Seana Coulson
University of California, San Diego

Extemporaneous Blending: Conceptual Integration in Humorous Discourse from Talk Radio

An "Off the Leash" cartoon by W. B. Park depicts a dozen or so pigs feeding at a trough. One pig, however, has his head raised, as if addressing the approaching farmer. The pig's words are apparently expressed in the cartoon's caption, "Garcon!" The cartoon thus compares the farmer in the cartoon to a waiter in a French restaurant, and the viewer is left to speculate about the nature of the correspondence between expensive French food and the contents of the feeding trough. Douglas Hofstadter and Liane Gabora, pointing to the analogical nature of this joke, pose the term *frame blend* for a frame whose elements and relations are constructed from a combination of two frames that share some abstract structure. Gilles Fauconnier and Mark Turner have shown how frame blends occur in a wide variety of cognitive phenomena, and they have developed an elaborate theory of conceptual integration, or blending, to explain the representation of composite descriptions ("Conceptual Integration," "Conceptual Projection," *Way*). Previous work in this area suggests that conceptual blending plays an important role in cases of verbal humor. But whereas this earlier work has addressed conceptual integration needed to comprehend carefully crafted humorous narratives, the present study addresses blends that people use in the slightly less scripted world of talk radio. Below I provide a brief introduction to conceptual integration theory, describe its application to humorous interaction between two hosts on a radio call-in show, and consider how people exploit the creative process of meaning construction in conversational interactions.

1. Conceptual Integration Theory

Among the basic concepts in conceptual integration theory are *mental spaces*, *frames*, or *cultural models*, and *mappings*. *Mental spaces* can be thought of as buffers in working memory that represent relevant information about a particular domain (Fauconnier, *Mental*). A mental space contains a partial representation of the entities and relations of a particular scenario as construed by a speaker. Spaces are structured by *elements* that represent each of the discourse entities and simple frames to represent the relationships that exist between them. *Frames* are hierarchically structured attribute/value pairs that can either be integrated with perceptual information or be used to activate generic knowledge about people and objects assumed by default. Socially shared frames are called *cultural models*.

Finally, *mappings* are abstract correspondences between elements and relations in different spaces.

When speakers produce language, listeners use that linguistic input along with background and contextual knowledge to set up simple cognitive models in mental spaces (Coulson, *Semantic Leaps*). Similarly, when people look at cartoons, or, indeed, the events of the world, they partition the input into different mental spaces, each structured by cognitive models from a relevant domain. For example, in the barnyard cartoon described above, the artist is evoking an analogy between aspects of the domain of human restaurants and the domain of barnyards. Since a mental space is used to represent certain aspects of conceptual structure from a particular domain that is relevant to the ongoing discourse context, to understand the barnyard cartoon, we set up one mental space to represent relevant aspects of the barnyard domain and another to represent those of the restaurant domain.

Although our knowledge of restaurants and barnyards is fairly extensive (though, admittedly, most urban dwellers know much more about the former), the conceptual structure activated in a mental space is but a small subset of the totality of our knowledge of these domains. In the barnyard cartoon, for example, the barnyard space is structured by a few contextually relevant elements, including the pig, farmer, food, and trough that are depicted in the cartoon, and by a simple frame that represents the relationship between them. In this case, the farmer feeds the pig food in a trough. The restaurant space also includes only a few elements and a frame to relate them: the waiter serves the customer food at his table.

While cognitive models set up in mental spaces represent only a subset of an individual's knowledge about a particular domain, their operation is constrained by knowledge of that domain and by information from that domain that can be recruited for inferential purposes. For example, if we were reading a story about an American tourist in a Parisian café, we would set up a simple cognitive model in a mental space. If the man said, "Garcon!" we could use our background knowledge about the domain of restaurants to infer that he was attempting to summon the waiter, and we would add that information to our representation of the events in the restaurant space.

Another important component of conceptual integration theory is the concept of *mappings*, defined above as an abstract correspondence between elements or relations in different mental spaces. For example, the analogical relationship between a farmer feeding a pig at a trough and a waiter serving a customer at a table implies mappings between the farmer and the waiter, the pig and the customer, and the trough and the table, as well as between the feeding and the serving relations. Mappings between elements and relations in different spaces are represented below in tables (e.g., table 1). In these tables, each column represents a mental space, and each row represents either an element or a relation in that space. Mappings are understood to obtain between elements or relations in the same row.

The interesting thing about the cartoon in which the pig raises his head from the trough and says "Garcon!" is that it seems to recruit aspects of *both* of the frames in the analogy (Hofstadter and Gabora). The cartoonist is not only calling

Table 1. Restaurant/Barnyard Analogy

Restaurant	Barnyard
Waiter	Farmer
Customer	Pig
Food	Food
Table	Trough
Serves	*Feeds*
(Waiter,	(Farmer,
Customer,	Pig, Food,
Food, Table)	Trough)

the viewer's attention to the analogy between restaurants and barnyards but also incorporating an aspect of behavior associated with restaurants (hailing a waiter with the cry "Garcon!") into a depiction of barnyard events. The cartoon thus represents a *blend* of conceptual structure from multiple domains, so-called because it reflects the process of *conceptual integration*, or *conceptual blending*.

