

Child-Directed Pun-Based Communication in Children's Picture Books as Conceptual Blending

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ABSTRACT

While there is vast research on language play and punning contributed by linguists of various theoretical persuasions, little has been done on punning directed at a very young audience. This study attempts to address this gap by proposing a Cognitive Linguistics analysis of creative animal puns in the picture book for toddlers, *I love you like no OTTER*. As the title indicates, the intended humorous effects of language play, and specifically punning, hinge upon the recognition of the phonetic similarity between animal words, here *otter*, and another word, e.g., *other*, in well-known phrases conventionally used in confessions of love, e.g., *I love you like no other*. The methodology adopted for the analysis is Fauconnier and Turner's model of conceptual blending, augmented with Brandt and Brandt's modifications. We propose that meaning construction and interpretation in the studied material is licensed by figurative inferencing involving conceptual blending, metonymy, and metaphor. We demonstrate that meaning in child-directed communication, such as the kind under investigation, is created via text and visuals, which need to be analyzed in conjunction with one another. The study highlights, among others, the explanatory value of the modified conceptual blending model in an analysis of punning and the relevance of the undervalued generic space in analyzing creative pun-based formal blends. In this respect, the paper contributes to the methodological framework of Cognitive Linguistics.

Keywords: conceptual blending; conceptual metonymy; conceptual metaphor; Cognitive Linguistics; multimodality

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INTRODUCTION

This analysis investigates creative language play and humor in the animal picture book for toddlers *I love you like no OTTER*. (Rossner, 2020). As the title indicates, the intended humorous effects of the narrative are based on puns and hinge upon the recognition of the phonetic similarity between an animal word (here, *otter*) and another word (*other*) in a confession of love and affection: *I love you like no other*. The theme of the book is the love of a parent for a child. The book's successful employment of wordplay is evidenced by its being listed as a best seller by both Amazon and *USA Today*.

In picture-book communication, meaning is communicated via two modes: verbal and visual. The two modalities complement each other and the resulting content communicates more than either can individually. This doubleness is built into the constructional framework of children's picture books (Nodelman 1991).

The present study aims to investigate figuration (i.e., conceptual blending, metonymy, and metaphor) employed in communicating the message of a loving parent-child relationship conveyed via both the text and the pictures in the analyzed book. Our special interest is figuration exploited for humorous effects in punning.

The analysis ties into rich research on creative language play, including puns, contributed by linguists of various theoretical persuasions (Raskin 1984; Attardo & Raskin 1991; Attardo 1994, 2014; Partington 2009; Zije 2024). The role of conceptual blending, metaphor, and metonymy in linguistic humor has also been studied (Barcelona 2003; Fauconnier & Turner 2002; Littlemore 2015; Coulson 2001; Hougaard; Oakley and Coulson 2022; Feyaerts and Brône 2005; Jabłońska-Hood 2020; Lundmark 2003; Zije 2024).

However, little has been done on the construction of pun-based humor employed in texts and visuals in picture books for zero- to three-year olds. This research is significant as it fills the gap in our understanding how humorous communication, directed at a very young audience, may rely on figuration.

An investigation into picture books for young children has cultural significance as well. The central role of picture books in early childhood development and in educational contexts (e.g., Niland 2023) has long been recognized in the world of publishing. Approximately one quarter of books sold worldwide are written for children, with books for zero to five years olds comprising 40% of that market. This is accompanied by an increase in parents reading to their children from 65% in 2019 to 72% in 2022.¹ Apparently, the shared pleasure of reading books is an integral part of family life across the globe.

LITERATURE REVIEW

A pun is defined as a rhetorical use of a word that, due to its phonetic realization, has two opposing senses and involves incongruence (explained in various models of humor as discrepancy, inconsistency, ambiguity, incompatible interpretation, etc.) followed by resolution, which we can explain as a realization that punning is involved. It is either spontaneously or deliberately authored to achieve humorous effects in the audience (Attardo, 1994; Partington, 2009). Puns have been of a long-standing interest among linguists of various theoretical persuasions, who have generated

¹ See: *Children's Book Sales Statistics: Market Data Report 2025* (<https://gitmux.org/childrens-book-sales-statistics/>)

distinct, yet in many respects compatible, accounts of what is the source of humorous effects in puns and how puns are disambiguated, or resolved, in processing an utterance.

Giora (1991), for example, suggests that the resolution of the pun depends on the *graded salience* principle, which claims that the more *conventional* the interpretation of the punning word, the more likely it is to be accessed first (as more salient). The other interpretation can only be activated under some conditions, for example, if the more salient meaning does not fit the context. On her account, conventionality is associated with familiarity, frequency of use, prototypicality, and popularity of meaning, or its activation by the preceding context.

Attardo (1994, 2014), in turn, couches the essence of verbal humor, including puns, in terms of the *incongruity* between two distinct yet compatible interpretations (scripts) that cannot be true at the same time. The two meanings are “spuriously appropriate in light of the joke’s setup” (Attardo, 2014, p. 612), but they oppose each other in some specific ways. Once the receiver realizes that the communicative act violates the Gricean cooperative principle, according to which the speaker’s contribution is assumed to be helpful, accurate and relevant, they are forced to change to a non-*bona-fide* mode of communication. This leads to a humorous understanding of the utterance.

