

Creativity in Interpreting Poetic Metaphor

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1. Introduction

What cognitive processes are invoked in understanding the metaphors in a poem, or in any other work of art? Is there any creativity required from the reader? Indeed, as we will show with an example in this paper, some metaphors need creativity on the part of the reader to be interpreted meaningfully. Acknowledging the existence of such metaphor, however, raises a horde of other questions. How is this creativity manifested? What is the role played by the poem (or the work of art) in the interpretation process? What role is played by the intentions of the author? How can such metaphors communicate? How can they be translated? These are some of the issues that we would like to address in this paper.

Of course, much psychological and cognitive science research has been done on the cognitive processes involved in understanding metaphor in the last twenty to thirty years. Most of such research has however focused on metaphors like “Surgeons are butchers” where the core of the intended interpretation can be identified rather easily. (See, for example, Gerrig and Healy 1983; Harris et al. 1999. Katz & Pexman 1997; Malgady & Johnson 1980; Trick and Katz 1986; Waggoner, Palermo and Kirsch 1997.) This research serves to illuminate various aspects of the communicative function of metaphor, which is sometimes stressed to the point that it is taken to be a necessary ingredient of metaphor (see, for example, Carroll 1994, 208–214). However, all this fails to shed any light on the creativity of the reader in understanding metaphor.

Interestingly, a glimpse of the creative aspect of interpreting metaphor is provided in an experiment done over twenty years ago by Pollio and Burns (1977). The purpose of Pollio and Burns’ experiment was actually to show that the distinction between anomaly and metaphor is not so easily drawn, and that many so called anomalous sentences, given an appropriate context, can be given quite acceptable metaphorical interpretations. In one of the tasks in their experiment, the subjects were given mechanically generated (by randomly selecting words) sentences that were grammatical but seemingly anomalous. The subjects were then asked to write down for each sentence, any interpretation that would render it meaningful. What they found was that many of the apparently anomalous sentences were given quite novel and creative interpretations. However, Pollio and Burns did not analyze or comment on the novelty or diversity of interpretations generated by the subjects, which is our main concern here in this paper.

We need not resort to mechanically generated sentences, for one can easily find verses that seem

quite anomalous in poetry, especially in modern poetry. (Interestingly, Pollio and Burns also told their subjects that the sentences they were to interpret were taken from rock music and poetry.) Of course, there has been some research on interpretations of poetic metaphors. (See, for example, Gibbs and Bogdonovich 1999; Gineste, Indurkha and Scart 2000; Glicksohn and Goodblatt 1993; Goodblatt 1996; Steen and Kreuz 1998; Tourangeau and Rips 1991.) But again, this research has not addressed the diversity or creativity of subjects' interpretations — the focus has been on what kind of features are activated by metaphor, the role of context and imagery, and so on.

Thus it seems that the issue of variability in the interpretations of metaphors has hardly been given any attention by the researchers so far. This paper is an attempt to redress this situation, and to motivate other researchers to take up the issue of creativity in interpreting metaphors. The paper is organized as follows. In the next section, we present some examples to illustrate the diversity of interpretations of poetic metaphors. In Section 3, we propose a mode of metaphor called 'synthetic metaphor' to explicitly identify such metaphors that are prone to generate diverse interpretations, and contrast it with the 'analytic metaphor', which generate largely overlapping interpretations. In Section 4, we discuss some characteristics of synthetic metaphor, and Section 5 presents the main conclusions of this paper.

2. Diversity in interpretations of metaphors in poetry: Some examples

We present three examples of poetry here and discuss the variability of metaphoric interpretations in each case. As the first example, consider the following poem by Stephen Spender.

Example I: 'Seascape' by Stephen Spender

There are some days the happy ocean lies
Like an unfingered harp, below the land.
Afternoon gilds all the silent wires
Into a burning music for the eyes.
On mirrors flashing between fine-strung fires
The shore, heaped up with roses, horses, spires
Wanders on water tall above ribbed sand.

The motionlessness of the hot sky tires
And a sigh, like a woman's from inland,
Brushes the instrument with shadowy hand
Drawing across those wires some gull's sharp cry
Or bell, or shout, from distant, hedged-in, shires;
These, deep as anchors, the hushing wave buries.