In conceptual blending, partial structure from two or more *input spaces* is dynamically combined in a *blended space*. Blending processes unfold in an array of mental spaces known as a *conceptual integration network*. A canonical integration network consists of two *input spaces*, each of which represents a cognitive model that contributes to the blend, an optional *generic space* that represents abstract commonalities in the inputs, and the *blended space* that has some structure from each of the inputs as well as novel emergent structure. Conceptual blending processes work through the establishment and exploitation of mappings, and the activation of background knowledge, and they frequently involve the use of mental imagery and mental simulation.

Table 2. Mappings in Restaurant/Barnyard Blend

Restaurant	Blend	Barnyard
Waiter	Farmer/Waiter	Farmer
Customer	Pig/Customer	Pig
Food	(Pig) Food	Food
Table	Trough	Trough
Serves	*Serves*	*Feeds*
(Waiter,	(Farmer/Waiter,	(Farmer,
Customer,	Pig/Customer,	Pig, Food,
Food, Table)	(Pig) Food,	Trough)
	Trough)	

The conceptual integration network for the restaurant/barnyard blend is outlined in table 2. The blended space evoked by the cartoon recruits conceptual structure from both the restaurant and the barnyard domains, and develops novel structure of its own. In the cartoon world represented in the blended space, the farmer assumes the role of a waiter and the pig assumes the role of a customer. Moreover, unlike normal pigs in a barnyard, the pig/customer in the blended space

can apparently speak. This emergent property of the pig/customer arises because background knowledge about customers in the restaurant domain has been recruited to animate the barnyard scene represented in the blended space.

Emergent structure arises in such cases from the operation of conceptual blending processes. *Composition*, for example, involves the juxtaposition of information in different spaces as when the pig in the barnyard space displays the ability to speak a human language. *Completion* occurs when information in the blend matches a concept stored in memory. A close enough match will lead to the activation of that concept. For example, the pig's saying "Garcon!" leads to the activation of a cultural model in the restaurant domain of the way a customer in a French restaurant reputedly summons the waiter. This information then becomes available for analogical projection onto the barnyard scenario represented in the blended space. Finally, *elaboration* is an extended form of completion that involves mental simulation, as when we imagine that the pig finds his food distasteful and presumably plans to ask the farmer to bring him another dish.

2. Conceptual Integration and Humor

Although the concept of conceptual blending was motivated by the desire to explain creative examples that demand the construction of hybrid cognitive models (as in the barnyard/restaurant cartoon), the processes that underlie these phenomena are actually widely utilized in all sorts of cognitive and linguistic phenomena (for a review, see Coulson, *Semantic*). These imaginative processes for information integration operate in the creative construction of meaning in analogy (Fauconnier, "Conceptual"), metaphor (Grady et al.), counterfactuals (Fauconnier, *Mappings*), concept combination (Coulson, *Semantic*; Turner and Fauconnier), and even comprehension of grammatical constructions (Mandelblit). Blending processes depend centrally on projection mapping and dynamic simulation to develop emergent structure and to promote novel conceptualizations involving the generation of inferences and emotional reactions.

Presumably, it is no accident that frame blends were first noticed in the context of humorous examples. The possibility of creating novel concepts from familiar ones is obviously conducive to humor. As Arthur Koestler writes:

> To cause surprise the humorist must have a modicum of originality—the ability to break away from the stereotyped routines of thought. Caricaturist, satirist, the writer of nonsense-humour, and even the expert tickler, each operates on more than one plane. Whether his purpose is to convey a social message, or merely to entertain, he must provide mental jolts, caused by the collision of incompatible matrices. To any given situation or subject he must conjure up an appropriate—or appropriately inappropriate— intruder which will provide the jolt.   (91–92)

Koestler's concept of *matrices* as skills, abilities, and symbolic codes that govern human behavior is compatible with the notion of cognitive models discussed in conceptual blending theory. When seemingly incompatible "matrices" are successfully integrated, the result is often humorous.

Blending in humorous examples has been discussed previously by a number of authors (Bergen; Coulson, "Menendez," "Reasoning," *Semantics*, "What's";

Feyaerts and Brône). In a study of political cartoons, I have noted that blending is frequently used to project a modern-day politician into a ridiculous scenario that helps illustrate the cartoonist's political position ("What's"). For example, during the sex scandal that led to former U.S. President Bill Clinton's impeachment, a cartoon by Jeff MacNelly depicted Clinton in a scene that most Americans associate with eighteenth-century President George Washington. Legend has it that when George Washington was a boy, he chopped down a cherry tree on his father's farm. When his father discovered what had happened, he went, furiously, to his family and demanded to know who had chopped down the tree. Knowing that he would likely receive a spanking for his honesty, Washington stood up and said, "I cannot tell a lie. It was I who chopped down the cherry tree." In the cartoon we see a toppled tree and Clinton, dressed in Colonial garb, wielding an electric chainsaw. He says, "When I denied chopping down the cherry tree I was legally accurate." The use of blended structure in the cartoon thus highlights the disanalogy between public perception of Washington as honest to a fault and Clinton as someone who had appropriated legalistic tactics to deceive those around him.

