Mental Spaces in Discourse and Interaction

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CHAPTER 1

Connecting the dots

Mental spaces and metaphoric language in discourse

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How are metaphors understood in local context? We examine the rise of the expression "connect the dots" as it appears in the speech of counter-terrorism expert Richard Clarke in a radio interview. Although conceptual metaphor theory (Lakoff & Johnson 1980, 1999) provides important insights into the congruence of the connect-the-dots-metaphor with conventional metaphoric mappings between seeing and knowing, it cannot account for novel uses of the metaphor in the expressions used by these discourse participants. These novel metaphors are better described by mental spaces and conceptual integration theory, as involving conceptual structure integrated from multiple mental spaces. We examine how specific aspects of background, contextual, and linguistic knowledge contribute to their meaning in this particular instance. Examining prosodic features in the speech will help us account for the role vocalization plays in the structuring of ongoing discourse. This examination enables researchers to assess the compatibility between mental spaces theory and Wallace Chafe’s theory of discourse.

Introduction

Consider the following excerpt from a radio interview with former White House Special Advisor on Counterterrorism, Richard A. Clarke:

(34) no I don’t think so.
(35) there’s uh some,
(36) .. uh dots,
(37) which are meaningless unless you put them together with lots of other dots.
(38) an=d,
(39) I understand what he's saying.
(40) but there are some dots that come out screaming at you.
(41) uh do something now about me.

Out of context, this excerpt is a bit baffling, to say the least. One might wonder, for example, what sort of dots the speaker is referring to, how they can scream, and how they can refer to themselves using the first person pronoun. More importantly, what communicative goal is achieved by the speaker's invocation of sentient screaming dots?

This particular example involves creative elaboration of the conventionalized metaphoric expression "connect the dots," but like many such uses goes considerably beyond its conventional meaning. We will argue that understanding the excerpt above relies upon three interrelated kinds of knowledge that we call elements of understanding. The first element is linguistic knowledge, such as knowledge of word meaning, grammar, knowledge of entrenched conceptual metaphors, as well as knowledge of particular metaphoric constructions. Closely related to linguistic knowledge, the second element is cultural knowledge of the relevant conceptual domains. In this case, it involves having background knowledge about the particular domains that are being discussed, including intelligence, national security, and international terrorism. In addition, since the example involves a metaphoric blend, it is necessary to have cultural knowledge of the source domain of the metaphor, the game of connect the dots, which will become clear when more of the co-text is provided. The third element of understanding is situational knowledge, and cannot be fully disentangled from the other two. A point emphasized by various stripes of discourse, rhetorical, and social theorists, understanding language utterances requires consideration of who is talking, who is being talked to, and what social relationships exist between them. Is the speaker representing him- or herself or speaking for another? What was said just prior to the current utterance, and how does it fit into the on-going conversation?

To date, most blending analyses have focused on the first two elements of understanding. Our goal here, however, is to show how all three contribute to the comprehension of this metaphoric blend, with a special emphasis on its moment-by-moment construction. This chapter represents our preliminary efforts to integrate mental spaces and conceptual integration theory (MSCI), as developed by Fauconnier ([1985]1994, 1997) and Fauconnier and Turner (2002), with Chafe's (1994) theory of discourse based on conscious experience. In doing so we seek to place mental space theory on firmer analytic ground as both a method of discourse analysis and as a theory of discourse. The next section on Mental Spaces and Inte-

ing Dots, along with subsequent discourse that elaborates its meaning. Overall, the analysis shows how creative meanings draw heavily on cultural, linguistic, and situational knowledge.

### Mental spaces and integration networks

In this section, we present in broad outline the relevant features of the mental spaces and conceptual integration framework, beginning with a definition of "mental spaces," their relationship to the "discourse ground", and the networks in which they operate as discourse unfolds.²

#### Mental spaces

In his seminal book on the subject, Fauconnier defines mental spaces as "constructs distinct from linguistic structures built up in any discourse according to guidelines provided by the linguistic expressions" (1994:16). In this definition, Fauconnier stresses two things: first, that mental spaces are not themselves linguistic, and second, that they are the products of on-going discourse. For the purpose of this chapter, we define mental spaces as representations of the scenes and situations in a given discourse scenario as perceived, imagined, remembered or otherwise understood by the speaker. Mental spaces are used to package information about an interlocutor's center of interest within an interactive context (cf. Coulson & Oakley 2003). This definition is intended to capture the extent to which language users formulate and understand concepts by focusing not on individual properties but on simulating physical, social, and introspective scenes and situations (see e.g. Barsalou & Wiemar-Hastings 2005).

