CHAPTER 3. Blending theory and its application in semantics and discourse studies Todd Oakley and Esther Pascual

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1. Introduction: Meaning construction in context

Standing in line at a local Starbuck's Coffee, one of the authors overheard the following remark by a fellow customer to his companion: "Oh… he was your next-door neighbour before you lived there." The referent in question was never the addressee's next-door neighbour in the conventional sense of synchronic occupation of adjacent dwellings, and if we were philosophers of language in a model-theoretic mold, such an utterance would be demonstrably false, if not altogether meaningless. But such utterances are the worka-day results of interactions between cognitively modern human beings, and we doubt the addressee had any trouble understanding it.

These are precisely the types of utterances on which Gilles Fauconnier ([1985] 1994, 1997) built his theory of mental spaces, according to which natural language is a process of building conceptual scenes and scenarios as we think and talk, and otherwise interact. Meaning emerges from *elements*, *roles*, *values*, and *relations* that inhabit or form a conceptual domain referred to as a 'mental space'. Mental spaces are either ontological domains within which the same element can be construed (e.g. Reality, Fiction, Dream, Counterfactuality) or represent the 'world' of an individual, entity, or concept as opposed

to another one (e.g. Barack Obama, Disneyland, Chinese medicine, Nobel prize winner). Human minds fluidly and (seemingly) effortlessly build up meaning through the construction, connection, and integration of these mental spaces, where the truth or falsity of a statement is really a rarified outcome of a much more general process linking thought, language, and context.

Back to the Starbuck's cue:

(1) Oh... he was your next-door neighbour before you lived there.

Comprehension of (1) entails the creation of a mental space configuration such that it is possible to refer to a past inhabitant of a dwelling as erstwhile neighbour to a present occupant at an adjacent dwelling. So, that, in some nontrivial sense, the addressee of (1) is predicated to share a social relationship with the referent of (1). A fruitful way to model this relation is to posit a mental space 'R', for speaker's reality at the time, within which the referent "he" is construed. In this space, the element **n** refers to "he" as a role-filling topic of conversation. It signifies that n is known to both discourse participants: perhaps "he" is a colleague at work or a common client. To understand (1) requires a new mental space, P, referencing a past situation. In P, the addressee and referent occupy the same social-geospatial role of "next-door neighbor," but at different times. As Figure 1 represents it, a meaningful and salient spatial alignment of roles emerges, but it is absent the precise temporal alignment of their values, where the role n is preserved (represented by the pragmatic connector running from R (present) to n' in P (past). The two mental spaces specify counterparts of the same individual, inhabiting either present R or past P.



INSERT FIGURE 1 ABOUT HERE

Figure 1: mental spaces analysis of (1)

This curious example illustrates the fact that natural language rarely behaves well according to the postulates of model theoretic accounts of language, as there is no unequivocal one-to-one relation between linguistic entities and the objective world, whatever that may be. This naturally has important implications for semantic theory, since it entails that meaning is not found in words or in other tangible linguistic units. Rather, meaning is constructed within a given conceptual configuration set up by language users at a given point in discourse and interaction. Thus, an understanding of the functional-cognitive foundations of meaning construction (wherein reference is a critical and defining practice) requires that any cognitive linguistic model of meaning construction regard such counterfactual, even illogical utterances as central rather than peripheral cases.

1.1 Ersatz neighbours

Now, imagine in fancy that you are the addressee. A week later, you run into the very person who is the referent of (1). You happen to know him professionally, and now decide to greet him with the hardy salutation: "Howdy, neighbour!."

Initially nonplussed, he is unsure what to make of this new title, and you then explain the situation. When recognizing his new role, he proceeds to swap stories with you about the neighborhood. Who lived where, when? Who left because of divorces and neighborhood scandal, etc. At this moment you two are honorary neighbors *reminiscing* about the neighborhood you never shared. What are we to make of such a fanciful, but nevertheless commonplace, discourse situation?

Fauconnier and his collaborator, Mark Turner, extended the theory of mental space to focus on such acts of conceptual gymnastics (1996, 1998, 2000, 2002). Utterance (1) can be regarded as a linguistic tipping point for developing a full-bodied scenario of non-genuine next-door neighbors gossiping about their neighborhood. These *as if* activities require an extended model known variously as 'conceptual integration' or 'conceptual blending'. The imagined interaction between ersatz neighbors —and in fact just the conceptualization of these 'neighbors' who never dwelled in adjacent homes at the

same time— is represented in Figure 2, where the two mental spaces function as socalled "input" spaces to an emergent blended space.



INSERT FIGURE 2 ABOUT HERE

Figure 2: Ersatz neighbours

The blended elements of $\mathbf{n}\alpha$ ' and $\mathbf{n}\beta$ ' signify a distinct conceptual achievement, characteristic of human beings, that reveals much about the nature of cognition, but perhaps even more about the nature of language and discourse. As will become apparent in the pages below, such flights of fancy are really just the beginning; much of our workaday cognitive operations require some form of conceptual integration or blending, which, as (1) implies, often requires a conceptual "compression" of roles, values, identity, and other relations over extended temporal and spatial associations. It is in this blended, compressed relationship that your colleague functions both as your and not your next-door neighbor.