In their study of blending in advertisements, Kurt Feyaerts and Geert Brône show how a mechanism they call *double grounding* is frequently used in humorous examples to evoke disparate inputs that feed the blend. In double grounding, one element in the blended space is relevantly linked to elements in each of the inputs. Feyaerts and Brône describe a political advertisement that depicts a clenched fist holding a bloody scarf. The caption reads, "Hoe krijgt Ariel Sharon dit nog proper?" (How will Ariel Sharon get this cleaned, then?). The scarf is said to be double grounded because it is mapped to Palestinian bloodshed in the Israel space, as well as to a dirty item of clothing in the other input space, that of a laundry detergent commercial.

In the cartoon about former President Clinton, the anachronistic chainsaw in the blend can also be said to be double grounded. As the means of felling the cherry tree, it is analogically linked to the ax that young Washington used in the eighteenth-century Washington space. As the crucial component of a legally accurate denial of *chopping* down the cherry tree, it is analogically linked to the use of semantics in the twentieth-century Clinton space to deny having sex with Monica Lewinsky. Moreover, the juxtaposition of a twentieth-century tool with an eighteenth-century legend links the cartoon's protagonist to the modern era.

Previous studies of humor have thus revealed extensive use of conceptual blending processes in advertisements, cartoons, and jokes. However, all of these examples of humorous blending are carefully constructed artifacts, as it were, in which an individual's original idea can be augmented with time. This raises the issue of how representative the analyses in the literature (e.g., as in Coulson, *Semantic*) are of conceptual integration processes putatively at play in more spontaneous examples of humor. Given the portrayal of conceptual integration as a central human cognitive ability (Fauconnier, "Conceptual") and as a set of

dynamic, online processes (Coulson and Oakley), one would expect to observe conceptual blending processes at play in humorous discourse in conversation.

3. Conceptual Integration and Talk Radio

To address the use of conceptual integration in conversational jokes, an excerpt from the syndicated radio talk show *Loveline* is analysed below. The show, based in Los Angeles, encourages its listeners to phone the radio station to ask questions about sex, drugs, and relationships. The show has two hosts, Dr. Drew, a board-certified physician who specializes in treating patients with drug addiction, and Adam Carolla, a comedian known for lowbrow humor. The show frequently has celebrity guests, such as actors and musicians, whom the hosts interview when there is a lull in the calls. The bulk of the show, however, consists of conversations between the hosts and their callers, as well as conversations between the hosts themselves, in which they make fun of their callers' problems. Columnist Marc Fisher described the show in his column "The Listener" in the *Washington Post*:

> A comedian, Adam Carolla, and an actual physician, Drew Pinsky, sit in the studio, trying to be unbelievably cool. Virtually anything goes in their moral universe. They talk about their own experiences with drugs and sex. They get serious when confronted with potential suicides, domestic abuse or fools having unprotected sex. But kids who want to know about which drugs to mix, young people boasting about their experience with threesomes and more, men and women looking for approval for promiscuity—all get a condoning, even celebratory welcome. Carolla is not above the occasional rape joke. And "Dr. Drew" seems to get his kicks out of young people describing their artificial ecstasies.

The excerpt analyzed below comes from an episode of *Loveline* that aired live on 20 February 2002. The caller, a teenaged boy, after describing a sexual encounter he had, has asked the doctor if he might be suffering from a medical problem. The caller claims to have had two orgasms in a row during oral sex with his girlfriend. The somewhat incredulous hosts' subsequent discussion of the boy's experience runs as follows:

> [1] Adam: Well listen, the Lord was kind to you that day.
> [2] Dr. Drew: He spoke directly to him.
> [3] Adam: Drew, do you think anything's wrong with the guy?
> [4] Dr. Drew: No, no, no.
> [5] Adam: Well listen just enjoy it.
> [6] It happened to you once.
> [7] It'll be like some sort of a Holy Grail you chase for the rest of your life.
> [8] But y'know count yourself among the blest.
> [9] It happened to you once and that's more than it's happened to me.
> [10] Dr. Drew: Well this could be some kind of a Purgatory,
> [11] sort of a Sisyphus like [pause]
> [12] constantly trying to recreate that and
> [13] never quite achieving it.
> [14] Adam: It is sort of a strange thing that
> [15] you have this incredible sort of never-ending orgasm once and then
> [16] end up chasing it like it was Moby Dick for the rest of your life.