Then from the shore, two zig-zag butterflies
Like errant dog-roses cross the bright strand
Spiralling over waves in dizzy gyres
Until they fall in wet reflected skies.
They drown. Fishermen understand
Such wings sunk in such ritual sacrifice

Remembering legends of undersea, drowned cities.
What voyagers, oh what heroes, flamed like pyres,
With helmets plumed, have set forth from some island
And them the seas engulfed. Their eyes
Distorted to the cruel waves' desires
Glitter with coins through the tide scarcely scanned,
While, far above, that harp assumes their sighs.

The 'ocean as a harp' metaphor seems to play a central role in this poem. Presented in this abstract form ('ocean as a harp') and devoid of context, the metaphor may perhaps admit a wide range of interpretations. In the poem, however, the poet has provided some, what we may call anchor points, to guide the interpretation of the metaphor. For example, phrases like "afternoon gilds all the silent wires", "a sigh ...brushes the instrument with shadowy hand, drawing across those wires some gull's sharp cry" serve to constrain the possible interpretations of 'ocean as a harp' metaphor. As a result, we can expect to see a convergence in different interpretations of the metaphor. Needless to

say, we would still expect to find quite some variability in the imagery and concrete experiences that are recalled to mind by the metaphor.

Thus, if different subjects were asked to read this poem and describe what it meant to them, and then we mapped their interpretations on some semantic dimensions, we may get something like Fig. 1. In this figure, there is a region of overlap among various subjects' interpretations, but there are also areas of partial or no overlap corresponding to individual variations.

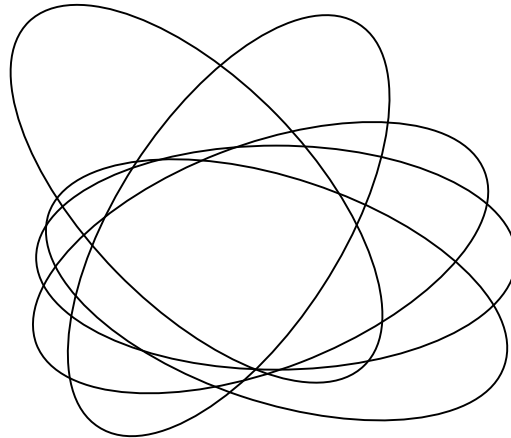


Fig. 1 Possible spread of interpretations of Spender's *Seascape*

Let us now consider the following poem by Dylan Thomas.

Example 2: 'The force that through the green fuse drives the flower' by Dylan Thomas

The force that through the green fuse drives the flower
Drives my green age; that blasts the roots of trees
Is my destroyer.
And I am dumb to tell the crooked rose
My youth is bent by the same wintry fever.

The force that drives the water through the rocks
Drives my red blood; that dries the mouthing streams
Turns mine to wax.
And I am dumb to mouth unto my veins
How at the mountain spring the same mouth sucks.

The hand that whirls the water in the pool

Stirs the quicksand; that ropes the blowing wind
Hauls my shroud sail.
And I am dumb to tell the hanging man
How of my clay is made the hangman's lime.

The lips of time leech to the fountain head;
Love drips and gathers, but the fallen blood
Shall calm her sores.
And I am dumb to tell a weather's wind
How time has ticked a heaven round the stars,

And I am dumb to tell the lover's tomb
How at my sheet goes the same crooked worm.

The central idea of this poem is that the same force that propels the nature forward also destroys it. In other words, creation and destruction are the two sides of the same coin. This idea is illustrated by different metaphors in each verse. (See, for example, the analysis in Bronowski 1981, 12–15.) But the interpretations of the metaphors are not so strongly constrained here as was the case in the last example. The imagery evoked by the metaphors would vary considerably depending on the each individual's background and life experiences. As noted by Bronowski (1981, p. 14): "Everyone of us reads the same poem, and yet each one of us makes his own poem. This is the nature of imagination: that everyone has to reimagine, and to reimagine for himself. Dylan Thomas

certainly imagined this poem first, certainly created the poem. And yet, if you want to understand the poem, you have to recreate it for yourself.” Yet, the structure of the poem constrains how an individual recreates the poem.

