What can blending do for you?

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Among the chief causes of the sublime in speech [. . .] is the collocation of members, a single one of which if severed from another possesses in itself nothing remarkable, but all united together make a full and perfect organism.

(Pseudo-) Longinus, On the Sublime (c. 200 CE), XL, 1.
(trans. by W. Rhys Roberts)

Theorizing about language, whether in colloquial or literary context, has often followed a similar path: from initial fascination with a framework which promised answers to puzzling questions, through finding some answers, to realizing that more questions were in fact generated in the process. Remaining faithful to a theory often meant expanding it beyond its intended power, and spending precious time getting out of problems the theory itself had created. This pattern had become so familiar that many of us accept it as an integral part of our intellectual lives. Another theoretical fad, we say.

And now there is blending, or conceptual integration theory (CIT), originally developed by Mark Turner and Gilles Fauconnier. Once again, some of us are in the fascination stage, while others are already savoring long-awaited answers. Still others think it is not enough of a theory yet and are cautiously awaiting the moment when blending becomes so rich theoretically that it will start creating problems for itself. But, at least to my knowledge, no-one has as yet called it a passing fad.

So what is blending? The quote at the top (many thanks to Joseph Goguen for finding it and letting me use it) is perhaps the clearest intuitive description: the unification of unremarkable concepts gives rise to ‘the sublime in speech’ – a full and perfect meaning. In essence, blending describes meaning by specifying the nature of operations on cognitive constructs called mental spaces (temporary cognitive structures prompted by the use of linguistic forms). More specifically, blending means mentally projecting structure from independent conceptual constructs (called input spaces). Input spaces may have enough shared structure to allow for cross-space mappings, but the degree of similarity may vary significantly. Elements of the structure of the inputs are selectively (rather than as wholes) projected into a new mental space, called a blended space, or a blend. In the most typical scenario, the process relies on a skeletal construct, called a generic space, which gives coherence to the newly formed space. Running the blend, or letting its new structure take a life of its own, gives rise to meanings which were not available in any of the inputs. This is called the
emergent structure. What blending achieves through such a formation of new mental spaces is a degree of clarity and simplicity (Fauconnier and Turner [2006] call it ‘human scale’) needed for new meanings to naturally arise and be easily manipulated.

In short, blending as a theory makes us better at describing just how new meanings can be creatively constructed out of the existing knowledge structures. The framework aligns itself with cognitive approaches to the construction of meaning in that it treats language expressions (but also visual images, sounds, gestures, and all other meaningful forms of human expression) as prompts which the human mind uses in an act of meaning construction and comprehension. The central assumption, rather than a corollary, is, then, that meaning is best described as dynamically constructed in a mental process which is by definition creative and imaginative. This is the reason why blending is particularly appealing to the research aimed at the explanation of the mechanisms of creativity, which includes literary analysis, and, more specifically, stylistics and poetics.

1 Science or fiction?

Let us look at some examples of blending at work. The first one comes from Edward O. Wilson’s book *The Future of Life* (2002), a beautiful mixture of scientific and humanistic reflection on the environment and our role in it. The prologue to the book is written as a letter to Thoreau, and thus it starts with ‘Henry! May I call you by your Christian name?’.

Understanding this introduction requires that the reader calls up the ‘Thoreau’ space – he has to know that Henry David Thoreau was a 19th-century philosopher, best known for his essay *Walden*, on nature and human condition. Wilson’s book is largely a reflection on similar topics, so the invocation to Thoreau naturally calls for the reader to construct a shared frame in which both writers belong.

But the frame that Wilson and Thoreau can naturally share is only that of ‘nature and philosophy’. They cannot, in any literal sense, share a temporal and spatial frame in which they could exchange correspondence and answer questions regarding appropriate forms of address. But this is precisely what Wilson’s letter invites us to believe. Despite that, the reader will not put the book away impatiently, assuming that Wilson is not sane enough to know that Thoreau is dead, and presumably will not be surprised at the idea that a letter to a specific person is relevant to the book addressed to a general audience. There must be a level of interpretation where these oddities make sense.

The mental space – the blend – in which Wilson can write a letter to Thoreau is important to an understanding that Wilson will be writing on related topics, and that he will be saying things that would interest Thoreau, if he were alive. In his own temporal space of the 19th century (input 1), Thoreau could not know
about Wilson at all, while in Wilson’s current temporal space (input 2), letters can be written only to one’s contemporaries. But in the blend, communication between Wilson and Thoreau is possible. In fact, in the blended ‘letter’ space Thoreau is present in two ways: as the addressee of Wilson’s thoughts expressed in the letter, and as a representative of his own thoughts, which Wilson refreshes and discusses throughout. He is thus alive as a mind, but not as a person, and he remains rooted in his 19th-century world. The blend arises out of a selective projection, as it co-opts only the necessary aspects of the inputs. The possibility of the exchange of thoughts, both ways, was not possible in any of the inputs – this is the emergent structure.