Even the most cursory reading of the transcript suggests that the hosts' humor relies heavily on conceptual blending, as the caller's sexual experience is construed with frames and cultural models that originate in religion, mythology, and

literature. For example, in (1), Adam compares the boy's second orgasm to a miracle bestowed by God. The mappings in this blend are outlined in table 3. In the generic miracle input, God bestows a miracle on a faithful member of his flock. Of course the precise characterization of the miracle differs from occasion to occasion. Famous miracles in Christian lore include turning water into wine, walking on water, and raising a man from the dead. The composition of the orgasm from the sex input with the miracle from the miracle input is part of what makes Adam's comment in (1) funny. Moreover, hyperbolically framing the orgasm as an act of God subtly conveys Adam's skepticism about the boy's story.

Table 3. Sex/Miracle Blend

Sex Input	Blend	Miracle Input
	God	God
Guy	Guy/Faithful	Faithful
Girlfriend		
Orgasm1	Orgasm1	
Orgasm2	Orgasm/Miracle	Miracle
Experiences	*Bestows*	*Bestows*
	(God,	(God,
(Guy,	Guy/Faithful,	Faithful,
Orgasm2)	Orgasm/Miracle)	Miracle)

In (2), Dr. Drew expands on Adam's joke about God by saying, "He spoke directly to him." Again, the alleged experience is understood by blending a cognitive model of the boy's sexual encounter with a model of God speaking to a faithful follower. Just as a miracle is construed as an unlikely occurrence, so too is an occasion of God speaking to a follower. In the Bible, God speaks audibly only to prophets such as Moses and saints such as Paul. By framing the caller as the recipient of a message from God, Drew somewhat ironically implies that the boy has saintly properties that caused him to be singled out in this fashion. The irony derives from the fact that, in the modern era, claims to conversational interactions with God are treated as a sign of mental illness.

Table 4. Orgasm/Message Blend

Sex Input	Blend	Miracle Input
	God	God
Guy	Guy/Faithful	Faithful
Girlfriend		
Orgasm1	Orgasm1	
Orgasm2	Orgasm/Message	Message
Experiences	*Speaks*	*Speaks*
	(God,	(God,
(Guy,	Guy/Faithful,	Faithful,
Orgasm2)	Orgasm/Message)	Message)

At this point (3), Adam turns to Dr. Drew and asks his professional opinion about the caller's health. Asked if there is anything wrong with the boy, Drew answers in (4) with a dismissive "No, no, no." Consequently, Adam addresses the caller directly in (5), telling him to "just enjoy it." In lines (6)–(9), Adam makes perhaps the most creative leap in this excerpt, suggesting that the boy might now be induced to attempt to repeat this remarkable sexual experience. This hypothetical attempt to repeat the experience is, in (7), analogically compared to the quest for the Holy Grail, evoking the conceptual integration network outlined in table 5. In this blend, the protagonist and the object of the quest are projected from the sex input, while the relational structure is derived from the Grail input. The caller himself has not suggested he plans to attempt to repeat the experience. Rather, the idea that the boy will seek another experience of this kind results from the integration of elements from the sex input with the quest frame from the Grail input.

Table 5. Grail Blend

Sex Input	Blend	Grail Input
Guy	Guy/Knight	Knight
Girlfriend		
Orgasm1		
Orgasm2	Orgasm2/Holy-Grail	Holy-Grail
Experiences	*Seeks*	*Quests*
(Guy,	(Guy/Knight,	(Knight,
Orgasm2)	Orgasm2/Holy-Grail)	Holy-Grail)

The Holy Grail is typically thought to be the vessel that Jesus Christ drank from at the Last Supper and that subsequently Joseph of Arimathea used to catch Christ's blood as he hung on the cross. In the Arthurian legends, a knight (in some accounts Sir Percival and others Sir Galahad) is bound to go on a quest to retrieve the Holy Grail. In the Arthurian legends, this quest for the Grail was considered the highest spiritual pursuit. Consistent with the miracle and the message blends, Adam's Holy Grail blend has the effect of imbuing the boy with knightly qualities and the orgasm with spiritual properties. The contrast between default affective responses to each of the inputs, coupled with the abstract commonalities needed to set up the blend, creates the comic effect.

The characterization of the boy as having been singled out by a deity for a unique experience is made explicit in (8) when Adam says, "But y'know count yourself among the blest." Moreover, in (9) Adam's utterance suggests a certain skepticism surrounding the possibility that the experience the caller described will ever be repeated. In saying, "It happened to you once, and that's more than it's happened to me," Adam seems to suggest that the caller should be content with a single experience of this nature and shouldn't be disappointed if it is never repeated. Presumably, if Adam thought it likely that the caller could achieve a

double orgasm again, his remarks would focus on the boy's future sexual exploits, rather than on telling him to count his blessings. Moreover, Adam has already suggested in (7) that the experience will be something the caller will strive to repeat for the rest of his life.