Now that we have achieved a basic understanding of what mental spaces are and how they can be integrated or "blended" to achieve workable, if sometimes fanciful, conceptual scenarios, we proceed to outline the basic elements, governing principles, and possible vital relations between input spaces. After which we discuss work on blending in grammar, and then proceed to pay particular and sustained attention to the explanatory power of Blending theory to account for meaning construction and discourse phenomena in written, spoken, and multi-modal communication. We will examine instances of conceptual blends in language for specific purposes, ranging from marketing to humor and journalism.

Three different kinds of blending networks used to achieve different communicative goals will be discussed: (i) mirror blends, especially those involving a split self; (ii) double-scope blends, some with double grounding (Brône and Feyaerts 2005), namely blends motivated by metaphor and metonymy; (iii) double-scope blends with material anchors, modeled by physical structure in the here and now (Liddell 1995, 1998, Hutchins [2003] 2005, Williams 2004); and (iv) simplex blends, including fictive interaction blends, in which an input space is fused with the frame of the conversation (Pascual 2008, Turner 2010). We conclude with an elaborate double-scope blending analysis of an American pharmaceutical advertisement with quadruple grounding spaces.

2.1 Basic principles

The primary cognitive function of conceptual blending is to create scenes that fit human scale (e.g. Fauconnier and Turner 2000, 2002). Much of what human beings think about, talk about, and act upon, operate over scales of time and space that are either too small or too large to fit comfortably with our range of common experience. Thus, the basic principle of conceptual blending is to "compress" that which is inherently diffuse and "decompress" that which is inherently condense. Consider a situation in which a father tries to explain to his young daughter the relationship between the sun and earth using produce at the dinner table:

(2) This hazelnut is the Earth, which rotates like this around the Sun, this orange.

The ready-to-hand items can be manipulated to represent an unready-to-hand relationship between celestial bodies, such that the father can demonstrate a complex, diffuse, and unfamiliar relationship to the daughter. In (2), we have a network of mental spaces—one for fruit, the other for planets—that can be productively aligned and momentarily blended to make concrete a relationship not easily distilled from basic human experience. The same basic operation would be at work for purposes of decompression:

(3) The hazelnut is an electron, which rotates around the nucleus, this orange.

Here the ready-to-hand foodstuff comprises the familiar means of "exploding" out a mode of observation and experience that is, in principle, unavailable to denizens of the

macroscopic world. Since the elements in input space 1, the fruit to be mapped and fused with the concepts at issue, are objects in the real world, present in the situation of communication, they are called 'material anchors' (see Hutchins [2003] 2005, Williams 2004). Interestingly, such material structure compressing or decompressing to human scale may also constitute the addresser's body, as when body parts or gestures accompanying language stand for space elements or relationships, or represent conventionalized lexical items, as in sign languages (Liddell 1995, 1998, Dudis 2004, Parrill and Sweetser 2004, Parrill, Tobin, and Turner 2010).

2.1.1 Compression of Vital Relations

Such compressions and decompressions are part and parcel of blending processes—while fundamentally unpredictable and indeterminate in nature—nevertheless, operate according to regular and routine conceptual connections. These "vital relations" (Fauconnier and Turner 2002) cover the gamut of common concepts, including *Time, Space, Cause-Effect, Change, Identity, Part-Whole, Representation, Category, Similarity/Difference* (*Analogy/Disanalogy*), *Intentionality*, and *Uniqueness*. For instance, the blended space in (1) preserves a relation of *identity* between fillers of these social roles even as it relaxes any strict relation of time. By contrast, the material anchor blend in (3) creates a new part-whole relation between hazelnut and orange that is not a relation in the Produce input space, but which builds on the *analogy* and *representation* possible once the speaker constructs the network. These relations then provide the basis for mental space connections between elements and relations in any given network of spaces. In (1), both "he" and "you" fill identical roles in the blended space, but not in the input spaces, and are compressed into *Uniqueness*. In (2) and (3), the choices of hazelnut for Earth/electron and orange for Sun/nucleus are motivated by the property "spheroid" and relative size, making the smaller hazelnut a good candidate for mappings to its analogical counterparts, Sun and nucleus, both of which are empirically "bigger." The fruit and planets are mapped by *Similarity* and compressed into *Uniqueness* in the blend, where the one entity in the here and now stands for spheres in outer space or the micro-world. In this respect, the basis of the conceptual blend, whereby the produce represents the planets/atomic parts, exploits the conceived similarity of "shape.".

2.1.2 Composition, completion, and elaboration

How is blending achieved?

Assuming the activation of a familiar mental space (e.g. Present Reality) and its counterpart (e.g. Past Reality), the speaker *projects selective* elements and relations from the one to the other, for there are many aspects of those spaces that are not immediately relevant to the configuration at hand. The *composition* of a conceptual blend begins with some kind of exploitable vital relation available for recruitment (i.e. projection) across spaces and into the blend.