We assume that mental spaces represent distinct physical, social, and/or introspective scenes and situations where attention is focused on a few salient elements therein. Along these lines, we assume that a mental space is governed by a semantic domain or domain matrices and that the particular characteristics of a mental space are determined by semantic frames for structuring the micro-features of a scene, such as role assignments, action and event sequences. We assume that as cognitive constructs, mental spaces are built up in real time. Moreover, unlike some prior discussions of mental spaces, we assume a given mental space can rep-

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² For those familiar with other recent models of language processing, it may seem at first blush that MSCI resembles Pickering & Garrod's (2004) Interactive Alignment model of discourse. While we find their model intriguing and agree with the central premise that interlocutors com
resent events unfolding in time without having to posit a different space as each change occurs.

A final assumption is that all mental spaces in a network are accessible to consciousness. Although discourse participants are not necessarily conscious of mental spaces per se (that is the provenance of analysts), they do have conscious access to the content of each mental space in the network. Following Mandler (2004: 59–89), we suggest that mental spaces comprise implicit and explicit declarative knowledge, with different facets of declarative knowledge made explicit and left implicit as discourse proceeds. This is why a mental space analysis can only claim to capture so much of the meaning potential in discourse, as one is never sure exactly what kinds of declarative knowledge a linguistic structure is going to activate.

**Grounding**

Perhaps the most critical element in our mental space model is grounding. Although largely absent in the mental spaces and blending theory developed by Fauconnier and Turner, this notational device has gained increasing prominence among cognitive linguists working in the area of discourse analysis, conversation analysis, and semiotics. The term grounding comes from Langacker (1999) who uses it to discuss grammatical elements that evoke the speaker’s situation, elements such as tense markers, quantifiers, and determiners. In cognitive grammar, grounding refers “to the actual speech event, its participants, and its immediate circumstances” (1999:79).

On our model, however, grounding more closely resembles the semiotic space proposed by Brandt & Brandt (2005: 19–22). In this capacity, grounding represents the discourse participants’ acts of engaging in discourse, of constructing meaning. Grounding allows the theory of mental spaces to consider explicitly how situational knowledge contributes to the understanding and management of discourse. Grounding involves specifying (1) the discourse participants and their roles, (2) the rhetorical situation that serves as the immediate local context for the current communicative act, (3) the situational and (4) argumentative relevance of the mental spaces network. The grounding of networks is such that a given mental space network functions as a discourse scenario, or a rhetorical or discourse move that can be characterized in terms of its illocutionary force and perlocutionary effects.

**Integration networks**

Mental space networks are comprised of various different sorts of spaces that opt-
Our analysis of this excerpt begins with an account of the situational knowledge needed to understand the excerpt, including knowledge about participants, their circumstances, and setting. The excerpt under analysis has three participants. Two of the participants are present in the immediate grounding, and one is virtually present as the discourse unfolds. The first participant is Richard Clarke, former White House Coordinator of counter-terrorism for the Clinton Administration and the George H.W. Bush Administration. Clarke is the author of *Against all Enemies*, a trenchant critique of the George W. Bush Administration's handling of the "war on terrorism" as well as their handling of intelligence leading up to the 9/11 terrorist attacks. The second participant is Dave Davies, a journalist who is filling in for the regular host (Terry Gross) of *Fresh Air*, a popular interview program on National Public Radio. Davies has read Clarke's book and is interviewing him for the radio audience. The third "virtual" participant in the conversation is Richard Posner, a federal judge, legal scholar, and conservative columnist.

The exchange takes place within the genre constraints of an interview radio program in which Davies asks open-ended and leading questions designed to prompt a response. Such interview strategies may include the interviewer playing the role of devil's advocate, usually in the form of paraphrasing or reporting the argument of someone with a position diametrically opposed to that of the guest. On the other side, the interviewee comes prepared with his own talking points and agenda. The setting is a taped radio broadcast, meaning that Davies and Clarke are the only two "talking" participants who can effectively influence the course of the conversation, although the editors and producers can decide which parts of the conversation to air. In contrast to spontaneous conversation, little overlap or interruption occurs, due to the format of this particular program.

The rhetorical context of the exchange is the differing assessments of Clarke (the actual guest) and Posner (the virtual participant) of the Congressional report by the 9/11 Commission. The report placed considerable blame on the intelligence community and made policy recommendations for improving the intelligence gathering and interpretation processes. Clarke agreed with the report's overall findings on intelligence, but did not think it covered the most critical issue: how the Bush Administration ignored intelligence gathered on terrorist activities in the United States and Europe prior to the attacks. The virtual Posner, in contrast, disagreed with the 9/11 Commission's assessment that the intelligence community was to blame for the attacks.