Having heard the boy's (hypothetical) attempt to reexperience a double orgasm compared to a lifelong quest for a holy relic, Dr. Drew follows with an alternative framing of the imagined endeavor. In (10), in keeping with previous allusions to Christian cultural models, he compares the caller's quest to Purgatory. In the Catholic tradition, Purgatory is a state that one's soul enters into after death. Construed as an intermediate between the eternal fires of Hell that await the sinner and the bliss of Heaven that greet the faithful, Purgatory is for those souls who were not entirely evil but not entirely without sin either. The fires of Purgatory are painful but are aimed at the soul's purification so that it can enter Heaven.

Table 6. Purgatory Blend

Grail Blend Input	Blend	Purgatory Input
Guy/Knight	Guy/Soul	Soul
Holy-Grail	Orgasm2	Purification
Seeks	Waits	Waits
(Guy/Knight,	(Guy/Soul,	(Soul,
Orgasm/Holy-Grail)	Orgasm/Purification)	Purification)

The conceptual integration network for Dr. Drew's Purgatory blend in (10) is outlined in table 6. Note that the inputs to this blend do not include a cognitive model of the caller's original experience (though this model is presumably still in a relatively active state). Rather, the focus is the boy's imagined attempt to recreate his original experience that emerges in the Grail blend. In fact, table 6 indicates that, along with Purgatory, Adam's earlier Grail blend serves as the primary input. Dr. Drew's contrastive use of "well" in (10) suggests that the Purgatory blend that follows differs importantly from Adam's construal of the caller's situation. Whereas the Grail blend frames the caller as a knightly individual engaged in a spiritual quest, the Purgatory blend frames the caller as a sinner undergoing penitence. An emergent property in the Grail blend is that the caller's quest is construed as admirable. In contrast, an emergent property in the Purgatory blend is that the caller's quest is construed as painful. This disanalogy could not be registered if the Grail blend were not active in some way.

Dr. Drew immediately follows the Purgatory blend with the Sisyphus blend evoked in lines (11)–(13). As punishment for betraying the secrets of the gods, Sisyphus was condemned to push a heavy boulder up a steep hill, only to watch it tumble back down once he reaches the top. For all of eternity, Sisyphus repeats the process of pushing the boulder up the hill and following it to the bottom to begin the task again. As indicated in table 7, the inputs to this blend include the Purgatory blend that Drew has just invoked and the cultural model of the myth of Sisyphus.

Table 7. Sisyphus Blend

Purgatory Blend Input	Blend	Sisyphus Input
Guy/Soul	Guy/Sisyphus	Sisyphus
Orgasm/Purification	Orgasm2	Rock-on-Mt-top
Waits	*Attempts*	*Pushes*
(Guy/Soul,	(Guy/Sisyphus,	(Sisyphus,
Orgasm/Purification)	Orgasm2)	Rock,
		Towards-Mt-top)
	Goal	*Goal*
	[*Experience*	[*On* (Rock,
	(Guy/Sisyphus,	Mt-top)]
	Orgasm2)]	
	~*Achieve*	*Falls*
	(Guy/Sisyphus,	(Rock,
	Orgasm2)	Mt-Bottom)

As in the Purgatory blend where the caller is framed as a sinner in need of purification, the protagonist in the Sisyphus blend is also framed as a moral transgressor undergoing punishment. Further, as in the Purgatory blend where the period in which the boy waits to reexperience the double orgasm is framed as unpleasant, the search for the double orgasm in the Sisyphus blend is framed as tragic. The main difference between the Purgatory and the Sisyphus blends is in the construal of the search process itself. In the Purgatory blend, our protagonist passively waits. In the Sisyphus blend, the protagonist actively seeks to recreate his magical sexual experience. Indeed, one might argue that the active nature of the search in the Sisyphus blend derives in part from the similar active framing of the quest in the Grail blend.

Dr. Drew seems to view the Sisyphus blend as more adequate than either the Grail or the Purgatory blends, as the protagonist's search for the double orgasm is both active, as in the Grail blend, and painful, as in the Purgatory blend. Moreover, the search process in the Sisyphus blend has an iterative quality to it and always ends in failure. Dr. Drew apparently finds the event structure of Sisyphus's repeated trips up the mountain to be a better match for the boy's hypothetical repeated attempts to experience a double orgasm than that of the quest for the Holy Grail. As noted above, Drew introduced the Purgatory blend in (10) with a contrastive use of "well," perhaps signaling the introduction of an alternative construal. Further, he includes the hedge "some kind of," as he says, "Well this could be some kind of a Purgatory," followed in (11) by a similarly hedged mention of Sisyphus, "sort of a Sisyphus like [pause]," and ultimately by the clarifying remarks in (12) and (13), "constantly trying to recreate that and never quite achieving it." One might surmise that the humorous impact of Dr. Drew's statement here derives from the fact that while the cultural framing of Sisyphus and that of the boy bragging about his sexual virility are rather incongruous, it is

nonetheless possible to see the analogy between the myth of Sisyphus and the search for the double orgasm as an apt one.