According to Partington (2009), punning can be accounted for if we assume Sinclair’s (1987) fundamental contention that communication is based on two modes of language organization. In the first mode, discourse is viewed as composed largely of semi-fixed, pre-constructed blocks whereby the speaker selects a word together with its *primed* linguistic behavior: its co-occurrence restrictions (collocations), its semantic preferences (semantic associations), its grammar-based selection restrictions (colligation), and its functions in the text (textual collocation). This language set-up is referred to as the idiom, or phraseological mode, and it is assumed to be the default organization of language in meaning creation and interpretation. In the other mode, the speaker is confronted with an open-ended choice of words, in the sense that they construe their utterance by making a word-by-word selection, and each word is considered as an individual unit of meaning independent of other meanings. Partington claims that the essence of punning lies precisely in the enforced switching from the default mode to the open-choice mode (2009). Puns often enforce a switch (or: *relexicalization*) from a figurative to literal understanding. The phrase may also be explicitly altered in order to challenge the receiver to reconstruct a conventional idiomatic collocation; e.g., a playful use of *industrial resolution* builds on the collocation *industrial revolution*. Likewise, Naciscione (2020) views puns as modified phrasal units.

As the research demonstrates, the Cognitive Linguistic model of conceptual blending (Fauconnier & Turner 2002) has proven useful in analyzing humorous language. Attempts at explaining figuration involved in verbal humor using this model include, among others, Coulson (2001), Hougaard, Oakley, and Coulson (2022), Feyaerts and Brône (2005), Jabłońska-Hood (2020), Lundmark (2003), and Ziye (2024). For this reason, we also adopt it for the present study and present it in the section to follow. Previewing the analysis, let us observe that processing humorous incongruity involves, by and large, fusing selected elements from component inputs so that the emergent meaning in the output creates humorous tension not found in either of the component inputs.

For example, Lundmark’s analysis (2003) of verbal and visual puns in advertising focuses on puns which exploit metaphor. The disambiguation of the incongruous metaphorical meaning consists in (partial) resolution whereby the non-metaphorical and metaphorical interpretations are set apart but continue to coexist, causing humorous effects. For illustration, an advertisement of

cat food based on the slogan *Something for your cat and you to chew on* is analyzed as including an input space in which a cat eats cat food, and another in which a man considers information, as an expression of the conventional metaphor IDEAS ARE FOOD. The shared elements (the generic space) are taken to include an agent performing an activity upon an object. In the fused (blended) space, we get a humorous scenario of a man who is eating cat food. Lundmark finds a relation between the accessibility of a generic space and the degree of humor in puns, concluding that metaphor-based puns that activate a generic space generally exhibit a low degree of humor, which can, however, be elaborated by visuals.

The newspaper headline *US slowdown punctures Michelin's profits* further illustrates this (Feyaerts & Brône 2005). Evoked by the context of *Michelin*, the verb *puncture* serves as a metonymic point of access to the target: *tires*, which in the context of use is identified as tires manufactured by Michelin. The meaning of the verb *puncture* is glossed as 'make a small hole, especially in a tire, thus letting air out of it, which is accompanied by a visible lowering of the body of the vehicle'. The use of the verb in the phrase *puncture profits* uncovers the metaphorical cross-domain mapping, or correspondence, based on the relation of analogizing, between the downward movement of a vehicle's body and a worsening financial condition of a business (tire manufacturer Michelin) via the metaphor LESS IS DOWN.

In their description, Feyaerts and Brône refer to the metonymic and metaphorical mappings as *double grounding* in (an) additional input space(s) in their modified conceptual blending framework. Incidentally, Brône and Coulson (2010) argue that headlines based on double grounding both require greater effort in cognitive processing and grant greater reward as they are more pleasurable for the reader.

THEORETICAL FOUNDATIONS

The methodological framework adopted for the analysis is primarily Fauconnier and Turner's (2002) model of conceptual blending augmented with Brandt and Brandt's (2005) modifications, which have been developed within the paradigm of Cognitive Linguistics. Relevant for the study are also the foundational beliefs of Cognitive Linguistics about the nature of meaning and context.

MEANING AND CONTEXT

Rather than a fixed and static semantic value carried by a linguistic unit, meaning is understood as the conceptualization evoked by the unit in the speaker's mind. This conceptualization is dynamic in nature and emergent as it is contextually construed in the ongoing discourse in every communicative act (Croft & Cruse, 2004; Langacker, 2013).

In Cognitive Linguistics, context is a broad construct: linguistic meaning emerges in full apprehension of physical, linguistic, social, and cultural contexts. Novel creations such as puns analyzed in this paper require particularly strong anchoring in the discourse-particular interaction between the interlocutors. In other words, they crucially rely on the *shared current discourse context* for their interpretation (Langacker 2013).

Finally, the meaning of a linguistic unit, or its form, may be motivated (i.e., guided or shaped) by *figurative* inferencing. Specifically, meaning construction and deconstruction may involve the operation of metonymy, metaphor, and conceptual blending (Radden & Panther, 2004; Panther & Radden, 2011). All three have been found operating in the studied dataset.