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**Davies's contribution**

The exchange begins as Davies says:

1. there's a clearly
2. a perceived need here for,
3. ...uh sensitive information to be shared,
4. even among investigators among different agencies.
5. uh,
6. ..who are working,
7. on...issues that that <information about terrorism>might arise.
8. in--
9. in effect to connect the dots.

Chafe's (1994) principal contention is that spoken discourse such as that in the above excerpt is produced and comprehended in prosodic "spurts" he calls Intonation Units (IUs). These units guide meaning construction because they possess prosodic instructions for understanding what information is prominent in the speaker's consciousness at any given moment. Hearers then unpack that information according to the prosodic guidelines of the perceived speech. In our theory, then, an IU helps discourse participants to construct mental spaces and mental space networks that are sufficiently similar in their semantic and pragmatic facets to facilitate interaction.

Our analysis focuses primarily on one of the three types of IUs (substantive) leaving the other two, (regulative and fragmentary), in the background. While substantive units present ideas, states, and referents, regulatory units perform discourse functions such as taking the floor (e.g., "uh" and "well"), holding the floor (e.g., "um"), signaling agreement and permitting continuance (e.g., "Mhm"), (see Chafe 1994:63–65). On the other hand, fragmentary units are essentially "false starts" or aborted attempts by the speaker to create a substantive IU. Both regulatory (e.g. line 14) and fragmentary (e.g. line 21) units are evident in this exchange, and, in many instances the regulatory unit comprises a sub-unit of a substantive IU as a floor holding device. However, the interview format already provides a regulatory structure so that instances of these are far less frequent than in casual conversation, and, the editors and producers ensure that fragmentary IUs be held to a minimum.

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4. We mark “uh” as a single intonation unit only when prosodically “bounded” by pauses or
The transcription above (a complete version of which can be found in the appendix) breaks up the spoken discourse into intonation units by focusing on pauses based on Chafe's criteria for a coherent IU. A coherent IU includes perceptible pauses preceding and following a string of words, a detectable pattern of deceleration and acceleration within a string of words, an overall decline in pitch level, the falling pitch contour at the end of a string of words, or a creaky voice at the end of a string (Chafe 1994:60). There is no set length to a substantive IU. According to Chafe, however, the mean length is around five words but can be lengthened extensively with acceleration. Our analysis will focus primarily on vocal prominence established through loudness and vowel and consonant lengthening.

Examining the content of the intonation units in our example, it is clear that there is no one-to-one mapping between material in an IU and material in a single mental space. For example, in this excerpt the first IU serves to open a mental space that is lexically cued by "perceived need" (line 2). This space will represent normative information about how the intelligence world should be, and stands in disanalogy to present reality. In other words, the situation depicted in the reference space is being construed in two ways in order to profile the contrast between the real situation and the preferable one. The second IU specifies the structure that goes in this normative construal: sharing information (line 3). The fourth IU further specifies the sharing information structure by noting that investigators in different agencies will be the ones sharing the information. The sixth and seventh IUs add still more information about the investigators: investigators working on terrorism issues. Finally, the ninth IU signals a new space with the words "in effect," a hedge that rephrases the conception prompted by the previous utterance. Thus, lines 3, 4, 6 & 7 successively refine information in the normative version of the reference space, and then 9 compresses the information set up by the others with the metaphoric expression "connect the dots."

**Cultural and linguistic knowledge**

As noted earlier, understanding the meaning of an expression such as "connect the dots" requires cultural knowledge, a good deal of linguistic knowledge, as well as situational knowledge evolving over the course of the interaction. In this section, we focus on the cultural and linguistic knowledge our interlocutors might conceivably bring to bear in their construction of the meaning of "connect the dots."

Generically, "to connect the dots" means to understand the relationship between apparently isolated bits of information. However, the expression has a particular conventionalized meaning in the context of the 9/11 terrorist attacks on the FBI (Federal Bureau of Investigation), the CIA (Central Intelligence Agency), and the NSA (National Security Agency) is that while a considerable amount of information relevant to the planned attacks was known to various members of these agencies, it was distributed amongst them such that no single agency had enough information to take preventive action. In this context, "failure to connect the dots" refers to the failure by US intelligence agents to understand the relationship between different facts about individuals with links to terrorist groups.

Although metaphoric uses of "connect the dots" occurred long before September 11, 2001, their frequency increased dramatically in the latter part of 2001, as this expression was used almost exclusively to refer to the failure to predict and prevent the 9/11 terrorist attacks. In fact, during the first part of 2002 this particular use of "connect the dots" was so common it actually became a cliché, provoking self-conscious ruminations on the part of linguistically minded journalists. For instance, here is New York Times columnist William Safire's (2002:22) explanation of the expression:

> The origin appears to be in a game run in newspapers early in the 20th century, based on a board game. A field of apparently random dots is displayed and numbered, and the dots are joined by the player in numerical order. Sometimes, due to running lines between the dots are given below. As the game is played, the short lines begin to take the shape of an object, and lo! A pattern or image leaps up from the page.