This fact is perhaps easier to grasp with example (2). The ready-to-hand, spherical foodstuff offers an occasion to project shape and relative size from the mental space, Produce, to the mental space, Celestial Body. Once the father has conscripted these items to serve a different purpose, he puts them into a proximal spatial relationship resembling an "orbit." Assuming this process coincides with the utterance of (2), we can infer that the composition of the blend overlaps with this discourse event. At this moment, we have a composed Produce as Celestial Bodies blend (see Figure 3) with a 'roundish' hazelnut occupying the salient categorical entity, orbiting 3rd planet, with the orange occupying the salient categorical entity, stationary gravitational center.



INSERT FIGURE 3 ABOUT HERE



Suppose now that the father replaces the first orange with a second one, with a conspicuous dark spot thereon. He says, "No, let's use this one. It will be better for talking about other things." The composed blend has now more clearly undergone *completion*, for additional information about Suns has been projected onto a *unique* feature of the dinner table orange. After the father has explained the orbital relation of these bodies, he then directs his daughter's attention to the dark blemishes on the orange. "See these, these are sun spots, and they can greatly affect what happens here on Earth." At this point, the father exploits a property from the Produce space to illustrate a phenomenon specific to stars, namely spots of concentrated electromagnetic radiation, to say something more about the solar system. This *saying something more* is a common discursive effect of blending. We project additional elements and relations in order to structure the blend for the purpose of elaborating knowledge of one or more input spaces. In this case, the blemished orange is a serendipitous property, enabling the parent to open a conversation about a separate but related matter. Or, harkening back to (1), if so-and-so were to reminisce with his ersatz neighbor about the "good-old days on the block," he would be elaborating the blend.

2.1.3 Simplex, mirror, single-scope, and double-scope networks

Fauconnier and Turner (2002) identify four distinct types of mental space networks to account for a range of conceptual operations. We prefer to use the term 'integration' when discussing simplex networks, for the network is the outcome of the basic process of fusing specific values with their respective roles from a 'frame', in the sense of Fillmore (1976, 1982, and see Sweetser, and Boas, this volume). The most common illustration of a simplex network is the integration of Kinship relations, as in:

(4) Eric is my father.

The speaker creates a mental space that identifies the value "Eric" with the role "father" from the Family frame, while the possessive pronoun "my" identifies the speaker as "ego." Such simplex integration of a role in a given frame and a value in a specific mental space may also be metaphorical, as in other examples of the 'X is the Y of Z' construction, such as Wordsworth's "The Child is Father of the man" (Fauconnier and Turner 2002: 142) or this ad reading "*Virgin is the parent of Virgin Music*" (Joy, Sherry, and Deschenes 2009: 43).¹ Similarly, in "he was your next-door neighbor", without the additional complement, we have something akin to a simplex integration of role and value. If one identifies a specific writing implement laying on a desk, picks it up and puts it back in a box of red pencils that happens to be laying adjacent to a box of blue pencils, then one is creating a simplex mental space based on a type-token relationship.

Another type of simplex blend is the fictive interaction blend (see Pascual and Oakley, this volume), which emerges from the fusion of a mental space and the frame of the Conversation (Pascual 2008, Turner 2010). If we say that "Thunder *announces* a coming storm", that "The bean burrito is California's *answer* to France's Croque Monsieur" (Fauconnier and Turner 2002) or that "Drug makers *listen in* while bacteria

¹ For a discussion on metaphor as an instance of conceptual blending and the distinction between conceptual metaphors in a given language and culture, and specific, often one-time blends, please see Coulson (1995), Grady, Oakley, and Coulson (1999), Grady (2005), Fauconnier and Turner (2008), and Fauconnier and Lakoff (2013).

<u>talk</u>" (*The New York Times*, February 27, 2001), we are construing and presenting a nonconversational event or relationship in terms of a conversation.

It should be pointed out that simplex networks rarely exist "in the wild,"² for they are quickly integrated into complex networks for thinking, talking, and acting—networks we regard as conceptual blends, of which there are three.

Consider this Dutch advertisement for Douwe Egberts "Return-Ticket Coffee," which reads in English as:

(5) New Return-ticket Coffee.

Coffee for your outgoing and your return trip.

A good trip. It starts with Douwe Egberts.



INSERT IMAGE 1 ('Douwe coffee') ABOUT HERE

² Instances of lexicalized fictive interaction are the exception, as discussed in Pascual and Oakley

⁽this volume).

The two input mental spaces set up share the same organizing frame of Travel with identical railway travelers who drink coffee during both legs of the journey. Each mental space specifies a different temporal aspect of an event; otherwise, they *mirror* each another in all salient respects. In this case, the Food frame is subordinate and thereby does not recruit any elements, roles, or relations that would clash with the Travel frame. The blend itself extends these two spaces to produce the logically impossible scenario of meeting yourself coming-and-going somewhere along the line. In the blended space, but not in either input, you can make eye contact and toast yourself with coffee (see Figure 4).³



³ The ersatz-neighbor blend is likewise a mirror network.

