

# On the Nature of Simile and Metaphor\*

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## Abstract

Traditionally simile and metaphor, as well as other figures of speech, have been understood as purely linguistic phenomena. Even though undoubtedly as such they are specific to human language and therefore exclusive to our species, it is my contention that they constitute primal cognitive processes embedded in our mind modeling architecture and made possible by our theory of mind. Therefore it is not impossible to surmise that processes akin to simile and metaphor can take place, in a non-linguistic or proto-linguistic fashion, in species endowed also with some sort of theory of mind. The case is similar to that of irony, which can be seen as antedated by mocking or taunting, behaviors which apparently are manifested as well in other primate species.

**Key words:** metaphor, simile, irony, theory of mind, context dependency

## Resumen

Tradicionalmente, el símil y la metáfora, así como otros tropos, han sido entendidos como fenómenos puramente lingüísticos. Aunque como tales sin duda alguna son específicos al lenguaje humano y por tanto privativos de nuestra especie, es mi contención que constituyen procesos cognitivos primarios empo-trados en nuestra arquitectura de modelamiento de la mente y posibilitados por nuestra teoría de la mente. Por consiguiente, no es imposible conjeturar que procesos emparentados con el símil y la metáfora pueden tener lugar, de una forma no-lingüística o proto-lingüística, en especies que poseen también algún tipo de teoría de la mente. El caso es similar al de la ironía, que puede considerarse precedido por la burla, un comportamiento que aparentemente se manifiesta también en otras especies de primates.

**Palabras claves:** metáfora, símil, ironía, teoría de la mente, dependencia contextual

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## I. Analogical Conclusion

Inference as a rule is taken to be the primary process whereby we reach conclusions regarding opinions, beliefs, or plans and actions. However, more often than not we conclude analyzing analogical processes. Simile and metaphor are two such processes.

We used to propitiate rivers or beseech the skies because we regarded rivers and skies as conscious and powerful entities, as actual persons. When I become angry I am appeased by offerings, I give away or support someone who implores –this is my nature as a person, and also the nature of rivers and skies. There is no inferential process behind my actions, just as there isn't one when I run away from a barking dog. To believe that rivers can be propitiated or skies beseeched has been taken to be a typical case of anthro-morphization, but there is no assignment of human qualities to the river or the sky anymore than what I expect another human being to act according to certain expectations—I simply know that to be the case.<sup>1</sup>

Behind the actions of the example above is the attribution of mind, perhaps what we consider to be the essential component of a person. One may characterize theory of mind as the state whereby one assumes identity of [certain] mental processes in any entity that possesses a mind. To understand the behavior of another such entity, then, it suffices to examine my own mind, or rather it suffices to see or feel myself acting in the context of another mind. Just as I operate under the assumption<sup>2</sup> that a growling dog may attack me, I operate under the assumption that my mind in [certain] basic aspects is identical to that of the other.

## II. Metaphor and Simile

Metaphor can be understood as an extension of the principle heretofore discussed. When I say JULIET IS THE SUN I don't believe that Juliet and the star that our planet revolves around are one and the same thing. Rather, I assume that certain essential characteristics at-tributable to both Juliet and the sun are identical, namely beauty, warmth, and life giving powers. Notice that *warmth* in itself is another metaphorical use, since Juliet's warmth is not the radiation of caloric energy, but rather the emotional or psychological sustenance that guarantees my well-being, just as the caloric energy of the sun guarantees the well-being of plants and animals in our planet.

There is no inference here, either logical or non-logical. One may explain or analyze the process suggesting models that show patterns of logical or non-logical inference, but the process itself is not rational. For Romeo, Juliet IS the sun, bodily, physically, experientially.