Given the restricted use of the phrase "connect the dots" to refer to intelligence gathering relevant to 9/11 it would be possible to understand its meaning simply by memorizing its conventional meaning in this context. However, we suggest that the success of this expression as a meme partly reflects the fact that it is supported by linguistic knowledge, including knowledge of the meaning of "connect." The verb "connect" has an entrenched literal meaning that is relevant for the game of Connect the Dots (described by Safire), as well as an entrenched metaphorical meaning relevant to the comprehension of abstract relationships. Even if one knew nothing about the Connect the Dots game, it might be possible to infer the contextually relevant meaning given knowledge of the meaning of "connect" and cultural knowledge of the prevailing explanation of the 9/11 attacks as described above.

Moreover, "connect the dots" is even more meaningful to someone with knowledge of the Connect the Dots game due to its potential interpretation via the entrenched conceptual metaphor KNOWING IS SEEING (Lakoff & Johnson 1980, 1998; Sweetser 1990). This conceptual metaphor is motivated by the existence of metaphorical expressions such as the following in (1)–(7).
(4) Her lecture was opaque.
(5) That's a myopic approach.
(6) This book opened my eyes to new ideas.
(7) These data shed new light on an old hypothesis.

All of these expressions involve positing particular mappings between elements and relations in the domain of seeing and the domain of knowing. For example, statements about the seeing agent are understood to pertain to the knowing agent; statements about the viewed object are understood to pertain to the object of knowledge; and, the act of seeing corresponds to the act of understanding. Consequently, statements about the visual acuity of the seeing agent have implications for the agent's ability to understand, and the clarity of the seeing agent's percept corresponds to the quality of the knowing agent's understanding.

Seeing Agent (subject)  →  Knowing Agent (subject)
Viewed Object  →  Object of Knowledge
Percept  →  Knowledge
Act of Perceiving  →  Act of Understanding
Agent's Visual Acuity  →  Agent's Ability to Understand
Clarity of Scene Percept  →  Quality of Understanding

The "connect the dots" blend co-opts the KNOWING IS SEEING metaphor and applies it to the game of connect the dots by adding a few new mappings. The most important of these is the mapping between dots and information that is quite simple to establish because a unit of information is often construed as a point. The metaphoric significance of the expression "connect the dots" is bolstered by the fact that there is one entrenched meaning of connect that suits the game, and another that suits the epistemic domain. Because the percept corresponds to the knowledge in the KNOWING IS SEEING metaphor, connected dots correspond to known relationships between different pieces of information. In the game, connected dots afford pattern recognition; in the epistemic domain, knowing relationships between different pieces of information allows the inference of new information. Further, because the clarity of the percept maps onto the quality of the knowledge, unconnected dots that yield an unclear percept map onto poor knowledge. Moreover, the unseen pattern in the game maps onto the fact that important information is unknown to the subject of knowing.

The integration network for "connect the dots" involves a presentation space that pertains to the Connect the Dots game, while the reference space pertains to national security and intelligence. In the blended space, information gleaned by

**Figure 1.** Connect-the-dots metaphor

officer to see terrorist activities represented in the dots. The intelligence officer in the blend draws lines between the dots just as the child does in the presentation space. However, while the child sees a pleasing picture in her drawing, the intelligence officer gains a growing understanding of impending terrorist attacks.

Integration networks such as that in Figure 1, however, must be understood as operating in dialogue with grounding. The particular structure activated by a linguistic utterance will vary with the participants, the setting, the co-text, along with other aspects of the situational context. As noted above, lines first 7 lines successively refine structure in the reference space characterizing intelligence agencies, and appeal to a culturally shared explanation of the 9/11 attacks as being due to the failure of intelligence agencies to combine disparate pieces of information. Interpretation of the metaphoric utterance in line 9 will depend upon the extent of a given listener's cultural and linguistic knowledge, her willingness to engage with the material, and the way in which various contextual factors affect the structuring
appears after a noticeable terminal contour in line 7 and false start in line 8. The
terminal contour may signal the end of the structuring of the reference space and
allow the listener to anticipate the need to activate structure from a novel domain.
Further, there is no pause between the phrases “in effect” and “to connect the
dots,” suggesting they are part of one substantive intonation unit and signaling
to the hearer that “connect the dots” is a summary expression epitomizing the
sentiments expressed in the previous four intonation units.