It is also worth noting that in the specific blend the letter is the best form of communication of all (it could have been, for example, a make-believe dialogue). Wilson has things to say to Thoreau, but he neither needs nor expects his answer. This is because, naturally, it is not Thoreau who needs to be informed. The reader needs to be informed, though, how Wilson’s observations are relevant from the perspective of Thoreau’s writings and the time that has elapsed since the publication of *Walden*. The fictional letter, though addressed to Thoreau, will be read by the reader, who is the addressee of the book. Another level of blending is thus necessary. The mental space of books and reading is framed by the concepts of the writer as the ‘sender’ and the readers as ‘addressees’. These participants do not interact on the personal level, but it is clear that the (generic) reader is the sole recipient of anything the writer writes. So if the letter space is blended with the book space, and another addressee is thus implied (Thoreau), he has to be blended with the actual addressee (the reader), thus attributing to the reader two viewpoints – that of the reader-as-reader, and that of Thoreau. This is also emergent structure – the point of the blend.

The second paragraph of the letter adds another space into the blend. It is the space of the Walden Pond nature reserve, the place where Thoreau lived and wrote. Now the two men meet there.

You brought me here. Our meeting could have just as well been a woodlot in Delaware, but here I am at the site of your cabin on the edge of Walden Pond.

In what sense can they both be there? Wilson can be physically present, walking in Thoreau’s footsteps and composing the ‘letter’ in his mind. But Thoreau himself can only inhabit the same space in one sense – that Wilson is seeing it through the lens of Thoreau’s memories and thoughts, as expressed in *Walden*. In Wilson’s ‘letter’, then, the Walden Pond reserve is a blend of the physical space and its representation.

Let me pause here to point out some features of the blend being developed, which one can expect to see in any blend. First, let us note what has been called selective projection. For example, the person of Thoreau anchors the blend in his time and his writings. Many particulars of the Walden Pond reserve and stories told by Thoreau are projected into the blend (cabin site, ants, mushrooms). But
there is no mention of other details of the philosopher’s life there, or even other
themes in *Walden* (such as civil disobedience). Similarly, the letter frame is also
partial – the letter is not dated, there are no addresses or allusions to any
expectation of a reply. Also, Wilson notes somewhere that he does not hear
planes passing overhead, but he hears the birds and insects Thoreau would have
heard. Only those elements of the frames are projected which have a role to play
in the intended meaning. The blend is a selective structure.

Another important feature of a blend is that it *compresses* multiple or distant
elements into unique or co-existent ones. Most visibly, the blend compresses the
distance between Thoreau’s and Wilson’s lives. Even if only as an addressee and
contributor of thoughts, Thoreau can be present in the blend alive and capable of
understanding Wilson. But, interestingly, he is not projected into the present.
Wilson explicitly mentions the distance of 150 years between them, and
describes the changes in Walden reserve that Thoreau cannot see. Also, Thoreau
cannot answer, because in the blend, as it is set up, he has no voice of his own
other than his book.

However, the blend develops as the text progresses. Wilson meets Brad
Parker, one of the character actors/naturalists who take visitors on tours of
Walden Pond. He is made up and dressed up to look exactly like Thoreau, and he
also knows Walden (the place and the book) very well. The illusion thus created
has a very real feel to it. At last, Wilson writes:

> Nor did I think it anomalous that at sixty nine I was speaking to a reanimation
of you, Henry Real-Thoreau, at thirty. In one sense it was quite appropriate.
The naturalists of my generation are you grown older and more
knowledgeable, if not wiser.

Even if jocularly, Wilson admits to sharing Walden Pond with Thoreau for a
moment. The physical space is the same for both of them – the same setting, feel,
and theme. The time is now compressed, so that both men are there, at their
appropriate ages – with Thoreau actually younger. However, another interesting
mental operation had to take place. The Real-Thoreau in this blend has all the
characteristics of the real man (from 150 years before), but he has been
‘reanimated’ by Brad Parker. For the illusion (the blend) to work, the crucial
features of Thoreau-hood have been *decompressed* from his actual body, and then
blended with the body of Parker. In fact, as the next sentence says, all naturalists
of Wilson’s age have had some of the spirit of Thoreau blended with their own
minds. As this example shows, blends can not only compress structure across
mental spaces, but also decompress unified concepts (such as a person’s identity)
and rearrange the pieces thus obtained.

Wilson’s text is exemplary in its clarity of argumentation, even though it is
free of scientific mannerisms and the matter-of-factness one could expect. The
seemingly outlandish blends which change the structure of such basic concepts as
space, time, and personal identity support the argument. He could have written a
prologue which would include thoughts about Thoreau and his value to contemporary studies of nature. But he would not have achieved the effect of engaging the reader in his argument and Thoreau’s at the same time, in ‘putting the reader in Thoreau’s mental shoes’, to use another blend. The blend does not consist in a simple merger of mental spaces. It creates a structure of its own, which can then yield meanings that would have been difficult to construct in other ways.