CONCEPTUAL BLENDING THEORY

Pertinent to the present analysis is conceptual blending (or conceptual integration), an on-line dynamic process whereby two or more input mental spaces, defined as “small conceptual packets constructed as we think and talk, for purposes of local understanding and action” (Fauconnier & Turner, 2002, p. 40), are projected to the output space, i.e., the blend, which develops its own ‘emergent’ content that is not supplied by the input spaces (Fauconnier & Turner, 2002). According to its creators, the framework of conceptual blending explains, to a certain extent, how meaning construction and comprehension are, by nature, creative and imaginative.

In the model advanced by Fauconnier and Turner (2002), conceptual blending involves at minimum two partially structured *input spaces*, whose matching elements are put in correspondence and connected by *counterpart connections*. Each conceptual blend also contains the *generic space*, which captures what is shared by the input spaces. The fourth space in this network is the *blended space*, which is created in a few cognitive operations. First, some structure from both inputs is *selectively projected* into and then arranged in the blended space (*composition*). Then, some background knowledge, which is not contained in the inputs, is added into the space (*completion*). Finally, the operation of *elaboration*, i.e., running the blend imaginatively, generates the *emergent meaning* of the blend.

The basic integration network can be modified to create a rich variety of blends, with four main kinds conventionally distinguished: simplex, mirror, single-scope, and double-scope. The simplex network integrates one input space structured by (part of) a frame and its roles and values supplied by another input space. For illustration, the conception that *Paul is the father of Sally* is a blend of a *family* frame with the roles *father*, *daughter*, etc., with the values *Paul* and *Sally*. The *compression* is facilitated by a Role-Value cross-space *connection*, which is one of several *vital relations* guiding compression in blending.

In a mirror network, all inputs share an organizing frame. For example, all may contain the *boat sailing along an ocean course* frame. Thus, counterpart connections among spaces are easily established, and compressions over vital relations are easily performed. However, at the level of finer detail, more specific information may differ: e.g., a *nineteenth-century clipper on a freight run* in one input space and a *late-twentieth-century exotic catamaran on a speed run* in the other. In the blended space, the shared broad organizing frame may inhere in another frame. As a result, for example, boats from different centuries may *race* against one another.

A single scope network comprises input spaces that are each organized by different frames; however, only one of the frames is projected into the blend. To demonstrate, in an utterance describing a business transaction between competing companies, for example, *Murdoch knocks out Iacocca*, one input space is organized by the *business* frame and the other by the *boxing* frame. However, the organizing frame in the blend is taken from the latter only. The *boxing* frame enters the blended space *superbly compressed*, i.e., we have coherent general knowledge of the basics of boxing, the roles of boxers and their dynamic interactions, etc. Projections from the *business* frame are restricted to values and they fit the *boxing* frame without disrupting it. As a result, greater understanding of the *business* input space is acquired as the blended space remains in active connection with the entire network.

A double-scope network integrates inputs organized by distinct frames, both of which contribute to the organizing frame of the blended space. If they differ sharply, integration of their components may create rich clashes, resulting in highly creative blends. For example, the computer desktop interface, in which we *move* files to the *trash* and *save* documents into *folders*, is the result of the conceptual blending of aspects of two frames (inputs): *office work* and *computer work*.

MODIFICATIONS OF THE MAIN MODEL

Fauconnier and Turner's (2002) model of conceptual blending has been augmented to better accommodate some aspects of meaning which, as has been argued, it falls short of explaining. Some criticism is that the original model fails to clearly account for pragmatic meanings (e.g., Barczewska, 2020; Brandt & Brandt, 2005; Coulson & Oakley, 2005;). For illustration, let us consider the oft-cited example in (1):

(1) This surgeon is a butcher.

In light of Fauconnier and Turner's model, the two input spaces in this integration network are furnished with the frames of, respectively, *surgery* and *butchery*, with the counterpart correspondences couched in the generic space as: *agent*, *undergoer*, *sharp instrument*, *work space*, and the *procedure of cutting flesh* (Croft & Cruse, 2004). The cross-space mapping between the inputs puts in correspondence the respective parts from the frame of surgery: a surgeon performing in an operating theatre, using a scalpel to heal the patient; and the frame of butchery: a butcher cutting the flesh of a dead animal with a knife in a butcher's shop in order to produce edible parts. The elements that are selectively projected to the blend and compressed create a scene whereby a butcher performs surgery on a human patient by using their butchery skills. However, Brandt and Brandt (2005) argue that it remains unclear how the inference of incompetence and the pragmatic value of the utterance being a reproach or an insult arises, given that the conventional knowledge furnishing both inputs refers to two skilled professions.

Brandt and Brandt (2005) improve the above analysis by adding specific input spaces to include the current discourse context as well as the expressive value of the utterance. Among others, they add a reference space (providing an element with specific reference: *this surgeon*) and a presentation space (providing an element with generic reference: *a butcher*), as well as an interpretation space (relevance space), which, in the blend in (1), is furnished with a force-dynamic relation between an agent who causes harm and a patient. Additionally, they posit the need for an autonomous ethical schema, providing valuation in terms of right and wrong. Projections to the blend from these spaces contribute to an emergent meaning of ethically irresponsible behavior and a negative valuation.

