English as a second language.
3. Intuitiveness of the analysis of jokes: the analysis of jokes may differ from the analysis that the reader may have in terms of Blending Theory, since the identification of the features of the inputs and their respective mappings are not only rule based, but intuition also plays a role in them. Still, the potential differences should not be significant for the results.
4. Sample size: 25 jokes as a sample may not be an ideal amount for an analysis. Nevertheless, patterns could still be identified. The specific amount is related to limitation n°4.

5. Familiarity with the topic: it has to be stated that before the start of the Seminar, none of the researchers was familiarized with the topic discussed. This implicated the deep learning and revision of the literature before the beginning of the project, a situation that is related to limitations 4 and 5.
6. Uniformity of analysis: since the researchers involved in this project are 9, minor differences in terms of writing might be spotted in the analysis and among different sections. However, it has been assured the proper linking between the parts.

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