Thus, we conjecture that if we asked different subjects to describe their interpretation of the poem, and plotted their interpretation on some semantic dimensions, we will get something like Fig. 2. In this figure there is a much smaller overlap among the various interpretations, compared to the previous case, and a wider variation in the personal meanings and imagery that is associated with the metaphors in the poem.

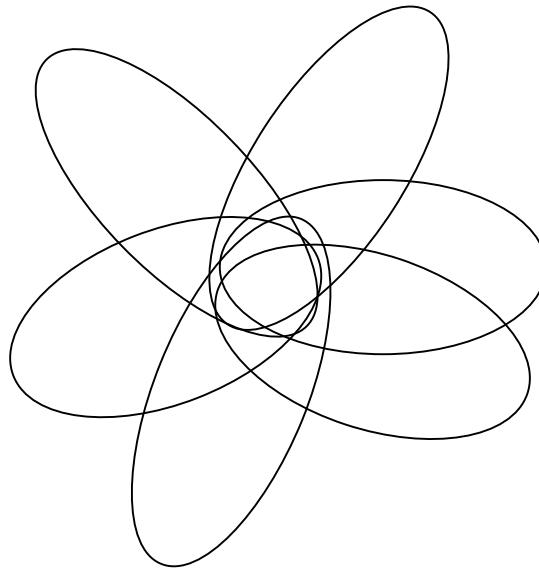


Fig. 2 Possible spread of interpretations of Dylan Thomas’s *The force through the green...*

Finally, consider the following lyrics by David Byrne.

OPEN THE KINGDOM (LIQUID DAYS, Part Two) (David Byrne)

Days of Fishes
Distant Roar
Turning to Speak
Turning to Hear

Open the Kingdom
Open the Kingdom
Open the Kingdom
Open the Kingdom...

In my way
In my way
Being most uncertain
And This Remains

Still for better
Birds of Voices
The Field of Living

I am Asking

I am Asking

I am Asking

Returning Love
Returning With Love
Then it was
Written with Love

Suppose we asked a large number of subjects of different backgrounds — literary critics, students

of literature, just ordinary people who enjoy poetry, etc. — to interpret this poem. What can we expect to find? In fact, in an informal experiment we did on the interpretation of this poem, we found almost no overlap between different interpretations. To give the reader some idea about the diversity of interpretations, we provide below some excerpts (verbatim) from the subjects' interpretations.

- ① I interpreted the poem to be a metaphor for the loss of salmon in the Northwest. I felt a sense of bereavement.
- ② Two bears are fishing along a river. The first bear is in the rapids, where fish are battered but also concentrated. The second bear opts for the bigger but scarcer fish in the smaller pond where the water is slower and deeper. A mocking bird cries out near the second bear...
- ③ Religious, possibly Jewish, mostly because of fishy holidays (footnote: this idea is from Chandler, actually) (Shabath); repetitions can be prayers, and the kingdom of love the connection to God, of course.
- ④ ...Basically, religion seems to be at the heart of the imagery that is being used. The word 'kingdom' itself, of course, as well as the opening image of fish and the "birds (souls?) of voices" flying over "the field of living" all seem to point in the direction of a Christian afterworld, a kind of Valhalla (that's Teutonic, right?) where everything is "written with love" and love is (a) god, I guess...
- ⑤ Someone on the outside of society trying to break in or maybe a person trying to communicate with fellow people. They listen but don't hear, like Emily in *Our Town* by Thornton Wilder.
- ⑥ An unseen oppression and the need to break it down. A metaphor for freedom, becoming itself a metaphor for one's birth spiritually.
- ⑦ I think the speaker is about to die and is asking or wondering or hoping that there is a heaven for him...
- ⑧ The sky is very large, storm is coming and large clouds running above. It seems heaven and earth to be in silence. But you feel loud sound running to you. The atmosphere shows that something tremendous will come soon...
- ⑨ This poem doesn't mean anything to me. I do not understand it. It evokes no feelings or emotions.
- ⑩ This poem is not very meaningful to me. The first line is the only one I like. It seems to be written associatively by someone without a clear plan or idea.
- ⑪ The poem looks like it was generated with a PERL script. The start looks pretty good but there is too much repetition with apparently no connection to the mood of the rest of the poem. The 'turning to speak' 'turning to hear', 'open the kingdom' bit evokes images of a new world, a world of information, perhaps opened up to the poet by speaking or hearing something new. The 'being uncertain' bit backs this, but then what the heck is all the love stuff at the end.
- ⑫ ...Fishes are usually slippery, quiet, distant and without certainty (they seem as they are uncertain in the liquid water). These aspects are, according to this poem, essential in life and characteristics to love; they need not be clear cut.