2 Inside looking out

My second example comes from a different genre – a movie (see Turner, this issue, for more discussion). In Woody Allen’s classic, Annie Hall, the beginning has his character, Alvin, reminiscing about his childhood. First he talks directly into the camera, then comments in a voiceover, while the viewers watch the childhood scenes. Alvin, as an adult, says In 1942 I had already discovered girls, and on the screen, in a classroom, young Alvy kisses a girl. Everyone is outraged and Alvy (the child) is called to the front of the class, to be admonished by the teacher. The camera goes back to Alvy’s desk, where adult Alvin is sitting, defending himself, in adult language: I was expressing a healthy sexual curiosity! The teacher (with Alvy still standing next to her) retorts: Six-year-old boys don’t have girls on their minds. We go back to Alvin, who speaks into the camera again: I did! Finally, the teacher expresses a wish that all students could be good – like Donald. Alvy turns to Donald and asks: What are you today, Donald? And Donald, and then other children, get up and describe their adult lives, staring into the camera (one of them says, in very slow and careful diction, I used to be a heroin addict, now I’m a methadone addict – vintage Woody Allen).

The scene blends the movie’s past and present. The classroom setting, the children (including young Alvy), the teacher, the kiss, the resulting outrage, are all projected from the past. The movie’s present is the other input but the projection is less obvious. It includes Alvin as an adult, with his adult defense of the childhood kiss, in which he consistently uses past tense, thus making it clear that his viewpoint space is that of Alvin’s adult present. The present is where the blend is located, even though the setting and the situation come from the past. The blend’s emergent structure allows the character to re-live the past and comment on it on-line, addressing the past and present participants in a way he could not have in the actual past.

The blend enters a new stage when Alvy asks about Donald’s today. If adult Alvin asked the question, it would be deictically simple – he would be asking about his own ‘today’. So why does it have to be Alvy, who belongs in the past?

The crucial element of this blend is its interactional structure. In most movies, actors are directed not to speak into the camera – that way, they can be portrayed as speaking to someone else in the movie space, instead of overstepping its bounds to speak to a viewer. Alvin speaks directly to the viewer through the
introductory scenes of the movie, thus creating a shared present space. But when he is responding to the teacher’s accusation (which is performed in the past classroom space, but addressed at the adult Alvin), his defense is directed at the viewer and the teacher – the two interactional spaces are blended, so that the viewer can combine the witness role from one input with the addressee role in the other, while Alvin can say things he couldn’t have said to the teacher then.

When the blend enters the stage of the discussion of today, the students become the focus, and thus only the Alvy character can talk to the other children (they wouldn’t recognize Alvin, or openly talk to him). But he is asking Alvin’s question, which assumes Alvin’s viewpoint and which only Alvin needs an answer to. When the children then recite their stories in childish voices and using six-year-old syntax, the logic of this blend shines through. They could not be present there in their adult looks and mental maturity, because Alvin knew them only as children. The information they provide is dubious – it could all be Alvin’s imagination, or hearsay. But they speak into the camera, because in fact they talk about the present that Alvin and the viewers inhabit. To conclude, Alvin’s and Alvy’s participations in the blend are different, which is why they can both be there. Alvin’s role is to think as an adult and interact at an adult level, Alvy is the anchor to the children’s space. These decompressed versions of the same person co-exist in the blend, and share much of its setting, but their interactional roles are projected from the inputs.

The Alvin/Alvy blend exemplifies a number of features that make blending useful in describing creative and novel uses of language and other forms of artistic expression. First of all, it shows clearly how the blend creates new structure, while preserving our access to its input spaces, so that the context out of which the blend emerges and its new structure are both accessible. Second, it illustrates how the mental spaces called up by specific forms are structured by frames, and how framing influences the interpretation. The scene we discussed is put in the classroom setting. The fact that Alvin makes his point while sitting at a student desk presents him as both an adult and a student – he looks mature, talks like an educated man, but defends the student he was. If he were at the front of the classroom, with the teacher, the ‘student’ frame would apply only to his former classmates, and he could not interact with them as he does.