The relevance of line 9 is thus established by the first four intonation units
describing the need for intelligence agencies to share information. Although Davies’s
language alone does not support the mapping between sharing information and
connecting dots, he can rely on his listeners having at least some subset of the
cultural and linguistic knowledge described above. We speculate that if “connect
the dots” did not already have a packaged, compressed meaning in the domain
of intelligence gathering, it would be less suitable for this summarizing function.
Moreover, once Davies utters it, the blended space becomes activated and available
for creative elaboration.

**Posner’s argument**

Davies follows by articulating an argument by Richard Posner to absolve the White
House and the wider intelligence community from responsibility for failing to
prevent the terrorist attacks on the World Trade Center and the Pentagon.

(10) ...and Richard Posner,
(11) in a piece in The New York Times recently
(12) ...um...
(13) in reviewing the 9/11 Commission Report,
(14) criticized the idea that,
(15) as he put it,
(16) the failure to prevent the attacks was due to,
(17) a failure to collate the «bits of information possessed by different security
agencies»,
(18) especially the CIA and the FBI.
(19) ...um,
(20) he says,
(21) the best bits of information were not obtained until,
(22) the month or so before the attack,

(25) «and understood» in time to detect the plot.
(26) ...um in effect he’s saying,
(27) «there’s all this information flowing around there»,
(28) and it’s...
(29) w—
(30) we weren’t just pick this pick those dots out,
(31) and connect them in time.
(32) is he right?

In mental spaces analysis, we posit three distinct versions of interactive grounding
that develop during Davies’s turn, as depicted in Figure 2. The first is the *ontological ground* applicable from lines 10–15, 20, and 23. In the ontological ground,
Davies and Clarke are the participants, the setting is a taped interview program
broadcast to millions of listeners, and the situational relevance constraining their
interaction is the 9/11 Commission Report. The argumentative relevance of this
grounding is that the speaker is setting up a context for a controversial claim to
which he wishes Clarke to respond. To this end, Davies engages in what Chafe calls
direct speech in lines 16–18 and 21–24 as he produces a verbatim reproduction of
Posner’s published thoughts in a new interactive context involving Richard Clarke,
a displaced *grounding* scenario with Posner as the absent discourse participant:
Davies is speaking for Posner.

A third interactive grounding is similarly displaced, this time as an indirect
enactment of Posner’s words evidenced in lines 21, 22, 24, 25, and 27–31. In this
third grounding, Davies speaks as Posner, with stresses and prominence of his
words taken as Posner’s own consciousness, thereby inviting Clarke to interactively with Posner (cf. Pascual 2002). The situational relevance remains the same,
but the argumentative relevance of this grounding is Posner’s disagreement with the
9/11 Commission’s findings. By introducing Posner’s words with the present
tense verb “says,” Davies brings the past speech event from the ‘there-and-then’ of a past speech event to the ‘here-and-now’ of the present conversation. Schiffin
(1981:60) has observed that speakers more frequently invoke the historical present
and other forms of immediate modes in the climax of a narrative. Davies’s tendency
to speak as Posner can be understood in a similar light, as he prompts Clarke
to respond directly and immediately to the words and ideas of Richard Posner by
making them the subtopic of discussion. This third grounding space is in fact an
integration of the first two, as it involves a hybrid identity of Davies speaking in
his own voice, but as Posner. This discourse tactic allows Clarke and the hearers to
On the standard reading of the blend, failure by intelligence agents at a children’s game is seen as a sign of their incompetence. Posner’s point, however, is that the agent’s task was far more complex than that in the children’s game and that the epistemic connections between intelligence data were less obvious than the ones children must draw between dots. The dots in the blend are not numbered in the way that they are in the children’s game. Further, the dots in the blend are not all there at the outset, but emerge in real time. Moreover, they are not all equally relevant for solving the puzzle as the intelligence officers in the blend have to “pick” which dots to connect, and have to do so under time pressure.

Although the mappings in 21–29 are the same as in the conventional “connect the dots” blend, the implications are not. That is, the dots still correspond to information, and connecting the dots corresponds to understanding the relationship between the different pieces of information. However, failure to make connections does not necessarily stem from failure to share information. Instead it could be due to insufficient time to consider the relevant relationships. Interestingly, this point is initially made in abstract terms in Posner’s own words, and subsequently expressed by Davies via structure in the blended space. Novel structure in the blended space – such as agents picking which dots to connect and doing so under time pressure – reflects information recently added to the intelligence-gathering space about the timely integration of information.