Simile is different. It also presupposes identity of mind in the sense that the perception of similarities is assumed to be shared. However, if I say JULIET IS LIKE THE SUN I don't assume identity between Juliet and the sun neither in general nor in particular. Rather, I state that the overall behavior of Juliet and

the sun are comparable. In a sense what I have is a rough mapping whereby I cannot guarantee predictions with utter exactitude, but that allows me to understand processes within a tolerable range of probabilities. More importantly, however, is that simile is concerned above all with general appearance rather than with essential constituents. When Homer says that the infantry of the Achaeans is like a swarm of bees, the idea is to convey the general feeling of multitude, conglomeration and ferociousness, not to draw patterns of identity.

Even so simile, like metaphor, depends on the assumption of identity of mind. An appearance is assumed to be perceived by another one just as it is perceived by me. If I say *The sea is like a woman*, my [male] interlocutor's simile assures me that indeed the overall feeling of femininity is the same for both of us.

### III. Context and Shared Context

Because in our species simile and metaphor are linguistically mediated, their efficacy depends on a shared context to make sense and meaning out of linguistic expressions. In order to experience identity of mental states we cannot depend only on functional identity dictated by the morphology of our brains, as we suppose is the case of other primates. In fact, more often than not the characteristics of identity in the metaphor are cultural constructs rather than actual properties. In other words, instead of life-giving properties which are characteristics of both the sun and Juliet (at least for Romeo), we find qualities that may be non-existent in any real sense.

Let us consider the following example:

**In India, the Cow is a sacred animal and to this day is looked upon with great affection. A gentle, shy young girl is given the pet name Gaurie, little cow. She is addressed in these words:**

*Aav mari garib Gai* (Gujarati)

*Aau méri garib Gau* (Hindi)

**Literally “Come here my gentle cow.” The exact equivalent in English would be: “Come here my little lamb, my lambkin.”<sup>3</sup>**

The metaphor “Sally is a cow” clearly has different interpretations in England, in Costa Rica, and in Hindu or Parsee India. It is equally true that the metaphor “Sally is a lamb” has very different interpretations in a country like Costa Rica as opposed to a country like Canada. According to the OED, ‘cow’ may be understood as *A timid, faint hearted person, a coward* or the word may be *Applied to a coarse or degraded woman*.<sup>4</sup> In Costa Rica, a person who ‘is a cow’ (*es una vaca*) is a particularly stupid or obtuse person, regardless of gender. On the other hand, someone who ‘is a lamb’ in Costa Rica (*es un cordero*) is a person (usually a man) who is submissive, a follower, someone without opinion

of his own, who follows the direction(s) imposed by the group he happens to belong to at the time.

Thus metaphors are members of a class of linguistic constructions that rely for their correct interpretation not only on contextual data (talking of someone who 'is a cow', the person in question might have recoiled at the thought of crossing a swing bridge), but on shared [cultural] connotations ('cow' refers to a timid or faint hearted person). Notice that a metaphor is not simply a synonym: 'cow' is not a synonym of 'faint hearted' because when it is used to refer to a timid or faint hearted person it adds the nuance of a [gentle or domestic] animal that reacts instinctively. Out of a plethora of real or assumed characteristics of a named entity, in a given culture some are selected with the purpose of enhancing or enriching a particular meaning.

Cows of course are neither coarse nor degraded nor particularly gentle or obtuse; it is a cultural bias that makes one associate any of these characteristics with this particular (female) mammal. In general, metaphors work on an assumed shared contextual body of meanings, associations, values, and sundry emotional links. Metaphors in fact range from stereotyped associated meanings shared by speakers of a given dialect (e.g. 'estúpido' [*stupid*] associated with 'vaca' [*cow*]) to complex and subtle constructions built upon a dynamic interchange in which a shared context is created. Such is the case of poetry, e.g.