However, it is unclear whether much of the *Loveline* audience has enough of the relevant background knowledge to appreciate the mappings outlined in the tables above. In fact, while previous allusions to concepts from Christianity had at least a chance of being registered by the semiliterate audience composed of drug users and unwitting teenaged parents, Dr. Drew's reference to Greek mythology seems particularly likely to fall on deaf ears. For many listeners, the candid (if not earnest) discussion of sex is amusement enough. For others, the juxtaposition of terminology from culturally respected domains of Christianity, Arthurian legends, and Greek mythology with the taboo topic of sex is similarly amusing. For yet others, it is the systematic nature of these juxtapositions that underlies the humor in these remarks. Ultimately, the relationship between the listener's knowledge of the inputs and the humorous impact of the blends is an empirical issue that requires psychological methods to address.

The commonality—both superficial and abstract—of all these examples, however, suggests that if no one else appreciates the finer aspects of the evoked conceptualizations of the caller's past and future sex life, the hosts themselves do. This is reemphasized by Adam's final comment in (14)–(16): "It is sort of a strange thing that you have this incredible sort of never-ending orgasm once and then end up chasing it like it was Moby Dick for the rest of your life." In alluding to Herman Melville's classic novel, Adam once again portrays the caller's pursuit of the double orgasm as something that occurs in an epic timeframe and that ends in failure.

Table 8. Moby Dick Blend

Sisyphus Blend Input	Grail Blend Input	Blend	Moby Dick Input
Guy/Sisyphus	Guy/Knight	Guy/Ahab	Ahab
Orgasm	Orgasm/Holy-Grail	Orgasm/MobyDick	MobyDick
Attempts (Guy/Sisyphus, Orgasm2)	*Seeks* (Guy/Knight, Orgasm2/Holy-Grail)	*Chases* (Guy/Ahab, Orgasm2)	*Hunts* (Ahab, MobyDick)
~*Achieve* (Guy/Sisyphus, Orgasm2)		~*Capture* (Guy/Ahab, Orgasm2/MobyDick)	*Kills* (Moby-Dick, Ahab)

Outlined in table 8, the Moby Dick blend has three inputs: the *Moby Dick* input structured by a cultural model of critical aspects of the story, the Sisyphus blend just introduced by Dr. Drew, and the Grail blend earlier introduced by Adam. The event structure in the *Moby Dick* input, that of a pursuit that goes on for many years,

is closer to that of Adam's Holy Grail blend (a quest that goes on for many years) than to the repeated failures in Dr. Drew's Sisyphus blend. However, unlike the original Grail blend in which the success or failure of the quest is left open (in some stories the Grail is found; in others the protagonist dies without finding it), the Moby Dick blend suggests that the hunt will end in failure as Ahab's death in the *Moby Dick* input maps onto the boy's failure to experience another double orgasm. The futility of the endeavor, as well as the idea that the protagonist is not blessed (as suggested in the original blends) but rather condemned, derives from Drew's Sisyphus blend.

4. Conclusions

Hofstadter and Gabora have compared the input frames in humorous blends to the notion of figure and ground in a piece of art as the elements contributed by one frame can be interpreted against the ground of the other. I have argued that a general function of blending in political cartoons is to project political actors and events into new contexts where the cartoonist's point can be hyperbolically illustrated ("What's"). Similarly, in the extemporaneous blends produced by Adam and Dr. Drew on *Loveline*, taboo elements are interpreted against the background of more socially acceptable—sometimes even revered—frames and cultural models. As Freud noted, joking provides a relatively safe arena for expressing aggressive, insulting, or otherwise socially unacceptable utterances. Blending, and the cognitive abilities that support it, is crucial in this respect by enabling us to frame taboo topics in terms and domains that are not taboo (see also Coulson, "What's").

Indeed, much of the humor in the excerpt analyzed above derives from the repeated juxtaposition of the sacred and the profane. In the blends described above, relational structure from a sacred input space was used to evoke an analogical match in the sex input. As a result, elements from the sex input (the boy and the orgasm) take on some of the qualities of their counterparts in the sacred input spaces. In the Grail blend, the boy is knightly and the orgasm is holy. In the Purgatory blend, the boy is penitent and the sought-for orgasm will signal purification. In the Sisyphus blend, the boy is a Greek anti-hero and the orgasm an unachievable goal and a source of agony. The cultural framing (i.e., register, social acceptability, associated degree of reverence) of each of the inputs considered separately differs markedly. Consequently, the hybrid elements constructed in the blended spaces have incongruous properties that people find funny.