This excerpt shows how in context meanings can differ substantively from their standard meanings as speakers adapt them to suit their rhetorical goals. We speculate that the intelligibility of this creative extension of “connect the dots” is related to the frequent use of this phrase to discuss intelligence gathering, the entrenched nature of the underlying mappings, and the fact that the standard connect-the-dots blend has been established in the immediately preceding utterances. One possibility is that because Davies introduces the blend in its most standard verbiage and in a very standard context, it sets up as active and supportive of further blending activity.

Screaming dots

Indeed, the “connect the dots” blend seems to provide the conceptual scaffolding upon which Clarke builds his response. It therefore sets the stage for Davies to ask the question, “Is he right?” With this question, the attention shifts back to the initial interactive ground. It is in this context that Clarke refers to “screaming dots.”
which are meaningless unless you put them together with lots of other dots.

(38) an=d,

(40) I understand what he's sayin=ng.

(41) but there are some dots that come out screamin=ming at you.

(42) uh do something now about me.

In fact, the full meaning of his remarks is not apparent until Clarke completes his turn.

(42) uh,

(43) and.. when we,

(44) uh,

(45) knew..that there were.. Al Qaedia people

(46) uh,

(47) going to Malaysia,

(48) going to Kuala Lampur,

(49) ..uh and meeting there,

(50) and plotting there.

(51) ..we became very concern=ed

(52) ..uh because it looked like the »kind of« meeting,

(53) .. uh where Al Qaedia people,

(54) operational people,

(55) get together,

(56) ..and go over the details,

(57) .. of some impen=ding attack.

(58) so if we had then learned,

(59) ..that some of those people in that meeting,

(60) were in Southern California,

(61) ..and ent@ered the United States,

(62) ..that would have been the kind of dot.

(63) uh that didn't need a lot of connecting.

(64) that would have screamed out at you,

(65) do something about me now.

(68) twenty-two hindsight and all that,

(69) but,

(70) ..I really do belie=ve,

(71) that if I were sitting in my old job in the White House,

(72) and I had see=n a report that said that,

(73) ..uh I would have ma=de the FBI,

(74) uh a–

(75) and frankly FBI headquarters would have wa=nted to,

(76) go=all out,

(77) to find those two guys.

Like Posner, Clarke is arguing that the “connect-the-dots” game is a bad analogy for understanding the situation. However, he does so by constructing yet another blend that acknowledges the presentation (Connect the Dots game) and reference (intelligence-gathering) spaces already set up. He starts by reiterating the standard version of the blend in line 36 and 37, showing that he understands it, and even acknowledging that there are times when it is apt. It is relevant here that “dots” itself is not emphasized. This may be because it is already semantically active in the discourse. Alternatively, it may signal Clarke’s discomfort with the standard analogy, if we attend closely to lines 34–42.

(34) no I don’t think so.

(35) there’s uh some.

(36) .. uh dots,

(37) which are meaningless unless you put them together with lots of other dots.

(38) an=d,

(40) I understand what he’s sayin=ng.

(41) but there are some dots that come out screamin=ming at you.

(42) uh do something now about me.

We might conjecture that the disfluency before “dots” in 36 results because of a last minute change in word choice. The plural count noun “dots” does not agree in number with the verb in line 36 (cf. “There’s some dots,” “There’s some information,” and “There are some dots”), but does agree with the verbs in line 37. In fact, one could replace “dots” with “facts” in lines 36 and 37 and leave Clarke’s meaning intact, raising the issue of why he frames his reply in terms of dots. We can only
Beginning with the active structure evoked by Davies, Clarke sets up a novel dots blend in lines 41–42. Clarke distinguishes the new dots blend from those evoked by Davies via the use of “but” and contrastive prosody on the quantifier “some” in line 41. In Clarke’s blend, the reference space is the same as that in the prior blend, intelligence information pertaining to terrorist activities. However, Clarke introduces a novel presentation space that involves a screaming person. In this space, the person’s screams could only go ‘unnoticed’ by others unless they were purposefully ignoring them. Thus in Clarke’s blend, the dots are not pieces of a larger picture, but sentient beings in their own right. In the blended space, the dots are bits of information that shout instructions at the intelligence agents.

Just as the “connect the dots” blend recruits existing metaphoric mappings, Clarke’s blend, too, recruits an existing blending schema, that of fictive interaction (Pascual 2002). Fictive interaction involves the use of frames for the structure of ordinary communicative acts to animate all sorts of processes. Fictive interaction is particularly common when the reference domain involves interpreting information, as for example when a lawyer says that the facts in a case “tell a story.” Because the reference space in this example also involves interpreting facts, fictive interaction is particularly apt.