**Into her lying down head  
His enemies entered bed,  
Under the encumbered eyelid,  
Through the rippled drum of the hair-buried ear;  
And Noah's rekindled now unkind dove  
Flew man-bearing there.<sup>5</sup>**

Here the word 'dove' has to assume cultural associations hallowed by a tradition specifically pointed at by the use of the proper name 'Noah'. By sheer juxtaposition, the words 'Noah' and 'dove' acquire specific meanings that distinguish them from other instances, say my friend Noah Westby or any ordinary pigeon. But, and this is one of the most interesting points, 'dove' cannot be construed here to mean *A gentle, innocent person*,<sup>6</sup> the "fixed" metaphorical rendering of the word. Instead, the reader is forced to create an altogether new (and, one suspects, unique) metaphorical sense for 'dove', aided by the adjectives 'rekindled', 'unkind' and 'man-bearing'; the term of comparison is absent or, more precisely, it's never explicitly designated. So, aside from the bounding adjectives, one has the boundaries of what 'dove' is not; for example, even though in a sense it is NOAH's bird, it is not the Holy Spirit (another forced association in this cultural context). A metaphor such as this one is an *n*-dimensional web of associations with a center (usually a rather ordinary noun) connected with constructs of all kinds, including metaphorical constructs, and bounded by precise connections with what it is not. The connections, however, cannot possibly be arrived at by strictly logical means or by any exclusively analytical method, and have to be built using

not only the shared background of cultural knowledge, but patterns of nonlogical inference as well. The full sense of the metaphor, however, is neither illogical nor capricious, for the associations with some of the things it is, could be or is not are precisely determined. How is the correct construction of sense and meaning achieved? Not only by isolating the relevant cultural indicators, but by correctly modeling the representation intended in another mind, namely the mind behind the poetic voice.

In the case of stereotyped association, sometimes the metaphor eventually yields a common word: thus *burrada* simply means “stupidity” or “foolishness”, and can no longer be understood as “something that donkeys do.” On the other hand, we have constructions such as the following:

**Un puño tengo de corazón  
bajo los pies  
distingo las hojas sueltas<sup>7</sup>**

***A fist I have for heart  
Under my feet  
I make out the fallen leaves.***

In this case the meaning of the utterance “I feel as if I’m suffocating, my feelings are like a handful of dry leaves that may be trampled underfoot even by myself, and yet they feel compact and hard, dense within my chest, impenetrable, aggressive, heavy and hurtful” cannot be possibly assigned by anything other than a nonlogical inference; this nonlogical inference is part of what is conveyed by the poem without being part of what is explicitly stated. Again, the inference is neither illogical nor capricious (in fact, it refers to a common human experience), and it is reached among other things by virtue of correctly modeling the mental representation behind the poetic voice.

It appears to me that metaphors stretch on a continuum from “fixed” metaphors to “poetic” metaphors, so I would expect some metaphors in between to demand nonlogical context-dependent inferences for full understanding.

Let us now examine examples of the following type:

- Well, Harry is [almost] human today.
- Not to worry: Harry is simply being an ape.

Consider now two different contexts for these examples: (I) Harry is a member of the species *homo sapiens sapiens*; (II) Harry is a member of the species *pan troglodytes*. If we are operating within context (I), the first sentence forces us to focus on things that Harry is not: he is not considerate (say), or ordinarily thoughtful or sensitive, characteristics that we freely and somewhat high-handedly bestow upon ourselves generally. The understanding is, of course, that Harry is by nature overbearing or uncouth (we could alternatively be pointing out that Harry today is surprisingly tidy, quiet or graceful). Notice that, depending on who is

uttering the statement and why, it could be ironic or quite the opposite (it could even be tender or affectionate in certain circumstances). On the other hand, if we consider the second sentence within the same given context, it directs our attention to (perhaps unexpected) aspects of Harry's personality: it could be a mere statement of fact (hominids certainly are, after all and strictly speaking, apes), or it could be forcing us to focus on certain characteristics that Harry has and that we do not tend to associate with ourselves: coarseness, lack of consideration for other people's views or feelings, or else boisterousness or vulgar deportment. In the first case we could be merely explaining or even justifying Harry's behavior; in the second case we could be dismissing Harry's behavior as repulsive or else we could be accepting its repulsiveness while at the same time appealing for a compassionate attitude in view of his unintentional animalism. In any of these cases, the crucial element that is needed to correctly understand the intended meaning is precisely the intention of the speaker: we are dealing here with shared contexts. So we don't envision a linear, individual-centered process, given that shared contexts are non-linear, collaborative products for which the determination of an interlocutor's intentions becomes a necessary input.