- ⑬ Loneliness of love, wondering if indeed it is love...
- ⑭ ...I get the feeling that the writer is trying to convey a spiritual (religious) experience in summer...
- ⑮ I am transplanted to a remote & rocky seashore. Each crashing wave both deafens me & drowns my voice, shocking me with its power & unpredictability. Yet each echoes the last, repeating, rolling, returning. Seabirds retreat & return, begging for bounty of fishes...
- ⑯ At the beginning I see a harbor and a man who is working in this harbor. It's very noisy and at the same time he's feeling alone...

We should add that the survey was conducted by mailing the questionnaire to subjects, and by posting it on the internet. We did not specify the author of the poem (hence the response 11), but we did provide the title. The subjects were adults (22–70 years), came from diverse backgrounds and different countries, but were all fluent English speakers.

Considering these excerpts, while we can group them under general themes like ‘love’, ‘religious’, ‘fish-based imagery’, and so on, it is really hard to find any common overlap in the interpretations. This situation is graphically depicted in Fig. 3. Notice that there are also instances when the subject deems the poem meaningless, and does not assign any interpretation at all (responses 9 and 10 above).

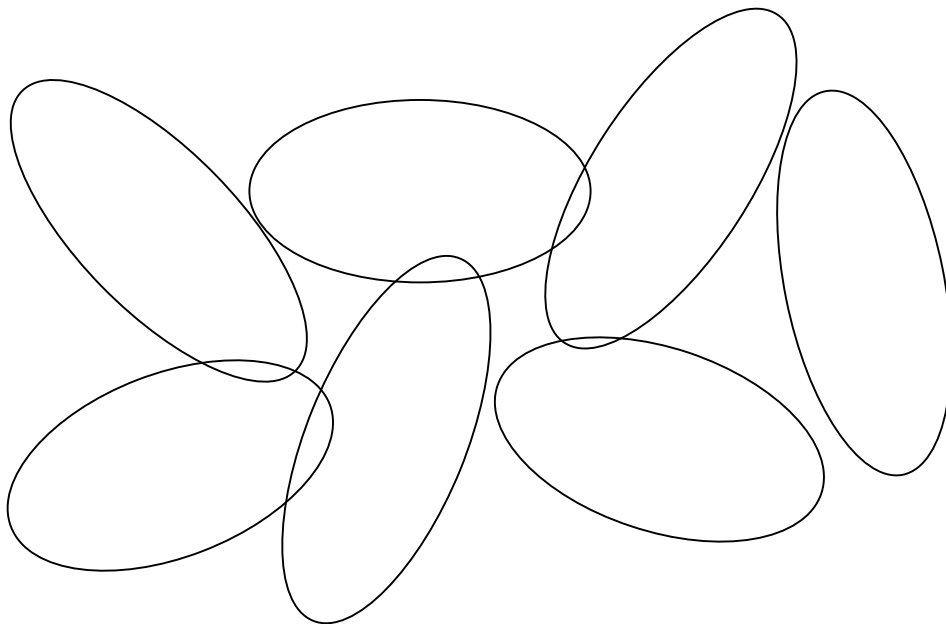


Fig. 3 Diversity of interpretations of David Byrne’s *Open the kingdom...*

3. Synthetic and Analytic Metaphors

From the examples discussed in the last section, we posit two different modes of metaphor: one that

generates overlapping interpretations, and the other that generates diverse, non-overlapping ones. We refer to these two modes here as *analytic* and *synthetic* metaphors respectively. We should emphasize at the outset that what we are proposing is a continuum, with metaphors like “surgeons are butchers” at the analytic end of the continuum, and metaphors like those in David Byrne’s *Open the kingdom...* at the synthetic end of the continuum. Metaphors like those in Stephen Spender’s *Seascape* and Dylan Thomas’s *The force through the green...* would lie in the middle of this continuum.