In Clarke’s blend, the dots do not simply speak, they scream. The implication from this screaming dots blend, then, is that the only conclusion to draw is that the responsible government agencies were ignoring the warning signs. The vowel lengthening on “screaming” in line 41, and the contrastive higher pitch on ‘now’ in line 42, both signal blending operations. The first dynamically recruits a new presentation space for screaming. The second reinforces the time-sensitive nature of activities in the reference space. The active space is the blended space in which intelligence officers interact verbally with the dots. In line 41, Clarke places himself in this space with a screaming dot. Then in 41 he quotes the dot’s verbal utterance in his fictive interaction. Having set up the screaming dot blend, Clarke can then return to it several moments later (in line 64) after adding structure (in lines 42–63) to the reference space with which it is linked.

Figure 3 presents both Clarke’s mental spaces network for Clarke as building up recursively from the network constructed by Davies. One salient difference is in the grounding, as Clarke is the speaker and Davies the hearer. With line 58, “so if we would have learned,” Clarke shifts into a counterfactual mode in which he places himself and like-minded agents in the same situation the real agents were in at the time. Listeners know they are in a counterfactual situation by Clarke’s emphasis on “if” at the beginning of the IU and the past tense of “learn” at the end of the unit followed by a slight pause. In line 61, Clarke is laughing as he says the verb

![Figure 3. Screaming dots](image)

Clarke’s own derisive stance toward the way intelligence was being handled by the Administration in the months leading up to the September eleventh attacks.

With line 62, we get prosodic emphasis at the beginning of the distal demonstrative “that” (which signals Clarke’s own position as an outsider looking in) and on the noun “dot” at the very end. Line 62, then, shifts attention back to Clarke’s blend, and lines 63–65 reiterate the screaming dot scene, this time with heavy prosodic emphasis on the temporal adverb “now.” Lines 35–42 and 62–65 are repeated below in order to show the similarities in Clarke’s wording, as well as similarities in the information in the intonation units in which the screaming dots blend is evoked.

(35) there’s uh some,

(36) .. uh dots,

(37) which are meaningless unless you put them together with lots of other dots.
but there are some dots that come out screaming at you.

uh do something now about me.

that would have been the kind of dot.

uh that didn’t need a lot of connecting.

that would have screamed out at you,

do something about me now.

The meat of Clarke’s argument, however, is the information he presents in lines 42–61—facts about the activity of known terrorists in early 2001 and facts that were known to various intelligence agents in the United States. Moreover, the interpretability of the screaming dots blend is much greater in 62–63, i.e. after the intervening information has been presented. Just as Davies was able to alter the standard connect-the-dots blend after evoking structure in the reference space, Clarke’s novel blend becomes much more compelling after the addition of information to the reference space. How knowledge of the actual topic changes discourse participant’s likely understanding of a conventional metaphor as a result of its being applied to that domain is not easily handled by cognitive accounts predicated on the asymmetrical flow of inferences from a concrete to abstract domain. In the cases we have examined, understanding the more abstract domain appears to facilitate comprehension of the figurative blends.

Conclusion

We argue that creative metaphoric blends rely heavily on conventional linguistic knowledge, such as the metaphoric meaning of “connect” and conventional mapping schemes such as that between seeing and knowing. Moreover, such metaphoric expressions are often given particularized cultural meanings. In the case of “failure to connect the dots,” for example, it refers to intelligence agencies’ failure to prevent the terrorist attacks on September 11, 2001 and particular mappings between intelligence information with dots, and terrorist plots with patterns in the dots. Even in creative extensions of connect-the-dots as in Richard Clarke’s screaming-dots blend, people seem to appeal to established blending schemes such as fictive interaction.

Our exploration of the importance of situational knowledge in understanding blends in context suggests that diagrams common in blending analyses are somewhat deceptive. Indeed, a common reaction to such diagrams is that they mind. Rather, the diagram is an atemporal representation of an understanding that evolves incrementally over the course of several minutes. We suggest that Chafe’s notion of active, semi-active, and inactive information may provide a valuable framework for a more refined model of how these processes actually occur.

With each intonation unit, the speaker activates a small amount of conceptual structure in mental spaces. Successful IUs have been seen to provide additional information about various elements in a single mental space. One function of metaphor expressions such as connect-the-dots is to compress a complicated scenario that takes several IUs to build up into an easily conceptualized scene. One function of prosodic information is to cue perspective shifts, and to indicate which mental space is currently in focus. Once a blend is established into the context, or in Chafe’s terminology becomes active, speakers are free to elaborate it, or to alter it creatively by introducing a new presentation space to change the emergent inferences.