If we now turn our attention to context (II), the first sentence forces us to focus on things that Harry (unexpectedly) is: [unusually] considerate, thoughtful or sensitive, or else tidy, quiet or graceful. In this case it is very difficult to posit a possible ironic intention: instead, the most likely scenarios include admiration or pleasant surprise. The second sentence directs our attention to characteristics that Harry does not have but that we perhaps wishfully hope he had: in this case Harry's nature excuses his behavior. As before, to correctly interpret the utterances we need to perceive the intention of the speaker, and therefore we need to have access to a shared context.

One of the deciding aspects of metaphor then is the determination of the intent behind the speaker's utterance. In the case of the second sentence within context (II), a literal interpretation is possible if the speaker is trying to reassure a visitor somewhat alarmed by Harry's display of ape-like behavior; its non-literal interpretation is possible if the speaker is trying to justify Harry's antics in the presence of someone who has been made to expect something more from Harry than plain old ape-like behavior. In this case both the speaker and his interlocutor take Harry to be more than a mere monkey, so a strictly literal interpretation is not possible. However, a third party watching either exchange cannot possibly determine the correct interpretation without taking into consideration the speaker's intent, in other words, without having some sense of the state of another mind, i.e., without the capacity to model the minds of others. On the other hand, a literal interpretation of the sentence 'Well, Harry is almost human today' in context (I) is only possible if the speaker actually believes Harry to be subhuman, something that is impossible unless we are capable of perceiving this belief in another's mind, since the fact is that Harry is of course fully human, uncouth as he may be. A non-literal interpretation is possible if one perceives the speaker's intention of drawing attention to Harry's special behavior [today], or else to point out (by contrast) Harry's usual unbecoming conduct.

The second sentence in context (I) presents a slightly different situation: anyone familiar with basic primatology can understand its literal meaning as the simple statement of fact that Harry belongs to the super-family *hominoidea*. If the sentence is not meant literally, he will understand that Harry is behaving in a way that makes him be less than what he can be expected to be. The first sentence in context (II), by contrast, is not subject to a literal interpretation: the focus is not so much the concept HUMAN, but rather Harry himself, who now appears to be more than one could reasonably expect him to be according to his nature. It should be easy to see from these examples that metaphors are not all classifiable in the same way.

Having arrived at this point, it is necessary to remember that some scholars treat “metaphorical interpretation as importantly continuous with such phenomena as hyperbole and approximation, rather than as a distinct interpretive type”.<sup>8</sup> This might be true of some cases, but metaphors such as the ‘dove’ metaphor in Dylan Thomas’ poem seem to be different from hyperboles or approximations: among other things, let us recall that in this metaphoric construction the term of comparison is absent, in the sense that it must be created or constructed by the interlocutor on the basis of connections in turn based upon shared cultural contexts, and bounded by associations and specific indicators (such as the adjectives ‘rekindled’, ‘unkind’ and ‘man-bearing’). Hyperbole and approximation, on the other hand, have to always include a term of reference: that which is being exaggerated or that which is being approximated. In fact, in hyperbole and approximation one is compelled to start from the perspective of the characteristic one wishes to exaggerate or from the perspective of the meaning one wants to draw near.