In analytic metaphor, the interpretation of metaphor can be obtained by analyzing the meaning constituents of the components of the metaphor. In fact, several models have already been proposed for this. For example, in the overlapping-feature model, the overlapping features of the topic and the vehicle of a metaphor constitute its meaning. In the mapping model, structural preserving mapping between the topic and the vehicle renders the metaphor meaningful. In the feature-transfer model, certain features of the vehicle are transferred to the topic thereby imparting meaning to the metaphor. Needless to say, several refinements have been proposed for each of these models. If we look at the available research, both theoretical and empirical, on metaphor, it will become obvious that most of it concerns analytic metaphor.

A major characteristic of analytic metaphor is that meaning constituents are culturally shared. In fact one could argue that it is this shared background that is primarily responsible for generating overlap in the interpretations of different subjects. Also, it is the shared cultural background that makes it possible for such metaphors to communicate their central idea rather unambiguously. A person with a different cultural or linguistic background, however, is very likely to misunderstand or not understand the metaphor at all.

In the synthetic metaphor, however, the interpretation of metaphor *cannot* be obtained by merely analyzing the meaning constituents of the components of the metaphor. In this regard, they can be said to non-compositional. (Being interested in the creativity of metaphor, we have focused on synthetic metaphor in our past research as well, though we have called them by different names: for example, projective metaphor, and similarity-creating metaphor.)

A major characteristic of this mode of metaphor is that *new meanings are created by synthesis*. Moreover, created meanings are very subjective, hence we see a wide variation among different subjects’ interpretations. This last characteristic has been empirically demonstrated in Nueckles and Janetzko (1997), from where we borrowed the terms ‘analytic’ and ‘synthetic’. They found that those features of a metaphor that lie in the intersection of topic features and vehicle features show a strong intersubjective agreement. But the so called emergent features, meaning metaphor features that neither belong to the topic features nor to the vehicle features, show a great variation among subjects.

4. Characteristics of Synthetic Metaphor

As it is the synthetic mode that is responsible for the diversity and creativity in the interpretation of a metaphor, we discuss it in more detail in this section.

4.1 Creation of Meaning in Synthetic Metaphor

Of course, calling the mechanism responsible for generating diversity in the interpretations of a metaphor 'synthetic metaphor' is just an initial step. More importantly we must explain how the new meanings are created by synthesis, and how they are constrained. Though these issues are partly addressed in our previous research (Indurkha 1992, 1998), we outline here the main ideas.

In synthetic metaphor, the components of the metaphor evoke their respective meaning constituents. These 'meaning' constituents are not restricted to just semantic or conceptual aspects of the meaning, but it is crucial to have perceptual aspects and episodic memory as well. All such activated meaning constituents work together to synthesize a 'simulation', to use a term from Barsalou (1999), of the situation or the event described in the poem. In this synthesis, the perception-like imagery (which is not to be confused with the shared image-schema) and the subject's past experiences (episodic memory) play a crucial role. As a result of synthesis, certain features resonate together, while others cancel each other out. Moreover, the activated features may evoke new gestalts or conceptual schema, which in turn further reorganize the features. What is obtained may be quite unique in the sense that the resulting confluence and organization of features may never have existed before, and could not be activated by the any of the components of the metaphor acting individually.

The two key constituents of this synthesis process, namely imagery and episodic memory, are highly individualistic. This explains the different ways in which subjects relate to such metaphors, and wide variations we see in their interpretations.

4.2 Synthetic Metaphor can occur at different levels

Another thing to point out is that the synthetic aspect of metaphor can occur at any level: at the level of individual words, at the level of phrases, or at the level of whole poem (or work). For example, if one were to read Dylan Thomas's *How soon the servant sun*, the first verse of which is produced below.