The core of Brandt and Brandt's modifications, and, by and large, the main difference between their model and Fauconnier and Turner's, lies in the belief that the meaning of an utterance, shared between the speaker and the addressee, is fully reliant on the rich current discourse situational context.

Specifically, Brandt and Brandt assume that a communicative act, couched in the model as a space of *semiosis*, always takes place within a specific situation. Relevant aspects of the situation, as framed by the participants, feed into the integration as a space of *situation*. Both of these spaces are encompassed by the space of the *pheno-world*, which includes common knowledge of the human phenomenological life-world. The three spaces—pheno-world, situation, and semiosis—form the *semiotic base space* for an utterance. Further, two additional spaces are set up, a *reference* space and a *presentation* space, which, broadly speaking, pertain to actuality and virtuality, respectively. When fused, they can be described as a virtual representation that specifies an aspect of the actual representation. Finally, there's a *relevance* space that specifies what is *situationally* relevant in a particular occurrence of communication and what impacts the process of meaning construction and comprehension.

The six-space model can be re-shaped to include any other relevant spaces, such as the ethical schema in the ‘surgeon-as-butcher’ blend. As Brandt and Cronquist (2022) demonstrate, this updated blending model has wide applicability. For example, it proves useful for analyzing the rich, communicative ensembles of visual, gestural, performative (theatrical), vocal, textual and musical features in live concerts. The utility of culturally and contextually sensitive models of blending, like Brandt and Brandt’s above, or Coulson and Oakley’s (2005) model, has also been argued for in Barczewska’s analysis of memes (2020). Relevant to this study, her analysis also advocates for treating entrenched idiomatic phrases as inputs in their own right, as suggested in Omazić (2005).

As already mentioned, the framework adopted for this investigation is primarily Fauconnier and Turner’s model of conceptual blending. However, following Brandt and Brandt’s contentions, we assume that it is essential that the rich context of the particular discourse ecology is fed into the integration network modelling meaning construction in the narrative of the studied picture-book for toddlers. Partly, this is due to the nature of the data, i.e., the visuals and the written/spoken text including some creative and imaginative *ad hoc* formal blends (puns).

CONCEPTUAL METAPHOR AND METONYMY

Conceptual metaphor and metonymy are defined respectively as a cognitive mapping (or a set of correspondences) across discrete conceptual domains based on analogy (or similarity) and correlation in experience; and a domain-internal mapping whereby one domain serves as a point of access to another within one overarching domain or domain complex, based on conceptual contiguity or association (Panther & Radden, 2011; Littlemore 2015). The relation of contiguity may be further explained as adjacency or closeness in the sense of spatial contact, temporal proximity, causal relations, and part-whole relations (Littlemore 2015).

Fauconnier and Turner’s model allows for an integrated account of conceptual blends, metaphors, and metonymies thus enhancing the utility of the framework for the present study. In the model, blending networks can have cross-space mappings whose compression is facilitated by the vital relations of Analogy, Similarity, and also Time, Space, Cause-Effect, and Part-Whole, which can create, respectively, metaphor- and metonymy-driven blends (2002).

In identifying metaphors, we followed the procedure whereby the contextualized meanings of the examined lexical items, which arise from the global understanding of the meaning of the whole narrative (e.g., the use of *close* in the context of the parent-child love relationship), are juxtaposed with their respective more basic meanings (e.g., *close* as not far in time or space). The lexical items whose basic meanings contrast with the contextualized meanings of parent-child love relationship, and this contrast can be bridged by analogy and/or correlation in experience, were identified as metaphorical linguistic expressions (Steen et al., 2010; Panther & Radden, 2011).

In parallel, metonymy is identified when the respective contrast can be bridged by contiguity (Steen et al., 2010). In addition, the disambiguation of metonymy is aided by the pictures.

METHOD

AIM AND RESEARCH QUESTIONS

The aim of the present study is to model the construction of verbal humor based on punning as employed in the texts and visuals in one picture book for toddlers. Our objective was to uncover some of the ways in which humorous communication directed at such a young audience may rely on figuration. Furthermore, we attempted to specify the nature of the context needed for the interpretation of the messages conveyed by both the texts and the visuals.

To accomplish this goal, we used Fauconnier and Turner's (2002) model of conceptual blending with Brandt and Brandt's (2005) modifications. The following three detailed research questions were posed:

- a. What kind of figurative language is involved in the communicated meanings and, particularly, in punning?
- b. Does the adopted framework model the construction of the communicated meanings with any explanatory potential?
- c. What core contextual information is necessary to fully unpack the intended meanings?

DATA

The data for analysis were obtained from the texts and pictures of the studied book, which is written in American English. It is short – only 24 pages long – so as to meet the attention span of a zero-to-three-year-old child (Guo & Yulia 2024). It is composed of two-page spreads with the text containing a pun on the left-hand side (e.g., *I love you like no OTTER.*, as in the title) and its illustration on the right (e.g., parent and baby otters swimming underwater, eyes locked on each other). The texts are one or two sentences long, and the accompanying illustrations depict the parent animal evoked by the pun, often clearly a mother, and a baby of the same species, engaging in a shared activity, e.g., swimming, flying, cuddling, or playing. Our dataset comprises 12 such tandems. To recall, in this analysis, the texts and the visuals are viewed as complementing each other, as each contributes to the communicated meanings.