Even in the case of utterances such as ‘Harry is a gorilla’, though, which could be either hyperbole or metaphor if Harry is a member of the *homo sapiens* species, an understanding of intent and shared context is necessary in order to correctly interpret the utterance. If the shared context is one of gorillas as gentle giants, one might want to emphasize Harry’s physical strength (hyperbole) or else one might want to point out Harry’s salient characteristic as one of strength and tenderness intertwined (metaphor). However, if the shared context is one of gorillas as immensely strong but insensitive brutes who always resort to the use of physical force in order to impose their will upon others, the speaker of such an utterance probably wants to emphasize Harry’s meanness (hyperbole) or else to select aggressive brutality as Harry’s salient characteristic (metaphor). The correct interpretation is of course also dependent on correctly assessing the speaker’s intention as one of endearment or one of animosity.

Let us now turn to a subject that is crucial in the context of this discussion: the relation between simile and metaphor. Part of the discussion deals with the problem of whether they are continuous or fundamentally different phenomena.<sup>9</sup> But it could very well be that similes, like metaphors, are not all classifiable in the same way, and that simple similes of the type **John is like a bull** have more in common with “fixed” metaphors than they do with examples of the following type:

**The night came like a great lady,  
slowly dragging a long black coat  
studded with diamonds.**

How do we come about understanding that the twilight was extended in time, that the sky was very dark but very clear, and that there were many stars that shone brightly? Even more, how do we understand that this particular night was impressively majestic, and that there was an animated quality about it that helped one to feel how our ancestors were able to consider it a deity? It seems to me that the cognitive difficulties posed by a simile such as this one are not significantly less than those posed by a [complex] metaphor. In fact one would, for example, expect an autistic person to fail in interpreting that the night is seen as a lady, that the sky is perceived as a coat, and that the stars are understood as diamonds. All of these perceptions are the result of non-logical inferences, made within the scope of a shared cultural context. However, the sense of awe that one feels is the result of sharing that very feeling with the mind behind the poetic voice. In fact, our sense of being humbled by an overpowering majesty is the reflection of the speaker's feelings (the feelings expressed by the poetic voice), to which we would have no access were we to lack the capacity of modeling our mind and the mind of others. Assessing a state of mind, which in some of the examples of metaphor previously examined is a necessary condition for the correct understanding of the intended meaning, is in this case perhaps even more necessary since an essential part of the meaning is the state of mind itself. A metaphor can, of course, embody this same quality, as we may verify by reexamining a previous example:

**Un puño tengo de corazón  
bajo los pies  
distingo las hojas sueltas**

*A fist I have for heart  
Under my feet  
I make out the fallen leaves.*

Rather than fathoming the state of mind [the state of heart] behind the poetic voice and capture the meaning of the poem, we must fathom the state of mind expressed because it is the meaning.

Another interesting issue is the question of how exactly that simile differs from the corresponding metaphor:

**The night was a great lady that  
slowly dragged a long black coat  
studded with diamonds.**

This direct anthropomorphization of the night in fact diminishes the perception of grandeur and mystery that we attach to it within the simile: night, after all,



is more than any human could be, and the comparison with a great lady is done to bring attention to its living or animated quality, and to point out avenues or glimpses of superhuman deportment. This leads us to what is perhaps the most obvious difference: the simile allows us to emphasize movement in a way that the metaphor cannot, and the quality of moving, of being able to move [perhaps purposefully], is essential to our perception of night's awe-inspiring characteristics. Where the metaphor favors closeness in the viewer's perspective, the simile favors distance. Furthermore it is possible to say that, generally speaking, in a metaphor the two component terms are fused, as it were, whereas in a simile they must remain clearly distinct.

In conclusion: the full understanding of both simile and metaphor demands a complex shared context, many times culturally determined, rich in [shared or equivalent] emotional associations, and therefore access to the other's actual, projected, or imagined inner state(s) or scenario(s); it also often demands access to another's intention.

#### IV. Primal Simile, Primal Metaphor

The complexity of metaphor and simile in our species easily obscures their basic origins, which we share with our [close] biological relatives, the other primates, or which we at least certainly share with the other apes.