How soon the servant sun,
(Sir morrow mark),
Can time unriddle, and the cupboard stone,
(Fog has a bone
He'll trumpet into meat),
Unshelve that all my gristles have a gown
And the naked egg stand straight,

In reading this verse (and the rest of the poem) it is necessary to synthesize the meaning at the level of individual words, if the poem is to be meaningful at all. The phrases ‘servant sun’, ‘can time unriddle’, ‘cupboard sun’ are not meaningful by themselves, and must be interpreted synthetically.

On the other hand, in *Open the kingdom...* the synthesis seems to take place largely at the level of phrases. The meaning of phrases like ‘open the kingdom’, ‘turning to speak’ etc. can be obtained in a normal fashion, but then their constituents (including imagery and episodic memory) must put together an interpretation of the poem by synthesis.

Finally, synthetic metaphor can occur at the level of whole poem or whole work. Perhaps best examples of these are songs like Suzanne Vega’s *Freezing* and works like Herman Melville’s *Moby Dick*, which of course are meaningful without any metaphorical interpretation, but can also be given a creative interpretation by synthesis.

All this is not to suggest that the process of synthesis works necessarily in a bottom-up fashion: from the words to phrases, then to sentences and finally to the whole poem. But merely to point out that the metaphor components participating in the synthesis process can have any granularity.

4.3 Synthetic Metaphor can occur in non-linguistic domains

Synthetic mode of metaphor is not just limited to metaphors of language, but is quite pervasive in non-linguistic domains. Consider, for example, Luis Buñuel’s *The discreet charm of the bourgeoisie*, in which we see a few times a sequence of the six main characters walking along a road running through a barren landscape. This sequence has been interpreted in various ways:

- ① “[T]he shot creates a sense of the characters’ suspension in space and time, of their universality, and also of their bewilderment and isolation.” (Edwards 1982, p. 263).
- ② “The leitmotif of the characters heading down the highway seems to stress the importance of motion in the lives of the elite. For Buñuel, their perpetual activity is often mindless and without direction.” (Higginbotham 1979, p. 172.)
- ③ “[T]he three or four recurrences of the shot with incremental variations tell us no more than that our bourgeoisie sextet is trudging down the road of life with a different expression on each face.” (Simon 1978, p. 366).

This diversity invariably points to the synthetic mode of metaphorical interpretation. We can also find similar examples in visual arts, especially when it comes to modern art. (See, for example, Champa 1985, 113–26; Mondrian 1934, 283–84; and Whitford 1987, 12–20 for interpretations of Piet Mondrian’s paintings. See also Fox 1982 for more examples of synthetic metaphors in non-linguistic domains.)

4.4 Communicability and Translatability of Synthetic Metaphor

A glance at the myriad of interpretations of David Byrne's *Open the kingdom...* reveals that these interpretations require some creativity on the part of the readers. The meaning is not just lying there to be picked up, so to say, but it must be actively extracted. So if we take any meaningful interpretation of this poem, how much of it is contributed by the author and how much by the reader? Can we say that something is 'communicated' by the poem from the author to the reader?

To answer this question, we must first specify what we mean by 'communication', and if the intentions are necessary for communication. On one hand, one can take a narrow view of communication which requires that there must be some message or content that the speaker must intend to communicate, and the intended message must be retrieved by the reader for successful communication to have occurred. In this view, clearly, we cannot say that a poem like *Open the kingdom...* communicates anything, for the author could not have intended all the multitudes of interpretations that the subjects assigned to the poem.

On the other hand, however, if we take a broader view of communication, we see that synthetic metaphors can communicate powerfully, but what they communicate depends largely on the reader. Indeed, when the author created the poem (or a work of art), they must have some ideas or images in mind. These ideas/images influence the concrete form of the poem (or the work). But once the work is finished, the connection between the poem/work and the artist is severed. The intentions of the artist are no longer relevant, except in as far as they are manifested in the concrete form of the poem or the work of art, which is all that remains.

When another individual now reads the poem or views the work, she or he interacts with the object, which owes its form to the ideas of the author. In the process of understanding the work, the reader, however, must recreate and reimagine his or her own ideas, to borrow Bronowski's terms. The creation of the reader, however, is constrained by the concrete form of the work, which in turn was influenced by the ideas of the author. So we see a causal chain going from the author to the reader, which constitutes a sort of communication, even though the ideas and images recreated by the reader may not coincide at all with the ideas and images in the author's mind when creating the work.