In fact, if the example examined here is at all representative, it is quite difficult to abandon a blending network that has been established into the context. The standard connect-the-dots blend was not compatible with either of the argumentative positions expressed by Davies and Clarke, yet they both used terms “connect” and “dots” to summarize their points. Davies (qua Posner) objects to the idea that intelligence data includes only relevant information, that it is all available simultaneously, and that the relationship between different facts is easy to establish. Clarke, on the other hand, objects to the very idea that predicting the 9/11 terrorist attack required understanding the relationship between seemingly unrelated facts, yet he, too, begins with the connect-the-dots blend.

As argued above, the culturally shared connect-the-dots blend is supported by a particular set of mappings between the game Connect the Dots and a culturally acknowledged framing of the 9/11 intelligence failures, as well as by more generally entrenched mappings between, for example, connecting and understanding. Although the former does not suit Davies’s argumentative purpose, the latter does. Consequently, his blend does not correspond to the game, but does recruit key mappings that support the original blend. However, because Clarke objects to the very premise of the mappings in the connect-the-dots blend, he explicitly disputes the applicability of the term “connect,” recruiting instead the conventionalized fictive interaction blend. While fictive interaction is compatible with Clarke’s construal of certain facts as being independently meaningful, it is less compatible with the mapping between facts and dots. Indeed, the creative nature of Clarke’s screaming-dots blend may be attributable to his maintenance of this mapping in the face of a larger (perceived) disanalogy. Innovation here emerges from the in-
References


Appendix

Transcript

[Interview with Richard Clarke, former White House Advisor on Counterterrorism. Interview aired on NPR's *Fresh Air* Wednesday, September 22, 2004 program. Beginning 4:52 minutes and ending 7:10 minutes into the interview.]


Transcript Conventions

Underline: contrastive change in pitch or intensity (loudness)

... a brief pause
... longer pause
... a continuous contour
... a terminal contour
? a yes-no question contour
-truncated or fragmentary unit
= lengthening of a preceding vowel or consonant

1 Dave Davies: there's a clearly
2 a perceived need here for,
3 ... uh sensitive information to be shared,
4 even among investigators among different agencies.
5 uh,
6 ..who are working,
7 on.. issues that that «information about terrorism» might arise.
8 in-
9 in effect to connect the dots.
10 ..and Richard Posner,
11 in a piece in The New York Times recently
12 ...um..
13 in reviewing the 9/11 Commission Report,
14 criticized the idea that,
15 as he put it,
16 the failure to prevent the attacks was due to,
17 ..a failure to collate the «bits of information possessed by different security agencies»,
18 especially the CIA and the FBI.
19 ...um,
20 he says,
21 the best bits of information were not obtained until,
22 ..the month or so before the attack,
23 and he says,
24 its unrealistic to suppose they could've been «inter=grated»,
25 «and understood» in time to detect the plot.
26 ...um in effect he's saying,
27 «there's all this information flowing around there»,
28 and it's,
29 ...w--
30 we weren't just pick this pick those dots out,
31 and connect them in time.
32 is he right?
33
34 Richard Clarke: no I don't think so.
35 there's uh some,
36 .. uh dots,
37 which are meaningless unless you put them together with lots of other dots.
38 an=d,
39 I understand what he's sayi=ng,
40 but there are some dots that come out of nowhere.
CHAPTER 2

The text and the story
Levels of blending in fictional narratives

Barbara Dancygier

The paper investigates applications of the mental spaces approach to the study of narrative discourse. It is postulated that fiction narratives are structured as blends, emerging out of a number of major narrative constructs called narrative spaces, with their rich topology and specific structure. It is argued further that two mechanisms are responsible for emergent story structure: narrative anchors and cross-input projections. The former are narrative equivalents of space builders, while the latter account for the constant enrichment of narrative spaces as a result of emerging cross-space links. Finally, narrative viewpoint is defined as a feature of space topology, rather than of a specific 'consciousness.' The paper argues further that blending opens new perspectives in narratological research.

Among discourse types, narrative discourse is perhaps the category which attracts the attention of the broadest array of disciplines. Fictional narratives, in particular, pose questions for linguists, psychologists, narratologists, literary critics, and stylisticians alike. The question of how a linguistic form, even of considerable complexity, can so fully absorb readers, transport them into fictional worlds, and affect them emotionally, is certainly a question which is difficult to answer from within one discipline alone.

The growing interest in the cognitive approaches to various areas of the humanities brought the cognitive turn to narrative studies as well. The influences are coming from different directions, mainly cognitive psychology and cognitive science (cf. Herman 2003a), but also cognitive linguistics, in its various forms. The frameworks of cognitive grammar, mental spaces theory, and blending all afford new possibilities for representing the ways in which texts construct meaning, whether in poetry or in fictional prose (see Stockwell 2002; Semino & Culpeper 2002), but blending appears to be particularly well suited to the analysis of the