The identification of the collected puns (formal blends) was straightforward. They are all nonce words which have been coined *ad hoc* for the purpose of the narrative. They are easily identifiable by the young audience as non-existing words. In addition, to aid the toddler with reading skills, all the puns are given in caps.

The use of metaphors and metonymies in the data has been uncovered in the procedure described in the methodology section. The identified metaphors and metonymies have been confirmed in the relevant literature as widely attested in language (Lakoff, Espenson, & Schwartz 1991; Littlemore 2015).

Finally, the reason for selecting a small data set for the analysis follows from the methodology of research that we have adopted and is consistent with other studies involving conceptual blending. Such investigations tend to focus on a very limited linguistic material, for example, one idiomatic expression, as in Brandt and Brandt (2005), a few cartoons, as in Coulson and Oakley (2005), or a few headlines, as in Feyaerts and Brône (2005).

RESULTS AND DISCUSSION

PUNS

In a panoramic overview, our analysis revealed that the texts each incorporate a pun, wherein a conventional, frequently used, idiomatic collocation cannot be cognitively processed in default mode as it contains a word fused with an animal word, e.g., *I love you BEARY much*. Each text is emblematic of the parent-child affection idiom, including familiar declarations such as *I love you very much; little sweetheart; nobody could compare; seal it with a kiss; we belong together; you are always in my heart; and you make me happy*. We assume that the blend draws on the full collocation rather than on an individual linguistic unit (Partington 2009; Naciscione 2020; Omazić 2005).

Each punning word exploits the phonetic similarity/identity of two source words (e.g., *very* and *beary* above). Animal words that can be played off include onomatopoeic words denoting cries or sounds produced by specific animal species, such as *squeak* in *My special little SQUEAK-heart* and *purr* in *We make the PURR-fect pair*. Some puns incorporate verbs of movement, e.g., *hop* in *You make me very HOPPY*, or body parts, e.g., *paws* in *PAW-sitively amazing*.

All the above animal words—denoting body parts, calls, sounds, and movements—express concepts which serve as a metonymic vehicle, or point of access, to the target overarching domain matrix containing rich, stable, and coherent knowledge about a specific animal. Moreover, they seem to be cognitively appropriate vehicles, pertaining to physical (not mental) human experience with animals and, particularly, to perceptually salient (specifically, in the modes of vision, audition, and motion) attributes of animals, or their body parts. We take them to represent, respectively, (SALIENT) PROPERTY FOR CATEGORY and (BODY) PART FOR WHOLE metonymy.

Most of the puns play off names of animals, as *My love for you is strong. I SEAL it with a kiss.*; and *We BEE-long together. This I know is true.*; or the pun in the title of the book *I love you like no OTTER*. There are few perfect puns, homophones (*DEER*, in *You are so DEER to me*), or homographs (*SEAL*). The remaining are all near puns (e.g., *SQUEAK/sweet*, *BEARY/very*, *BEE/[be]long*).²

THE CONTEXT

We found the following elements of broadly defined context particularly relevant for the studied data. To begin with, the message of parent-child affection, which is the main theme of the book, is strengthened by the presupposed idealized immediate situational context in which parent and child are sitting close to each other in a familiar and friendly environment. The relative imbalance of authority, which the parent-child relation may be imbued with in other contexts (e.g., when the parent is expressing a directive), is not invoked, and the interactive and interpersonal effect that the parent aims to achieve is the strengthening of their bond. This is accomplished via indulging in the shared activity of reading/listening to the story and looking at the pictures together.

² Puns are most conventionally classified as either perfect puns, whereby the words activating different interpretations are identical in their phonetic realization, and near-puns, or imperfect puns, whereby the words are similar phonetics-wise but not identical (Attardo, 2014; Partington, 2009). Incidentally, the (im)perfectness of the pun does not affect the receiver's experience of pleasure (Attardo, 2014). Exact puns can exploit homonymy (e.g., *club* as 'association of people' or 'heavy weapon'), or homophony (e.g., *leek* and *leak*). In near puns, the receiver is confronted with an altered phonetic realization of a given unit, e.g., with *fronds* like *these*, who needs *anemones*, and is forced to reconstruct the original phonetic representation of the conventional text, with *friends* like *these*, who needs *enemies* (Partington, 2009).

Some core situational contexts are provided through the visual mode. In the illustrations on each two-page spread, the parent and the child see some typical animal behavior (flying, swimming, grooming, playing) that is carefully selected for the young audience and anthropomorphized (parent and child of the species exchanging loving looks, kissing, petting, hugging, etc.). As the analysis confirmed, the illustrations provide their own contribution to the integrated complex conceptual network underlying the meaning of the narrative, and, consequently, are vital for overall meaning construction and interpretation. A specific example of such a contribution is provided in the following section.