Perhaps, an extreme example of this kind of communication is provided by *A whiter shade of pale*, a popular Procol Harum tune from the 60s. In an experiment similar to the one with David Byrne's *Open the kingdom...*, we asked subjects to read the lyrics of the song and write down their interpretation of the phrase 'whiter shade of pale'. We obtained a diversity of interpretations, and many subjects reported a strong emotional response to the line. Yet, the lyricist Gary Brooker, referring to this line, is reported to have said, "It is just a song", implying that he did not intend any specific meaning.

Of course, this aspect of synthetic metaphors, namely that they allow reader to impose their own ideas and images and recreate their own interpretations, makes such metaphors notoriously difficult, if not impossible, to translate properly. The plain reason for it is that in translation, one first needs to identify what aspect of the work one is trying to preserve. The aspects can range from meaning, to other intentional or spurious characteristics of its form. Having identified these aspects, one must render them somehow in the target language, a task that requires its own form of ingenuity. But when the significant or meaning-carrying aspects of the work cannot be identified at all, one is at a loss as to what to render in the target language — a translator's bane. (See, for example, Hofstadter 1997, 406–7). This, of course, by no means implies that such works are meaningless or insignificant. There are many major and significant works of art that cannot be transported or translated to another medium: think of Christo's wrapping of Reichstag, for instance. (See also, Fox 1982, for works that would be difficult or impossible to transport or translate.) Translatability is not a necessary requirement when it comes to poetry and other works of art.

On the contrary, precisely this indeterminacy of meaning of synthetic metaphors endows them with an ability to span across cultures. As each reader brings his or her own cognitive baggage — in terms of cultural background, biases, etc. — to interpret the metaphor, each goes away with some message (and some, of course, with no message), depending on the state of their baggage. Indeed, a hallmark of genius is to come up with such potent metaphors that have a universal appeal, and can be interpreted in a variety of ways.

5. Conclusions

In this paper we have demonstrated that some metaphors, which we refer to as synthetic metaphors, admit a diversity of interpretations, and require a certain amount of creativity from the reader. Such metaphors can be likened to a mirror, albeit a distorted one, which reflects the reader's own images and experiences, but after rearranging and reorganizing them in novel ways. In reflecting on these arrangements, the reader may get a new perspective or idea, or notice some new connections. In this way, such a metaphor works essentially by distorting the familiar conceptual structure in order to reveal new and hidden features of the objects and events, as well as the biases, prejudices and preconceptions of the reader himself or herself. Therein lies the significant cognitive value of synthetic metaphors.

Though we hypothesized a synthetic-analytic continuum for metaphors in this paper, we do not necessarily wish to imply two distinct cognitive processes. For all we know, it may well be that the same cognitive process gives rise to both analytic and synthetic metaphors, with the difference between them resulting from the characteristics of the meaning constituents involved: an analytic metaphor activating mostly culturally shared meaning constituents, and a synthetic metaphor evoking largely individualistic meaning constituents like personal experiences. Our aim is to merely emphasize that what we call synthetic metaphor does not play exactly the same role in cognition as analytic metaphor, and it is necessary to ask different kinds of questions to study

synthetic metaphor, its underlying cognitive process, and its effect on cognition.

In particular, we find that most of the existing research on metaphor focuses on the commonality of interpretations, which reveals aspects of only analytic metaphor and its cognitive significance. To fully grasp the cognitive function of metaphor in art, literature and aesthetics, we must also study how a reader relates to metaphor in his or her own individual ways. And for this, we must focus not on where different subjects agree on their interpretations of a metaphor, but where they disagree. We must examine how subjects relate to metaphors in unique ways depending on their individual background and experiences. We must study how readers creatively render the metaphors meaningful. We hope that the discussion of this paper will motivate other researchers to embark on further investigation of these issues.

Acknowledgements

I would like to thank all the subjects who participated in the experiment described in Section 2. Thanks are also due to Dietmar Janetzko for setting up the questionnaire on the internet.

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