INSERT FIGURE 4 ABOUT HERE

Figure 4: Mirror network for split-self traveler

Classical examples of mirror networks are the boat race between Great America II and Northern Light, traveling the same route on different centuries (Fauconnier and Turner 1998: 154-156) and the riddle of the Buddhist monk, in which one needs to guess when a monk walking up and down a mountain meets 'himself' (Fauconnier 1997, Fauconnier and Turner 1998, 2002).

In contrast to mirror networks, single and double-scope blends often exploit analogical mappings of role/value relations between different organizing frames, where one frame dominates the conceptual relationship. Such activities arise from *single-scope* mental space networks, as in this example from Groucho Marx's (1959) autobiography:

(6) Today, with actors, musicians and all the affiliated crafts unionized, it is hard to conceive the relationship that existed in those days between the actor and the theatre manager. What Henry the Eight was to English history and Torquemada was to the Spanish Inquisition, the theatre manager was to vaudeville. His powers were absolute. (66)

Here, an analogical relationship is set up between theatre manager and vaudeville actor on the one hand and absolutist ruler and subject on the other. The input space for Dictators represents a broad *scenario* of absolute rule, with the more *scenic* "daughter" spaces supplying the exemplar personages from Tudor England and the Spanish Inquisition (see Figure 5).⁴ In the blend, any particular theatre vaudeville actor is under the same absolute rule as a subject in the Court of Henry VIII or, worse still, a Sephardic Jew in 15th century Spain or Portugal. Hyperbole aside, the emergent meaning of blending a theatre-manager with one of these historical figures is to highlight the lopsided power-relationship between these two roles, a relationship characterized by a dominant conception of the American employer/employee relationship before the Progressive movement of the early 20th century. While there are many potential clashes of conceptual structure between the semantic frames for Absolute Rule and Theatricality, no such clashes need to be negotiated in the blend or network at this stage. The frame for Absolute Rule comprises the organizing frame for the network; thus, it is single-scope.

⁴ Oftentimes, as in the case above, the input spaces comprise scenarios, defined here as situations with types of agents, actions, instruments, and constraints, while scenes are particularized instantiations of one or more of these elements and relations.



INSERT FIGURE 5 ABOUT HERE

Figure 5: Single-scope network

Such single-scope networks are open to further elaboration by bringing additional elements of theatricality into the blend, changing the heretofore single-scope into a double-scope network. A piquant example of this comes from Mel Brooks' 1981 film, *Histo-ry of the World, Part I*, where the Spanish Inquisition is dramatized as a musical. In this instance, Torquemada (played by Brooks) is the lead in a Broadway-style musical. One of his minions introduces him with the following word-play salutation:

(7) Torquemada. Do not implore him for compassion.
Torquemada. Do not beg him for forgiveness.
Torquemada. Do not ask him for mercy.
Let's face it. You can't *torq-im-odda-anything*!

Here, the phonetic form of the character's Spanish name, Torquemada, is integrated with the English utterance "talk him out of anything", motivated by a vital relation of similarity. And so ensues an elaborate vaudeville-inspired musical. It is the double-scope blending of absolute rule with musical theatre for comic effect. One could say that the mental space for Musical Theatre "drowns out" the content of the Spanish Inquisition space. Such instances of human creativity and satire are carnival examples of double-scope mental space networks, where the focus of attention is solely on the blended space, where the humor emerges (see Figure 6). In contrast to Figure 5, where the source input space remains the dominant focus of attention, this double-scope network focuses extended attention on the blend itself, but with recruitment of additional conceptual structure from scenic spaces of the Musical Theatre scenario. Thus, the scene of the Spanish Inquisition in the previous example is now the input space for the blend, as opposed to merely one of two referential "daughter" spaces. The fact that the point of the blend is to spoof history rather than use history as a means of teasing out an analogical relation, shifts the entire networks toward Musical Theatre.



INSERT FIGURE 6 ABOUT HERE

Figure 6: Double-scope network

Such phonologic and semantic blends are common, but not restricted to, humoristic discourse (e.g. Coulson [2001] 2005, 2005, Feyaerts and Brône 2005, Fujii 2008, Krikmann 2009). They are also frequently used in advertising, where they may also be integrated with visual input spaces (e.g. Lundmark 2005, Joy, Sherry, and Deschenes 2009), and some may occur in everyday language use and even become conventionalized (e.g. "brunch", "motel", "nectarine", Fauconnier and Turner 2002). Perhaps more surprisingly, syntactic and morphological blending may be fully grammaticalized in language (Fauconnier and Turner 1996, Mandelblit 1997).

2.2.3 Optimality principles

Conceptual blends achieve their cognitive and communicative effects by variably satisfying different constraints. Fauconnier and Turner (2000, 2002) identify six such optimality principles. Importantly, no blend satisfies each constraint equally well, in fact, the completion and elaboration of blends often requires the relaxation of one constraint in favor of another, as shown below.