Let us examine the following example to illustrate what we may call the shared foundation of [certain] figures of speech. Mocking or taunting<sup>10</sup> is a behavior common to most, if not, all primate species. Although we can mock or taunt without the use of words, as by necessity do our biological cousins, most of the time we do so in the company of linguistic expressions, or even using language exclusively as is the case with irony. It is not difficult to see irony, then, as an extension or refinement of the more primal act of mocking or taunting. Mocking or taunting are, however, lower level behaviors in that they require an overtly social context, that is to say they require an audience: it is hard to imagine them in a strictly one to one setting (in our species this requires the construction of a *virtual* audience, done by necessity with linguistic means) and even less so as an internal mental phenomenon (again, in our species this is possible only due to the presence of language). An audience is a necessary condition of mocking or taunting because basically it pursues three objectives, all of which require an overtly social setting:

1. To single out (to the point of exclusion) the target from the group.
2. To elicit an angry response from the target and thus expose some weakness.
3. To diminish the target's standing within the group.

With or without the use of words, however, mocking or taunting requires the assumption of identity of mind. It requires, in fact, the existence

of what I will call the **primal metaphor**. The general formula for metaphors is the following:

X IS Y

The formula for the primal metaphor is

I AM Y

Mocking or taunting is possible because actions that irritate or infuriate me irritate or infuriate the other one. I can hardly mock or taunt an iguana because there is no identity of mind between the iguana and me, but curiously it is possible for a troop of capuchins to taunt a human being.

Likewise, the general formula for similes is

X is **LIKE** Y

The formula for the primal simile is

I am **LIKE** Y

Just as I see a general resemblance between a chimpanzee and myself, I cannot see a similar resemblance between a lobster and myself. Apparently I am justified in positing identity of mind (restricted as it may be) between the chimpanzee and myself, just as apparently I am justified in positing that such an identity does not exist between a lobster and myself. The primal metaphor and the primal simile are the cornerstones of theory of mind or, alternatively, theory of mind generates the primal metaphor and the primal simile. This leads us to the natural conclusion that metaphor and simile are impossible without the existence of theory of mind. In fact, both are dependent far more on theory of mind than they are on inferential processes.

Notice that I haven't mentioned yet the formulae

Y IS me

and

Y is **LIKE** me

That is because metaphor, like simile, is not strictly symmetrical. To posit that a characteristic in another one can be found also in myself is an entirely different proposition than knowing that a characteristic of mine necessarily is a property of the other one. Therefore it is reasonable to assume that these formulae are possible only in species that are endowed with the capacity of linguistic modeling, a capacity that interacts with and substantially

expands the capacity of mind modeling. The same is true of the following set of formulae:

I **am** NOT Y  
 I **am** NOT **like** Y  
 Y **is** NOT me  
 Y **is** NOT **like** me

Discussion of this set must be left for another occasion, since its analysis is perforce extensive and taxing. However, the points made so far may already allow us to reclaim the idea of cognition in general as the object of cognitive science. Heretofore we have been forced in practice, if not in theory, to focus on artificial cognition, human cognition or other animal species' cognition (e.g. other primate species' cognition). Even if for now human cognition proper must remain, in my opinion, the point of reference that needs primary characterization, the goal of characterizing cognition as such, predicated on the notion that there IS cognition as such and not a collection of disjoint cognitions or types of cognition, seems to be plausible enough.