Other situationally relevant contextual elements stem from a folk cultural model of young children's learning processes and the benefits of parent-child interaction involving reading a picture book. As mentioned in Introduction, it is widely believed that such an interaction is not only a social and socializing activity but also promotes learning and facilitates understanding. Lovable animal characters in picture books, cute and cuddly, are particularly effective in performing these social and cognitive functions. As noticed by parents and confirmed by research, children readily identify themselves with animal characters (Spencer, 2020). Thus, the knowledge of the cognitive and social functions of animal picture books is relevant to the ecology of the studied discourse and needs to be fed into the conceptual network.

Finally, the dual meaning of the punning word and subsequent expectation of humorous effects are also relevant for the construction and interpretation of the communicated messages and, thus, fed into the network.

SPECIFIC EXAMPLE: WHOO LOVES YOU?

Our analysis revealed that the augmented Fauconnier and Turner's (2002) framework allows us to model the cognitive processing underlying the construction of meaning in the studied data with, arguably, remarkable explanatory adequacy. An in-depth analysis of the specific instance of a pun, i.e., *WHOO loves you?*, is presented below. Figure 1 below represents the phonetic plane of the formal blend (pun). Figure 2 models a deconstructed conceptual blending network that is involved in understanding of narrative on the spread with this pun.

The question *WHOO loves you?* is a very noticeable blend formed from the conventional representation of the (reduplicated) hooting call of an owl: *hoo hoo* /*hu: hu:*/ and the well-entrenched idiomatic collocation *who loves you?*. The parent would most probably imitate the hooting sound, perhaps even exaggerating it, while reading the question in order to bring out the incongruity and thus the pun. The phonetic similarity between one part of the owl's call and the interrogative pronoun *who* facilitates the deliberate creation of a lexical (formal) substitution blend, as marked in Figure 1.³

³ The pronunciation of the pronoun *who* is identical in American English and British English, any potential non-standard variations aside.

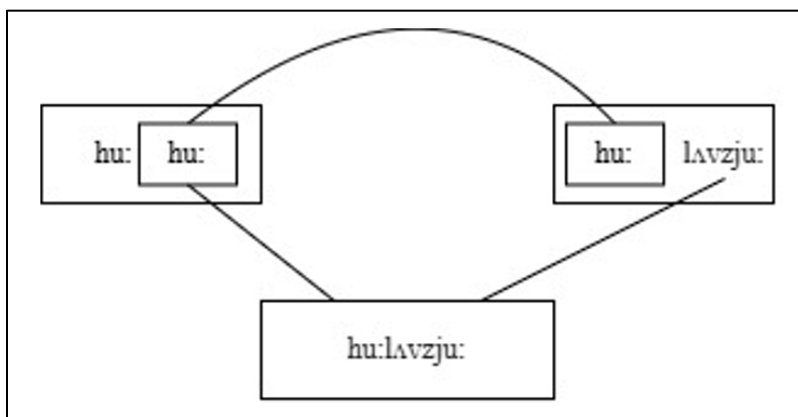


FIGURE 1. The phonetic plane of the lexical (formal) substitution blend of *WHOO*

At the conceptual level, prompted by both the linguistic form and the visual material, the blend arises in a complex network of mental spaces as in Figure 2. We shall argue that it predominantly includes an input space furnished with an ‘owls’ frame (Input 1) and an input space with a ‘human family’ frame (Input 4). In Input 1, the hooting animal call—as conceptually closely associated, or contiguous, with the animal producing it—serves as a metonymy-based point of access to the whole ‘owls’ domain, containing general knowledge about owls, such as nesting habits, mating, hatching, fledglings, etc. As a partial and temporary construct furnished with elements of that fixed and stable knowledge, Input 1 contains, apart from the calls, the scenario of a parent raising an owlet as well as the roles of a *parent* owl and a *young* owlet. Arguably, the body of knowledge available for recruitment to Input 1 is generic in nature (in the sense of Brandt and Brandt’s [2005] presentation space).

In the special circumstances of the interlocutors and their interpersonal relations, which we shall couch as part of Brandt and Brandt’s semiotic base space, we postulate the need for Input 2, set up by the visual clues whereby the anthropomorphic owls in the visual material (loving looks, physical proximity of the adult owl to the owlet, the adult owl flying ahead of the younger one as if leading or protecting it) are put in correspondence with their counterpart roles from Input 1, as values. In the simplex integration network, they are connected, projected to the blend and compressed due to the vital relation of Identity, becoming a loving mama/daddy owl and their beloved baby owl from the picture in the toddler’s book (in the sense of Brandt and Brandt’s reference space), which, as we run the blend, are both flying in the night sky, exchanging loving looks and indulging in conversation (which is in an animal code), confessing love, etc. The blended space is further recruited for integration as Input 3.

Let us now turn to the ‘human family’ space (Input 4). By analogy with the ‘owl’ space, it is a presentation space, which is generic in nature, drawing from the feltwork of general and stable knowledge about the ‘human family’ social construct, including such roles as *father*, *mother*, and *child*, as well as the ability to communicate. Input 5, in turn, is a reference space. It provides the mental representation of a specific reader and a specific toddler-listener engaged in the pleasurable joint activity of reading a specific children’s book in the here and now of the speech situation. As Inputs 4 and 5 become integrated, the counterpart elements are connected and projected to the blended space, where they are compressed due to the vital relation of Identity (Input 6). In the blended space, they become parent and child engaged in the joint activity of reading and listening.