The *integration* constraint posits that a blend forms a single scene or unit and be "manipulated" as such. This constraint reflects the principle of compression. When the father at the dinner table takes the orange and hazelnut and spatially manipulates them into an orbital array, the blended mental conceit of an orange/Sun-hazelnut/Earth are thereby animated as a single scenario, such that the father can now move the hazelnut in an arc and have it signify the movement of the earth. Material anchor blends must satisfy the integration constraint to a degree more significant than with other blending types.

The *topology* constraint stipulates that it is optimal to preserve the relationships between elements in the input spaces and in the blended space. While it is possible to anchor a dinner-table solar system with salt and pepper dispensers, the fact that an orange and hazelnut are spheroids of differing size has the effect of preserving gross geometric shape in the blended space. (Other instances of material anchor blending relax such iconic properties of their proxies, but it may be easier—especially for children wielding a limited range of categorical strategies—to attend to the blended concept when general topological structure remains active in attention, perception, and working memory.)

The *web* constraint specifies that it is optimal to maintain mappings between the input spaces in the blend. Thus, it is critical for the ensuing interaction between ersatz-neighbors that they maintain the role-value connections between the input spaces if elaboration of the blend is to enable the non-actual reminiscences of the "good old days in the neighborhood." If, for instance, one of the discourse participant's attention drifts, the identity mappings between these two input spaces may be momentarily interrupted, making it difficult for one of them to track the discourse and respond appropriately, requiring a discursive "repair" of the blend.

The *unpacking* constraint stipulates that the blend should supply the basis for inferring the structure of the input spaces. Blends that optimize the unpacking constraint are best exemplified by instances of so-called 'double grounding blends', involving ambiguity, as in the news headlines in 8 and 9 (Brône and Feyaerts 2005):

(8) U.S. slowdown *punctures* Michelin's profits.

(9) The Agnelli family is once again *in the driver's seat* at Fiat.

Both examples are puns, exploiting the literal and metaphorical meanings of the verb "puncture" in (8) and of the preposition "in the driver's seat" in (9). In each case, the blend forces the reader to unpack the contents of each input space (tires/company profits; car's interior/dominant member of an organization) and dwell for some time on the rela-

tionship. That is, the metonymic relationship between tires and the tire company Michelin and between a driver's seat and the car company Fiat, and the conceptual metaphors MORE IS UP, LESS IS DOWN and LEADING AN ORGANISATION IS DRIVING IS VEHICLE, respectively.



INSERT FIGURE 7 ABOUT HERE



The point of the blend is to serve as a springboard for appreciating the tensions between the input spaces. Psycholinguistic reaction time experiments suggest that double grounding blending is a psychologically real phenomenon, which readers find more cognitively demanding but also more aesthetically satisfying (Brône and Coulson 2010).

The *metonymy* constraint stipulates that items related via contiguity or some other part-whole relation compress to identity in the blend. The following cartoon exemplifies metonymic "tightening" (Fauconnier and Turner 2000).

(10)



INSERT IMAGE 2 (IKEA) ABOUT HERE

(Accessed from *Catholic Humor*, 22 May 2015, by Martin Perscheid, http://www.-catholichumor.org/2014/06/suddenly-father-realized-he-should-not.html, used with permission from the artist)

Here, the clergy cannot help but feel as though he were about to nail real-life Jesus upon the Cross, this despite knowing that he is merely engaging in a bit of do-it-yourself iconographic assembly. The humor comes from the discrepancy between these two scenarios—the quotidian act of assembling furniture and an act of torture.

The *good reason* constraint postulates that any element that happens to emerge in the blend, however incidental to the framing structure of the input spaces, is given significance in the blend. Consider this Dutch advertisement for eggs:

INSERT IMAGE 3 ('Ei love you') ABOUT HERE

(11) Ei love you



Hou jij van eieren? Dan heb je geluk. Want eieren houden ook van jou!

Lit. Egg/I love you. Do you love eggs? Then you're in luck. 'Cause eggs love

you too!' (<u>http://www.eiloveyou.nl/</u>)

This advertisement exploits the phonological overlap between the Dutch common noun ('ei', 'egg', pronounced [ai]) and the English first person singular pronoun ('I') to create a fictive interaction blend (see section 2.1.3) in which the expression of affection 'I love you' is now ascribed to an egg addressing the reader. Of immediate relevance is the image of an egg wearing a knit hat. Why this image? The obvious answer is to personify the egg as an addressor, a sentient being who needs to be protected from the elements. The presence of the hat, otherwise irrelevant for eggdom, materializes as an important indicator of personhood—putting the "I" in "ei," so to speak. (Notice too that the photographed egg now entertains an intrinsic front, such that it is "facing" the reader, something more difficult to affect without the hat.)

Consider again the Father Schober cartoon (10), in which the initial reaction to it by one of our friends is instructive. After laughing, she uttered "i-keel-ya" [ajkilja] or "I kill you," inspired by the name of the company, Ikea, as if Father Schober were announcing his intentions to his victim. It is at this point, where the cognizer finds additional good reason to utter the company's name.