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## Notes

- 1 Obviously we are often wrong when acting according to the assumption of identity of mind.
- 2 In the sense of taking up or adopting. The point is that when I take my hand away in the presence of fire it's because I assume that fire will hurt me, albeit not necessarily in the logical sense.
- 3 Piloo Nanavutty (translator and commentator) (1999). *The Gathas of Zarathushtra: Hymns in Praise of Wisdom*. Ahmedabad: Mapin Publishing Pvt. Ltd., pg. 26.
- 4 Oxford University Press (1985). *The Compact Edition of the Oxford English Dictionary*. London: Oxford University Press, pgs. 1110-1111.
- 5 Dylan Thomas (1971). *Collected Poems*. New York: New Direction Books, pg. 125.
- 6 Forbes Inc. (2000). *The American Heritage Dictionary of the English Language*. Boston: Houghton Mifflin Company, pg. 540.
- 7 Manuel Arce Arenales (2005). *Murciélagos de fuego*. San José, Costa Rica: Editores Alambique, pg. 55.
- 8 Catherine Wearing (2006). *Autism, Metaphor, and Relevant Theory*, presented at the Workshop on Language, Context, and Cognition. May, 2006, Punta del Este, Uruguay.
- 9 Apparently, there is evidence that 'high functioning' autistic people do not have problems with similes the way they do with metaphors, or at least that they encounter when dealing with them the same degree of difficulty they experience with "ordinary" literal

speech (cf. Happé (1993))– this would tend to support the position that metaphor and simile are fundamentally different. Wearing, however, would prefer to treat similes as continuous with phenomena such as metaphor, in keeping with standard relevance theoretic assumptions, although she accepts Happé's data in support of considering irony as a cognitively more complex process than metaphor.

- 10 The Spanish words *burla* and *burlarse* come closer than *mocking* or *taunting* to the type of behavior we are examining here. Indeed these words by nature involve the use of bodily and facial gestures, to which linguistic accompaniment is often ancillary.

## Bibliography

- Arce Arenales, Manuel (2002). *Visitas al desván*. San José, Costa Rica: Editores Alambique.
- (2004). *De leguas y minutos*. San José, Costa Rica: Editores Alambique.
- (2005). *Las huellas del zapatero*. San José, Costa Rica: Editores Alambique.
- (2005). *Murciélagos de fuego*. San José, Costa Rica: Editores Alambique.
- Bezuidenhout, A. (2001). Metaphor and what is said: A defense of a direct expression view of metaphor. *Midwest Studies in Philosophy*, 25:156-186.
- Davidson, Donald (1978). What Metaphors Mean, reprinted in *Inquiries Into Truth and Interpretation* (1984). Oxford: Oxford University Press.
- Grice, H. (1989). Logic and conversation. In *Studies in the way of words*, pages 3-57. Cambridge, MA.: Harvard University Press.
- Happé, F. (1993). Communicative competence and theory of mind in autism: atest for relevance theory. *Cognition*, 48:101-119.
- (1995). Understanding minds and metaphors: Insights from the study of figurative language in autism. *Metaphor and Symbolic Activity*, 10(4):275-295.
- Lakoff, George and Mark Johnson (1980). *Metaphors We Live By*. Chicago: Chicago University Press.
- Lakoff, George (1990). *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: Chicago University Press.
- Nanavutty, Pilo (translator and commentator) (1999). *The Gathas of Zarathushtra: Hymns in Praise of Wisdom*. Ahmadabad: Mapin Publishing Pvt. Ltd.
- Ricoeur, Paul (1977). *The Rule of Metaphor*. Trans. Robert Czerny. Toronto: University of Toronto Press.
- Sperber D. and D. Wilson (1995). *Relevance: Communication and Cognition*. Oxford: Blackwell, 2<sup>nd</sup>. Edition.
- (2002). Pragmatics, modularity and mind-reading. *Mind & Language*, 17(1-2):3-23.
- Stern, J. (2000). *Metaphor in Context*. Cambridge, MA: MIT Press.
- Thomas, Dylan (1971). *Collected Poems*. New York: New Direction Books.
- Wearing, C. (2006). Metaphor and what is said. *Mind and Language*.
- (2006). *Autism, Metaphor, and Relevance Theory [DRAFT]*, presented at the Workshop on Language, Context, and Cognition, May 2006, Punta del Este, Uruguay.

Wilson, Deirdre and Dan Sperber (2005). *Handbook of Pragmatics*. En Laurence Horn and Ward Gregory (eds.). *Relevance Theory* (pp. 607-632). Oxford: Blackwell.