Moreover, part of the humor in the *Loveline* excerpt derives from the sequential character of the blends. The caller's initial experience is framed with two similar but nonidentical blends (the Miracle and the Message). The caller's hypothetical attempt to recreate the experience is then articulated with four different blends (Grail, Purgatory, Sisyphus, and Moby Dick). Like a jazz musician trading fours, each host produces a blend that recruits aspects of the previous one. Table 9 represents the position of each host's blends in the transcript, with Adam's blends on the left, and Dr. Drew's on the right. When Adam offers the miracle

blend, Drew follows with the message blend. Next Adam offers the Grail blend, which Drew counters with the Purgatory and Sisyphus blends. Finally, Adam finishes with the Moby Dick blend that incorporates elements of each of the three previous blends.

Table 9. Position of Blends in the Transcript

Adam	Dr. Drew
Miracle Blend	Message Blend
(line 1)	(line 2)
Grail Blend	Purgatory Blend
(line 7)	(line 10)
	Sisyphus Blend
	(line 11)
Moby Dick Blend	
(lines 14-16)	

Adam's initial construal of the caller's future *reminds* him of the quest for the Holy Grail; this in turn reminds Dr. Drew of Purgatory and of the myth of Sisyphus; collectively, these examples remind Adam of the hunt for Moby Dick. Robert Schank argues that the process of reminding is central to human learning and is indicative of the organization of information in memory. When new information activates related structures in memory, reminding is said to have occurred. These activated memory structures help us to process the relevant aspects of the current context. In turn, this processing results in the modification of the memory structures to incorporate new information about the input.

Although the quest for the Holy Grail, Purgatory, the myth of Sisyphus, and Captain Ahab's pursuit of Moby Dick would seem to have little in common with one another, it is possible to construct mappings between the conceptualization of each of these stories and the caller's attempt to reexperience the double orgasm. In Schank's theory, the connection between these disparate domains results from shared *thematic organization packets* (TOPs). TOPs are memory structures that represent abstract, domain-independent commonalities between sequences of events. If nothing else, the aforementioned scenarios all involve a strongly desired goal pursued by an agent.

In fact, the comic nature of the *Loveline* excerpt derives from the *differences* in the inferential results of sequential blends of wildly disparate concepts that all share a common TOP. Indeed, the choice of input domain often seems to be guided by the nature of the emergent properties of the blend rather than its proximity to the target in abstract similarity-space. For example, Dr. Drew's appeal to the Purgatory input seems to be due to the fact that it afforded a negative construal of the scenario in contrast to the positive ones that had been offered until that point. We might speculate that the hosts' search for appropriate analogues is constrained somewhat by the activation of a particular TOP but that many other factors come into play in the establishment of a match.

In fact, the conversational interaction seems to affect the conceptual integrations proposed by each of the participants. Work by sociolinguists doing microanalysis of conversation indicates that the production of a sentence is shaped by seemingly irrelevant factors such as the direction of participants' gaze and their relationship to one another (Goodwin). For example, Charles Goodwin has shown a relationship between gaze direction and the production of speech disfluencies, as speakers insert fillers such as "uh" when an intended recipient has not met their gaze. Even the choice of what words to include in the sentence is affected by gaze direction, as false starts in speech have been shown to be related to the speaker's attempt to rephrase an utterance in order to make it more relevant to a listener who has made eye contact, rather than to make it relevant to the previously intended listener who has not.

Although the analysis above does not consider microlevel aspects of the hosts' interaction with each other and with the caller, the complementarity of their comments suggests that they do indeed attempt to coordinate with one another. In following Adam's miracle blend, Dr. Drew relies upon the same input domains in the construction of the message blend. In following Adam's Grail blend, Dr. Drew constructs blends intended to frame the hypothetical scenario suggested by Adam. Moreover, Drew's Purgatory and Sisyphus blends imply a negative construal of this hypothetical scenario that contrasts with Adam's initial positive framing. In Adam's final Moby Dick blend, he maintains the negative construal suggested by Drew but recruits an event structure more similar to that of his initial Grail blend than to those suggested by Dr. Drew.

The interactional demands of conversation—to make a contribution that is relevant to prior speakers' comments and includes novel information—can be seen to affect the construction of these humorous blends. For example, one way that the speakers here maintain relevance is by recruiting conceptual structure from at least one of the input domains used in the previous speaker's blend. Indeed, in some cases the previous speaker's blend serves as an input for the current speaker's blend. In addition, each speaker's choice of a novel input space is constrained to be consistent with the abstract structure in the activated TOP. The requirement that speakers contribute novel information is satisfied by integrating structure from a novel input with previously activated structure, as blending processes frequently result in the production of emergent structure.

As noted above, previous investigations of both verbal and nonverbal humor have suggested that conceptual integration processes are frequently important for the appreciation of these examples. However, because earlier work on this topic has focused on literary and artistic examples that can be constructed over a matter of days or weeks, the current study has addressed so-called extemporaneous blending evident in the discourse of radio talk show hosts Adam and Dr. Drew. Both the excerpt analyzed above and numerous unanalyzed excerpts from the same talk show indicate that such discourse is replete with examples that recruit conceptual integration processes. Moreover, analyzed examples were seen to

display many of the same properties as less spontaneous examples of blending, such as the recruitment of an apparently unrelated input domain that allows the humorist to hyperbolically frame his topic. In fact, it was suggested that the humorous conceptualizations that occur in the course of extemporaneous blending are, in part, shaped by the demands of conversational interaction as speakers attempt to blend "appropriately inappropriate" novel structure with contextually evoked concepts.