Before we bring together the ‘individuated owls’ space and the ‘individuated parent-child’ space, let us ponder the interpretation of the text: *WHOO loves you? Let me tell you this*. We can identify some elements of the situational context which impact the text’s overall message (Brandt and Brandt’s relevance space). In the interactional and interpersonal circumstances of the speech situation, the text (which is on the first spread) is the opening of a story about the love that any parent feels for their offspring and how that love is reciprocated by the child, which unfolds on the successive pages. It is a confession of love that the parent makes using a communication code supplied by lovable animal characters, such as owls. We take the parent-child love relationship as well as the frame ANIMALS IN CHILDREN’S STORIES to be elements furnishing relevance space (Input 7), which feeds into the blended space (Space 8). Also, relevance space needs to include an appreciation of punning and the expectation of sharing a laugh.

Inputs 3 and 6 share a broad topology, i.e., organizing frame, which is also projected to the blend (Space 8). The integration network is then a mirror blend. Space 8 is essentially a virtual reality in which the reader and the young listener *are*, as if, a parent owl and a baby owlet, enjoying flying together, engaging in a conversation that is partly in human language and partly hooting. The parent owl is telling the story, and they very obviously love each other. Importantly, they share the experience of recognizing the incongruence and resolving the pun.

Finally, we have not so far discussed the generic space in our blend, which is absent from Brandt and Brandt’s framework because they feel it has no explanatory value. As they note, the shared structure is found in the inputs (Brandt & Brandt, 2005). In the mirror network, which we propose for the case at hand, the shared topology is particularly straightforward: it invokes two communicating animate entities remaining in a relationship ($e_1 \leftrightarrow e_2$). However, in texts including *ad hoc* formal blends such as the one we discuss; the phonetic realization of the punning word shared between the two sources (the shared part of a cluster of sounds representing an animal call and a phonetic realization of the collocation) appears to have its own independent cognitive identity, beyond the shared context-sensitive structure of the component mental spaces. The awareness of the shared phonetic material and it being a punning word is brought to the fore in the cognitive processing of the incongruous text, while the recognition of the shared organizing frame and analogy (perhaps identity for the child) comes secondary (more as in a cause-and-effect nexus). Thus, we postulate the need for a generic structure, which crucially contains the phonetic realization of the pun (Input 9), as represented in Figure 2.⁴

⁴ For clarity of presentation, we have simplified the scheme by leaving out the counterpart connections between spaces.