2.1.4 Excursus: Whither the generic space?

Readers familiar with the literature on conceptual blending will notice something missing from each of these blending analyses, namely the generic space. If one were to read, for example, Fauconnier and Turner (1996, 1998, 2000, 2002), but also Oakley (1998) or Grady, Oakley, and Coulson (1999), one would see both diagrams and text given over to a mental space housing generic structure common to all the spaces in the network. Such

stipulations, once commonplace, are becoming less frequent, in part because perhaps no feature of the blending framework has engendered as much controversy among blending theorists themselves (cf. Brandt and Brandt 2005, Coulson and Pascual 2006, Oakley 2012).

If one regards mental spaces as essentially scenes and scenarios activated as we think and talk (and not simply 'conceptual packets'), the generic structure of that space would be an emergent property of direct mental engagement with the scenes themselves, thus a generic space would be an output of the network rather than an input to the network. Given that these mental space networks come and go quickly, are used to illuminate parts of one space at the expense of another, or otherwise are devised for local, on-line conceptualization, the generic space may just be more an artifact of analysis—a form of mental scaffolding for the theorist—than a reflection of the processes unfolding during discourse production and processing.

There is to date in sum no consensus among conceptual blending theorists as to the need for a generic space.

3.1 Blending and discourse

Most of the aforementioned examples are attested utterances but with many of the facets of their rhetorical situations redacted for analytic and expository convenience. In this final section we present a full case study of a pharmaceutical commercial from the United States. This analysis exhibits how the conceptual blending framework can systematically capture features of rhetorical situations and their relation to semiotic material that rhetoricians have only investigated impressionistically. The following case study takes its place among a range of similar studies presented in several venues, with Oakley and Hougaard's (2008) edited volume and two special issues on blending (Coulson and Oakley 2000, 2005, Dancygier 2006) as signal exemplars. But first we discuss the role of context in blending configurations.

3.1.1 Grounding: Basic and extended communication space networks All acts of communication take place among situated participants endowed with skills at intersubjective interaction. As Sanders, Sanders, and Sweetser (2009: 25) note:

... any communicative use of language necessarily involves the presumption that the speaker has mental states, and that she is expressing some content of her mental states, in some speech setting, using some set of linguistic forms.

The authors then introduce the notion of a *basic communicative spaces network* that participants access "for free"—meaning that such a space of communication is immediately accessible and does not have to be built up or elaborated as other content mental spaces, but which constitutes the deictic center of those mental space networks. Similar but not identical to Langacker's (1987, 1991, 2008) notion of *grounding* and Clark's (1996) *common ground*, a basic space of communication operationalizes the basic rhetorical nature of language that has posed a challenge for speakers and analysts of discourse: The space of communication is taken to be non-salient or lacking in prominence during the speech event (for the ostensible object of the speech events is not the event itself), yet they remain highly prominent, insofar as every symbolic act issues from it, returns to it, thereby altering it. That is, all content mental space networks are anchored to some rhetorical situation, replete with persons, exigencies, and constraints (cf. Bitzer 1969).

A brief review of the previous examples should suffice to illustrate the implicit presence of communicative spaces networks that we term 'grounding spaces' (cf. Coulson and Oakley 2005, Oakley and Coulson 2008, Oakley and Kaufer 2008).⁵ In order to understand utterance (1), we need to appeal to a minimal context that includes a bystander overhearing two men talking in English while waiting in line. From this vantage point, the bystander takes this comment to be "off the record," "small talk" while waiting in line. But we can poke this example a little further, and likewise change the space of communication from a Starbuck's cue to the authors' laptops; the bystander opportunistically retrieves "field data" for a suitable example of mental spaces. What is more, the act of imagining this utterance as the basis for the Ersatz-Neighbor blend is itself an elaboration on the basic communication space from which the utterance first appeared. In addition, example (2) makes little sense absent the intentional communicative situation between father and daughter at the dinner table. This is how the overall context of production and interpretation both motivates and constraints blending operations (Coulson and Pascual 2006).

The basic communicative space offers blending theorists interested in discourse the means of modeling or otherwise accounting for the fundamental presumption of

⁵ Brandt and Brandt (2005) offer a similar construct known as "semiotic space."

communicative intentions in specific situations. While obvious, it becomes clear to anyone working with complex textual artifacts that such communicative spaces can be extended into fictive and fictional variants once the fundamental process of one-person-addressing-another becomes a representational resource for rhetorical elaboration in the satisfaction of given communicative goals.

3.2 Case study: Conceptual blending in discourse, interaction, and rhetoric

3.2.1 Symbicort and "big bad pharma"

Our final example of blending is particularly complex: a televised pharmaceutical advertisement for *Symbicort*, a medication for alleviating symptoms associated with Chronic Obstructive Pulmonary Disease. It entails multiple embedded instances of double-scope blending that are rhetorically presented through active and fictive forms of direct speech.

The central enabling conceit involves a grandfather reading a picture book of the *Three Little Pigs* to his young grandson.