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Notes on Contributors

Catherine Addison (*caddison@pan.uzulu.ac.za*) is a fifth-generation South African who is at present an associate professor of English at the University of Zululand. After graduating from the University of British Columbia with a Ph.D. on Byron in 1987, she taught at several universities in Canada and South Africa. She has published on Byron, Crane, Mitford, Shelley, Southey, Spenser, colonialism, simile, prosody, and the verse novel.

John D. Ballam (*johnballam@hotmail.com*) is a lecturer at the Open University and a tutor at the University of Bristol. His research interests center upon the late-Victorian and early-Modernist periods, and his forthcoming work includes a collection of essays on Mary Augusta Ward.

Seana Coulson (*coulson@cogsci.ucsd.edu*) is an associate professor in the Department of Cognitive Science at the University of California, San Diego, where she heads the Brain and Cognition Laboratory. Her research interests include cognitive semantics and experimental pragmatics, with an emphasis on the cognitive and neural underpinnings of figurative language comprehension. She is a member of the Cognitive Neuroscience Society, the Cognitive Science Society, and the International Cognitive Linguistics Association.

Michael Foster (*mfoster@abo.fi*) is a H. W. Donner researcher of English at Åbo Akademi University in Turku, Finland.

Robert E. Kohn (*Robert.Kohn.49@post.harvard.edu*) is Professor Emeritus of Economics at Southern Illinois University, Edwardsville. He published his final economics paper, "A Theoretical Inefficiency in the International Marketing of Tradeable Global Warming Emission Permits" in the January 2005 issue of *Open Economies Review* and has now shifted all of his research to literary and art criticism. In a similar vein to the present essay, Kohn previously published papers identifying postmodernist novelists William Kotzwinkle, Thomas Pynchon, and William Gaddis with Tibetan Buddhism. Essays on Buddhism in John Hawkes's *The Passion Artist* and Ronald Sukenick's *Out* are forthcoming in *Critique* and *The Explicator* respectively. A more personal essay, "Spinozan Judaism," is included in an anthology, *New Harvest: Jewish Writing in St. Louis, 1998-2005*, ed. Howard Schwartz and Barbara Raznick (2005).

David Malcolm (*angmd@univ.gda.pl*) is Professor of English Literature at the University of Gdansk in Poland. He is the coauthor of a study of Jean Rhys's short

Abstracts

SEANA COULSON, "Extemporaneous Blending: Conceptual Integration in Humorous Discourse from Talk Radio" / **107**

Conceptual integration, or blending, is a theoretical framework for describing how people combine information from different domains to yield new concepts. Previous work suggests that blending processes are important for humor production and comprehension, as humorous examples often involve the construction of hybrid cognitive models in so-called blended spaces. However, such work has focused mainly on blends that underlie written and scripted language. The use of blending processes in more spontaneous examples of humorous discourse can be demontrated by an analysis of an excerpt from the syndicated talk radio show *Loveline*. This analysis suggests that humorous discourse between the show's hosts displays many of the same types of blending processes at play in more scripted examples. In addition, it suggests that humorous conceptualizations that occur in the course of extemporaneous blending are shaped in part by the demands of conversational interaction.

VIOLETA SOTIROVA, "Repetition in Free Indirect Style: A Dialogue of Minds?" / **123**

I explore the validity of a claim made by two narratologists that recent findings on repetition in spoken discourse are hard to apply to the written language. To test their predictions I turn to D. H. Lawrence, well known for his stylistic habit of repetition—a peculiarity sometimes criticized, sometimes lauded. Finding parallels between the uses of repetition in conversation and its deployment in the portrayal of character consciousness, I show that conversation and such crafted genres as novelistic prose may be more closely aligned than previously thought. The implications of this study are twofold: its results bear on narrative theories of point of view and support a dialogic framework for the analysis of free indirect style; its significance for Lawrence studies is in establishing that his repetitions are meaningful and not redundant and that they have a dialogic intranarrative function.

DEBRA SAN, "Hiatus of Subject and Verb in Poetic Language" / **137**

English-language readers expect a verb to follow fairly swiftly after its grammatical subject, but poems often separate the two for prolonged stretches. Such interrupted syntax does not, as in enjambment, continue to the next line. It suspends itself over several intervening lines before it resumes. Because syntactic hiatuses are often difficult for readers to work their way through, recognizing and understanding the phenomenon of subject-verb hiatus can help to clarify seemingly cryptic lines of poetry. Examples are given from poems by Arnold, Auden, Blake, Browning, Coleridge, Cowper, Dickinson, Donne, Eliot, Graves, Gray, Milton, Shelley, Spenser, Whitman, and Wordsworth.