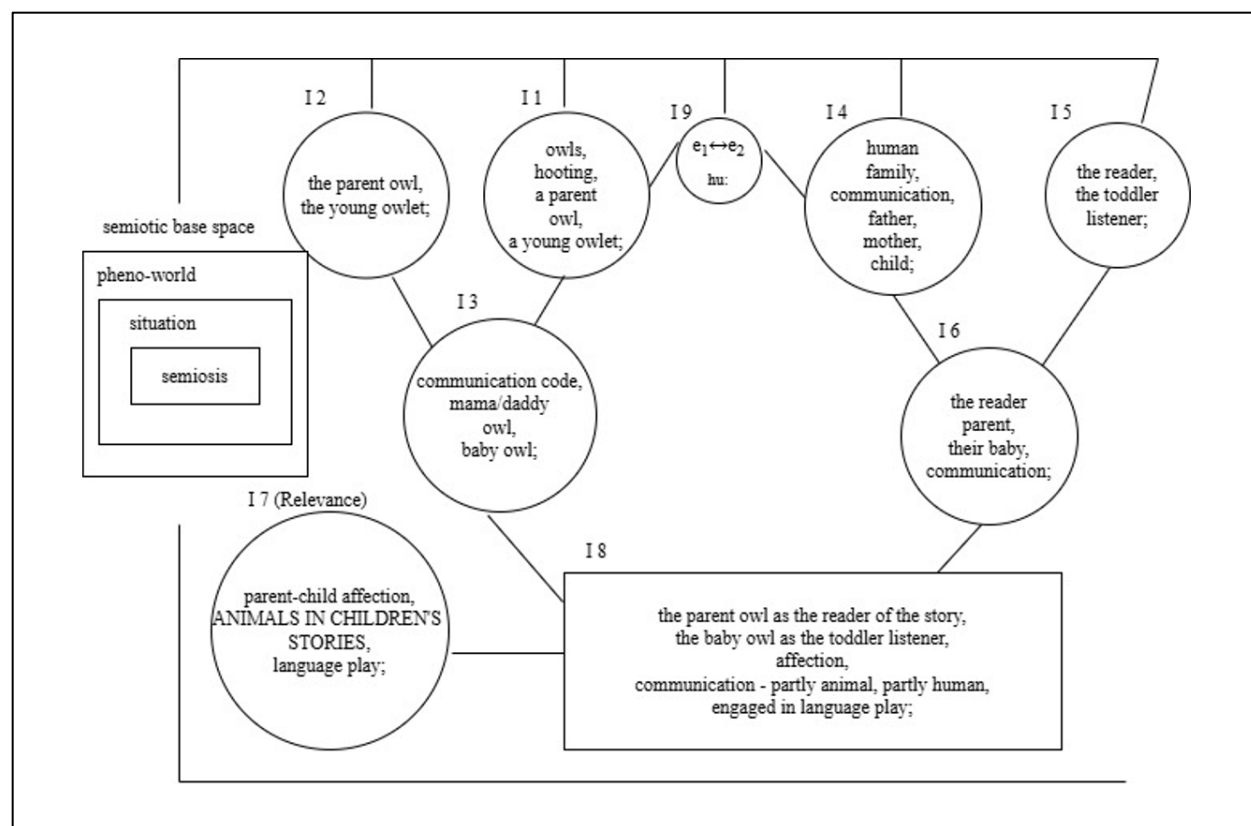


FIGURE 2. The complex network of conceptual blending in the pun *WHOO loves you?*

METAPHOR-MOTIVATED MEANING IN LANGUAGE AND VISUALS

As the analysis revealed, some spaces feeding into the complex conceptual networks set up by the narrative in the book (both the text and visuals) also involve compressing corresponding elements that are contributed by distant domains, which are drawn together by the vital conceptual relations of Analogy and/or Similarity. Thus, the conceptual blending network underlying both the verbal and the visual data also includes metaphorical blending. In (2-4), we provide some examples of metaphor-driven verbal content (for clarity of presentation, we now avoid animal puns), together with their respective conceptual metaphors.

- (2) I miss you when we are *apart*. → EMOTIONAL INTIMACY IS PHYSICAL CLOSENESS (note also the simile *You stick to me like glue*.⁵)
- (3) My love for you is strong. I *seal* it with a kiss → EMOTIONAL BONDING IS PHYSICAL BONDING
- (4) You are so *dear* to me. → LOVE IS A VALUABLE OBJECT

The verbal metaphorical content is reinforced by the visuals; in each consecutive picture, the animal characters are either in direct physical contact (e.g., the joey in mama kangaroo's pouch) or remain close (e.g., flying together). In the specific instance (*Whoo loves you?*) studied in the

⁵ While in the present analysis simile, as a direct expression of similarity, or comparison, is treated as separate from metaphor, there are approaches within which it is a form of metaphor (Steen et al. 2010).

previous section, we also noted the physical proximity of the animal characters in the visuals. The emotional-physical metaphorical relation is further reinforced in the real-time reading scenario where the child is likely cuddling with the parent and/or sitting on his/her lap, thereby embodying the metaphor in the book. Such physical instantiation of a metaphor has been shown to increase its effectiveness at conveying the intended meaning (e.g., Xu, Liu, & Wang, 2023; Khatin-Zadeh et al., 2023).

CONCLUSION

This study highlighted, among others, (i) the utility of the conceptual blending model in the analysis of punning; (ii) the importance of the situational context, immediate or otherwise, in humorous meaning creation and interpretation, and, thus, the utility of models which incorporate context as a core component; and (iii) the relevance of the generic space in an analysis of pun-based creative formal blends. These points are elaborated below.

When confronted with some incongruity of meaning, and, hence, the need to switch to a non-*bona-fide* mode of communication, the toddler-listener is challenged to resolve it by reconstructing the idiomatic phrase and setting it apart from the animal word. The humorous effect arises precisely from the interplay (or tension) between the two senses, both of which remain accessible. The framework of conceptual blending provides a model of cognitive processing whereby an emerging integrated network retains all interconnections among its spaces, including the blended spaces. As such, it is well suited for modelling the cognitive processing of two incongruent senses—both separately and in tandem—all accessible and accessed simultaneously. In addition, our analysis showed that the conceptual blending framework has considerable explanatory potential for the use of figuration in puns similar to those we studied. As we demonstrated, some counterpart connections and compressions in the network may be metonymic and/or metaphorical in nature. In addition, the framework illustrated the flexibility needed to unpack meanings channeled via more than one mode, i.e., written (spoken) text and visuals.

Furthermore, outside the context of this book, the studied puns would be rather unimpressive and the humorous effects they produce rather weak. Yet, disambiguated by the visuals and placed within the immediate situational context of a parent reading the book to their child, the puns become cute and funny, tailor-made for the special audience they are intended for. As we have argued, part of the relevant context is also the broad folk knowledge of the cognitive and social functions of the interaction between a parent and child centered on an animal picture book. Moreover, in our analysis of the blend *WHOO loves you?* as a mirror network, we highlighted the relevance of a generic space, noting that the shared broad topology of the component inputs here is not as straightforward as typically found in mirror networks. Specifically, we claimed that the awareness of the shared structure appears to be secondary and backgrounded, while the shared phonetic structure of the formal blend is foregrounded and cognitively salient.

Finally, it is hoped that the paper contributes to research on the severely understudied area of child-directed communication, especially that involving language play in picture books for young children. Thus, the analysis opens some avenues for future exploration, e.g., of figuration in other types of verbal humor.

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