INSERT IMAGE 4 (Grandpa and Grandchild) ABOUT HERE

As he exclaims, "And the wolf was huffing and puffing," the child interjects with "kinda like you sometimes, Grandpa." He then responds, "Well...when you have COPD it can be hard to breathe...it can be hard to get air out, which can make it hard to get air in," at which time the camera shot shifts to inside the story world, with a wheezing Big Bad Wolf wearing the same green sweater as grandpa, unable to blow down the straw house.



INSERT IMAGE 5 (Wolf with COPD) ABOUT HERE

As the ad proceeds, the grandpa Big Bad Wolf consults a pulmonologist, represented as a she-wolf, who then prescribes Symbicort, thus enabling the Big Bad Wolf to help his grandson blow out the candles on his birthday cake.



INSERT IMAGE 6 (3 scenes: wolf at doctors, party, idea) ABOUT HERE

In the case of the *Three Little Pigs* story, an anthropomorphized wild animal (the Wolf) antagonizes a pen of domesticated animals (the pigs), a common occurrence, for

wolf packs find livestock an easy catch. The critical point from the folktale is that the Big Bad Wolf's salient weapon of choice is not his fangs but his lungs. He gains access to prey by blowing down the fortress. The blowing is some opportunistic conceit that combines the fact that wolves howl with an implausible possibility of them using that breath to collapse the barrier between predator and prey. This scenario allows for completion and elaboration, such that, in the blended scenario of "lupus-genic" cyclonic wind, there are some materials capable of withstanding such forces better than others. With each disaster and escape the three little pigs follow good engineering principles and build consecutively stronger abodes. While the wolf makes short work of straw and stick houses, he runs into trouble with brick.

This fable blend is important for our purposes because the blend itself functions as an "input space" for an elaborated blend.



INSERT FIGURE 8 ABOUT HERE



Our analysis focuses on the composition of a blend based on selective projection from a Domicile and Predation input spaces. In the Domicile space, intentional agents seek refuge in a dwelling from the elements and intruders. It stands to reason that some materials are stronger and more resistant than others: a house made of straw is weaker than a house made of sticks, and a house made of bricks is far stronger than both straw and stick. Builders can imagine intentional mental states of potential intruders and plan accordingly; hence, the elements Theory of Mind ('ToM' in the diagram) and Intentionality

are salient characteristics of the fabled pigs in the blend. The logic of this space contributes the pragmatic scale of increasing imperviousness, such that straw, stick, and brick "line up" ascending order of strength. The Predation space contributes the role of Wolf as an apex predator of wild and domesticated animals, but primarily of livestock, such as pigs. In this space, the apex predator seeks to capture prey by any means possible. In the blend, which we like to call the "Wolf Blowhard" space, recruits the naturalistic predatorprey relationship between wolves and pigs, while concurrently recruiting knowledge about human dwellings, such that they are intentionally build to offer protection, and that their builders, in anticipating the nefarious intentions of potential intruders (Theory of Mind), select building materials of increasing strength. In the blend, the weapon of choice wielded by the wolf is his breath, and the defensive tactic chosen by the pigs are the building materials. The emergent logic of the blend is that with each escape and bivouac of the pigs brings with it a corresponding increase in the imperviousness of the building materials, which, in turn, increases the amount of energy necessary for the wolf to blow the house down. According to legend, this wolf succeeds in blowing down the first two houses, but then fails in his attempts with the brick house.

Such is the blended scenario of a predator whose weapon of choice are his lungs. What if his weapon of choice is defective?

This entrenched narrative highlights and selectively projects the "huffing and puffing" actions of said wolf, an unusual tactic for apex predation, but one that nicely dovetails with the condition of Chronic Obstructive Pulmonary Disease (COPD), a combination of emphysema and chronic bronchitis. While the Wolf's huffing and puffing is healthy, grandpa's huffing and puffing is symptomatic of disease. In this blended scenario, the Big Bad Wolf suffers from COPD and can't even blow down a house made of straw, the easiest of the three houses.

Figure 9 presents the mental space network for this completed blend.







Here we have a grandfather (senior citizen) who gets transported into the story world of the *Three Little Pigs* as the Big Bad Wolf. Unfortunately, this elderly Big Bad Wolf suffers from COPD, which does not allow him to breath normally. He can't get enough air in or out to help his grandson wolf pup blow out candles on a birthday cake, let alone blow down an entire house made of straw. It is the elaborated concept of a COPD Big Bad Wolf that motivates an additional narrative of a medical consultation with a pulmonologist (lung specialist). In the fable world of the Big Bad Wolf, the pulmonologist is a shewolf who then prescribes Symbicort to her patient, since, of course, the story world of this Anglo-European fable, nevertheless takes place in an Americanized fee-for-service system where access to many drugs must issue through a physician.