As the example also demonstrates, the kinds of spaces which may serve as inputs to blending can be structured by textual as well as non-textual frames (interactional, visual, etc.). Inputs of widely different kinds can thus contribute to the same blend. But the resulting blends can also use the inputs in different ways. Fauconnier and Turner (2002) distinguish several types of integration networks, based on how projections from input spaces affect the emergent structure. A more thorough discussion of the differences among various networks exceeds the limits of this short introduction, but one point has to be stressed. While simpler blends (simplex, single-scope, or mirror networks) use the input spaces in a variety of meaningful ways, the true power of blending in shaping our thought is best seen in double-scope blends. These are networks which use input spaces
with markedly different, or even clashing, structures. Contrary to what one might expect, double-scope blending results not in inconsistency or confusion, but in increased originality and power instead. In the Woody Allen example, the classroom space, the movie’s ‘present’ space and the viewer’s space have nothing in common, and clash in terms of time, place, participants, and interactive goals. And yet it is because of the clash, rather than in spite of it, that the meaning (and the humor) of the scene can emerge.

3 Meanings and forms

Both examples discussed above show how various aspects of form in an act of communication contribute to the emerging meaning. Whether we are considering names of authors, forms of address, pronouns, tenses, the choice of vocabulary, interactional properties, or visual images, all of them serve as prompts for construction of mental spaces, which then participate in the construction of the final meaning. Most of the blending research to date offers explanations, based on the forms used, of how new thoughts can be expressed when in fact only familiar sources of meaning are used. The explanations offered trace the flow of meanings through a variety of spaces, thus combining grammatical, lexical, interactional, or visual information into one framework.

Perhaps as a result of their focus on form–meaning mappings and of their intended level of specificity, blending analyses have sometimes been read as definitive, leaving limited room for individual interpretation. However, as Hiraga’s study (2005) of two Japanese haiku poems clearly shows, blending can be helpful in explaining multiplicity of possible interpretations, while maintaining a very clear view of how the forms inspire the meanings. Hiraga’s discussion of the expression tori naki (‘birds cry’) from Basho’s haiku poem shows convincingly how varied meanings can be read from the same form, while being prompted by that form. In the expression, the poet used a logograph which is itself a blend of two independently meaningful radicals, thus invoking the etymological implications of the choice and directing the reading towards an interpretation other logographs would not have suggested, while opening the door to several metaphorical and metonymic interpretations. Hiraga’s work thus demonstrates that multiplicity of meanings can also be explained through focusing on form–meaning correlations and that blending has the theoretical resources needed.

Blending proposes a view of meaning construction which attempts to model unconscious cognitive processes, those that have been termed ‘backstage cognition’. It is indeed important to notice that even the simplest language expression requires unconscious processing resources to be understood (and I am not referring to syntax). Conceptual integration is focusing precisely on what the name suggests – how different concepts participate in the formation of new meanings, or how ‘the sublime in speech’ is achieved. But it cannot yet make
specific claims about the realities of neural activity which underlies those processes. The results of blending in thought can be modeled and coherently explained, and are thus far factually revealing as well as theoretically inspiring. Even if we never obtain any solid evidence of whether blending occurs in predictable ways in our ‘wetware’ (another blend), we will still profit from the clarity with which meaning construction in a variety of texts can now be described.

In this short introduction, we have looked at just two examples of blending, in areas which are the closest to the kind of creativity we are interested in. We have not been able to review the full scope of relevant literature, in stylistics or in related disciplines. This essay is thus followed by a list of selected texts and websites, which should help the reader search for more information.

The examples discussed in some detail above suggest that the blending framework can be applied to a variety of data and modes of expression. What the contributions to this issue intend to do is show how some of us used blending in our analyses of texts representing different genres, periods, and styles. The issue starts with an article by Mark Turner, which clarifies the concepts of compression and representation, using examples from Provençal poetry, but also Winnie the Pooh and other Disney cartoons. Eve Sweetser’s article interprets the role of rhyming patterns and dialogic structure in Rostand’s Cyrano de Bergerac. The next article, by Elena Semino, investigates the construction of intramental and intermental realities in a story by Virginia Woolf. Then Vera Tobin brings blending to reception theory, investigating the roots of readers’ stances to Conan Doyle’s Sherlock Holmes. And finally, Sean McAlister uses Helen Weinzweig’s novel, Basic Black with Pearls, to look at the role blending can play in our understanding of the role of traumatic experiences in memory and identity construction. There are probably countless other ways blending could be used in stylistic analysis, so, predictable as it may seem, the conclusion from this collection will most likely be the usual one – there is more work to be done. The good thing is that we have started doing it.

Selected bibliography

Blending basics


Journals – special issues (individual papers are not listed)


Style (2002) 36(3), Special Issue ‘Cognitive Approaches to Figurative Language’.

Blends versus other mappings


Websites

http://blending.stanford.edu (blending bibliography and other links)

http://cogweb.ucla.edu (Cognition and Cultural Studies)


http://theartfulmind.stanford.edu (Special Project at the Center for Advanced Study in the Behavioral Sciences, Stanford, CA, 2001–2)

http://www2.bc.edu/~richarad/lcb/home.html (Literature, Cognition, and the Brain)

Blending in poetry, fiction, and non-fiction


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**Blending in related fields**


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