INSERT FIGURE 10 ABOUT HERE

Figure 10: Elaboration of the COPD Big Bad Wolf blend

The network now reaches a state of elaboration, with the Pulmonologist space playing an even greater role in the functioning of the blended conceit. Here the specialist considers different treatment options, as well as the contraindications and possible side effects of each medication. In this enactment, the she-wolf pulmonologist prescribes Symbicort to the elderly Big Bad Wolf, and we begin to see its positive effects. The Big Bad Wolf can now engage in pleasant interactions with his grandson/pup; he now passes by the pigs straw house. They notice a healthier and happier Big Bad Wolf and begin to get nervous. The narrative, then breaks back to the two-shot between grandson and grandfather, in which the grandfather enacts the wolf.



INSERT IMAGE 7 (Grandpa enacting wolf) ABOUT HERE

The complexity of this advertisement inheres not only in the blended conceit of a COPD Big Bad Wolf, but in its narratological structure, for which conceptual blending theory has also been helpful in elucidating.

Recent research in blending (e.g. Hougaard 2005, Coulson 2006a, 2006b, Pascual 2008, Dancygier 2012, Pascual and Xiang 2016) has come to focus on networks of mental spaces embedded within mental space networks of discourse and interaction. Though the terminology is not settled (see footnote 6), there is a consensus that conceptual blending should model the dynamics of discourse and interaction.

This advertisement brings out the human complexities inherent in discourse and interaction.

4.2.2 Communicative spaces of Symbicort

Our analysis of this Symbicort ad leads us to posit 4 distinct types of Communicative Spaces and their interconnections, captured in Figure 12.



INSERT FIGURE 11 ABOUT HERE

Figure 11: Communicative space network for the COPD Big Bad Wolf

There are four discourse formations for evoked scenes of speech, constituting the rhetorical situation of this advertisement. Our exposition thereof follows an internal to external trajectory. Grounding space alpha (α) represents the establishing scene we call 'story time' (similar to the Story Viewpoint Space in Dancygier 2008, 2012). Here, a grandfather and his grandson sit on a couch reading the story of the *Three Little Pigs*. Everything in this space is happening before the viewer's eyes in real time. Grounding space beta, on the other hand, provides default schemas of doctor/patient interactions. In this particular instance, we have the grandfather (a senior citizen, with all the connotations that evokes) and a pulmonologist. In the narrative, the events of this encounter are past relative to alpha, as this interaction forms the basis of the grandfather's ostensible reported speech to his grandson.

But there is a third grounding space enabled by the blended conceit, wherein the grandfather is the COPD Big Bad Wolf and his pulmonologist is a she-wolf. There are also other potential and incidental discourse participants, such as the wolf-pup, as well as the grandmother she-wolf and other members of the family/wolf pack, depicted as attending a birthday party, and let's not forget the three little pigs hiding in the straw house within earshot of the main character. This grounding space is co-present alpha but future relative to beta. This grounding space is represented through visual information, with the she-wolf being the only wolf character speaking. The dominant communicative mode in the gamma space is through pantomime, facial expression, and gesture.

The final grounding space is delta (δ), which corresponds ontologically to the advertisement itself. This space oscillates between being co-present with alpha, but its illocutionary force makes it logically future relative to all the grounding spaces. That is, when the advertisement asks the viewer to "ask your doctor is Symbicort is right for you," it is, in effect, scripting a future encounter with the viewer's own internist, presumably one who is not a she-wolf. It anticipates the content of your next medical consultation. Such scripted interactions are commonplace *proleptic* blends in pharmaceutical advertising.

The integration of multiple discourse formations is not altogether seamless. Recall that virtually everything related to the audience is ostensibly emanating from the story time space. The grandfather begins by relating his medical condition to his grandson, which retains prosodic features of an adult talking to a young child (e.g. higher vocal register, elongated vowels, and other forms of exaggerated vocalization), but with adult content. The speech of the she-wolf pulmonologist is at once represented as reported speech of the conversation with the grandfather. However, the physician recommends that "you should tell your doctor if you have a heart condition or high blood pressure before tracking it [Symbicort]," which breaks the frame of doctor/patient consultation, since she is supposed to be speaking directly to her patient, but is, in fact, speaking to the viewer—the viewer's role shifts from bystander to addressee. Importantly, the doctor's speech is in voice over and not directly animated, as it was when introducing the product to the COPD wolf. The network is as complex as can be, and still effective in attaining its persuasive communicative goal.

4. Conclusion

Conceptual blending is a developing and thriving area of research in cognitive linguistics, such that nearly all who specialize in the fields of discourse, literary, and rhetorical analysis must be familiar with its basic operations and principles. We have outlined just these basic operations and principles in the opening sections of this chapter with only intermittent reference to examples appearing elsewhere in the literature. Our second goal was to focus attention to the processes involved in understanding the complex and dynamics of

blending as a discursive and rhetorical phenomenon, with a special focus on pharmaceutical advertisements appearing on United States television and streaming systems. Our analysis emphasizes that: 1) mental spaces are best regarded as scenarios and scenes within more elaborate networks, and 2) the same dynamics of construing content also apply to the construal of acts of communication itself, necessitating, as they do in the above case study, to unpack the complex scenes and scenarios of interaction that experience in these complex but quotidian cultural products. Conceptual blending constitutes a general framework and model for grasping the details of these activities.

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